POZNAN UNIVERSITY OF TECHNOLOGY

FACULTY OF ENGINEERING MANAGEMENT

PHD THESIS

COLLABORATIVE STRATEGIES FOR CONSOLIDATION OF HIGHER EDUCATION INSTITUTIONS WITHIN EUROPEAN UNIVERSITIES INITIATIVE ALLIANCES

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Abstract

In this doctoral thesis, collaborative strategies for consolidation of higher education institutions (HEIs) in Europe within the framework of European Universities Initiative (EUI) were investigated. The study explored how EUI strategic alliances were structured, governed and developed, in response to ambitious and evolving policy objectives in European Higher Education Area (EHEA), as well as growing interest and need for cross-border collaboration among HEIs in Europe. The research problem focused on identification and development of strategic models that can support effective consolidation and long-term integration of HEIs in the context of European university alliances. The study was based on triangulated methodological approach, combining a systemic literature review, content analysis of documentation from 41 EUI alliances, in-depth interviews with alliances' coordinators and Delphi method applied to proposed models' verification by experts. The analysis led to the development of three strategic models of alliance collaboration: Thematic Model (focused on specific areas of education and research), Typological Model (comprising institutions of similar type) and General (Transversal) Model (characterized by broader strategic scope and institutional diversity). Each model was operationalized using Business Model Canvas, a strategic management tool, which offers structured visualization of value proposition, stakeholders relationships, key resources and revenue streams. The models were verified by selected experts who confirmed their applicability and strategic relevance. Key findings include the significance of project-based management of strategic alliances, verification of various alliance governance models and inclusion of associated partners, as essential stakeholders in successful operationalization of EUI alliances.

In addition to theoretical and practical contributions, this doctoral thesis provided a set of EU strategic policy recommendations related to European Universities Initiative and intended for European policymakers. The recommendations emphasize, among others, the need for long-term sustainable funding beyond project life-time, enhancing strategic partnerships with industry and other stakeholders, optimizing governance and legal frameworks, as well as supporting alliances with shared infrastructure, regulatory coherence and transparent performance monitoring mechanisms for stakeholders operating within this environment.

Streszczenie

Niniejsza rozprawa doktorska dotyczy strategii współpracy w zakresie konsolidacji instytucji szkolnictwa wyższego w Europie w ramach inicjatywy Uniwersytetów Europejskich (EUI). W odpowiedzi na ambitne cele polityki w Europejskim Obszarze Szkolnictwa Wyższego (EHEA), a także rosnące zainteresowanie i potrzebę współpracy transgranicznej pomiędzy instytucjami szkolnictwa wyższego w Europie, w niniejszej pracy przeanalizowano strukturę, zarządzanie i rozwój strategicznych sojuszy w ramach inicjatywy Uniwersytetów Europejskich. Problem badawczy koncentrował się na identyfikacji i opracowaniu modeli strategicznych, które mogą wspierać skuteczną konsolidację i długofalową integrację instytucji szkolnictwa wyższego w kontekście europejskich sojuszy uniwersyteckich.

Badanie opierało się na triangulacyjnym podejściu metodologicznym, łączącym systematyczny przegląd literatury, analizę treści dokumentacji 41 sojuszy europejskich, pogłębione wywiady z koordynatorami sojuszy oraz metodę delficką zastosowaną do weryfikacji przez ekspertów zaproponowanych modeli. Analiza doprowadziła do opracowania trzech strategicznych modeli współpracy w ramach sojuszy: modelu tematycznego (skoncentrowanego na określonych obszarach edukacji i badań), modelu typologicznego (składającego się z instytucji o podobnym charakterze) oraz modelu ogólnego (transwersalnego), charakteryzującego się szerszym zakresem strategicznym i różnorodnością instytucjonalną. Każdy z modeli został opracowany w sposób operacyjny przy użyciu Business Model Canvas – narzędzia zarządzania strategicznego, które umożliwia strukturalną wizualizację propozycji wartości, relacji z interesariuszami, kluczowych zasobów i źródeł przychodów. Modele zostały zweryfikowane przez wybranych ekspertów, którzy potwierdzili możliwość ich praktycznego zastosowania oraz strategiczne znaczenie.

Do kluczowych ustaleń należą: znaczenie zarządzania projektowego w ramach strategicznych sojuszy, weryfikacja różnych modeli zarządzania sojuszami oraz uwzględnienie partnerów stowarzyszonych jako kluczowych interesariuszy w skutecznej operacjonalizacji sojuszy EUI. Poza wkładem teoretycznym i praktycznym, rozprawa doktorska zawiera również zestaw rekomendacji strategicznych w obszarze Uniwersytetów Europejskich, skierowanych do europejskich decydentów. Rekomendacje te podkreślają między innymi potrzebę długoterminowego, zrównoważonego finansowania wykraczającego poza czas trwania projektów, wzmacnianie strategicznych partnerstw z przemysłem i innymi interesariuszami, optymalizację ram zarządzania i ram prawnych, a także wspieranie sojuszy poprzez wspólną infrastrukturę, spójność regulacyjną i przejrzyste mechanizmy monitorowania efektywności.

INTRODUCTION

European Universities Initiative (EUI) launched by the European Commission in 2018 is a key pillar of European Higher Education Area (EHEA) and brings new dimension and variety of new possibilities to the internationalization cooperation area among higher education institutions (HEIs) in Europe. Up to date strategic alliances among HEIs have been limited to particular areas of cooperation or certain research disciplines, while European Universities Initiative and newly created alliances provide much broader perspectives for collaborative strategies at different levels. The Initiative is based on four pillars of long-term strategy in the areas of: education, research, innovation and European values and identity. European Universities are ambitious, cross-border alliances of higher education institutions developing strategic and long-term structural collaboration. The EUI alliances aim to enhance competitiveness of European higher education institutions in the global environment and also strengthen European identity. Up to date 65 alliances have been created, involving more than 570 higher education institutions across Europe.

The decision to undertake this research was based on growing strategic importance of the European University Initiative alliances in Europe and the unique opportunities they provide. Furthermore, the author holds professional experience as Secretary General of one such alliances and was a member of the core team responsible for the successful submission of two proposals within European Universities Initiative calls. Such professional expertise equipped the author with insights into strategic, management and operational aspects of collaborations within EUI. This dual perspective, as both researcher and practitioner, provided unique opportunities to study and develop collaborative strategy models that can be also tested and applied in practice.

While European Universities Initiative is perceived as one of the most transformative and ambitious developments in European Higher Education Area, academic research related to this topic still remains limited. Even though, there are number of studies and publications related to institutional participation, policy objectives and early implementation challenges of EUI, there seems to be a clear lack of structured frameworks on consolidation processes and collaboration strategies of higher education institutions in Europe within European Universities Initiative. The literature does not offer much insights into how higher education institutions can effectively integrate governance models, missions and operational strategies within EUI framework. As a result, the author defined the core **research problem** of this study, which is the identification and development of collaborative strategy models which support the

consolidation of higher education institutions within the framework of the European Universities Initiative (EUI). The **research gap** was addressed by developing and verifying collaborative strategy models in a very unique, yet ambitious context of European Universities Initiative alliances. The study contributed to both, theoretical advancements of collaborative strategies among alliances in academic literature and provided practical tools for institutional leaders engaged in transnational cooperation among different universities within European Universities Initiative. The research in this thesis was conducted at the intersection of strategic management and higher education internationalization strategies.

This research specifically focused on analyzing forty one alliances created under two Erasmus+ calls announced by the European Commission in 2018 and 2019, which constituted empirical ground for exploring governance, structure and strategic directions of collaborations among higher education institutions in Europe within European Universities Initiative framework. Based on the initial comparative analysis, eighteen alliances were selected for further, deepened and focused analysis. Twenty three alliances were classified as other, since they did not express characteristics related to clear thematic specialization or shared institutional typology. However, eventually isolating this group of alliances contributed later on to identification of the third alliance model – General (Transversal) model. This model demonstrated features of more broader scope in terms of thematic approach and institutional multiplicity.

Among 18 alliances selected for further deepened research, eight alliances were identified as thematic and ten were identified as typological. Through the analysis of available official documents related to alliances (released by the European Commission), institutional data and in-depth interviews with coordinators of these alliances, eventually three strategic models were developed: Thematic, Typological and Transversal (General). The models, which were verified by a carefully selected group of experts through a Delphi method, offered both theoretical framework and practical tools for new alliances' creation and future development of the existing ones.

The following **cognitive** and **application goals** were defined by the author.

Cognitive goals:

- Identification of different European Universities Initiatives Alliances and their geographical balance
- Analysis of collaborative strategies – differences and similarities in cooperation approaches
- Recognition of various governance models within European Universities Initiatives

Application goal:

- Developing state-of-the-art model of internationalization strategies among HEIs in Europe that strengthens European values, identity and international competitiveness and enhances the knowledge triangle and quality education

Furthermore, the following **research questions** were formulated by the author for the purpose of this thesis:

Q1 – Can a finite number of EUI models be identified to categorize the consortia?

Q2 – It is possible to differentiate features that indicate similarities within chosen models?

Q3 – Is there a relation between the size of EUI alliances and the number of associated partners (AP)?

Q4 – Can preferred governance models be identified within EUI?

The research conducted in this thesis allowed to provide answers to the above presented research questions and constituted the basis for deepened analysis which resulted in the achievement of the objective of the study. The research methods that were applied in this research process are presented in the below table (Tab. 1).

Tab. 1. Overview of research methods applied in the research process and their contributions to study objectives and research questions
(source: author's own elaboration)

Research method	Aim	Sources of data	Linked research questions
Systematic Literature Review (SLR) (2021 & 2024)	Identification of existing knowledge, research gap, and theoretical foundations	Academic databases, EU policy documents, Web of Science, Google Scholar	Initial foundation for all research questions
Data analysis	Extraction of data on strategy, structure and governance of EUI alliances	Official websites of alliances, European Commission factsheets	Q3
Comparative analysis	Grouping alliances into models based on strategic and structural characteristics	Results from content analysis and database of 41 alliances	Q1

In-depth Interviews (IDI)	Gaining qualitative insights into practical collaboration strategies among partners in EUI alliances	Alliance leaders and coordinators from selected alliances (16 in total)	Q2, Q4
Delphi Method	Verification of proposed strategic models with expert feedback	16 management experts and practitioners involved in EUI alliances	

The research process started with Systematic Literature Review (SLR), which was conducted twice in 2021 and in 2024, and provided overview of existing research in the area of the European Universities Initiative (EUI). This step enabled to identify theoretical foundations and research gap on collaborative strategy models. It also served as a foundation for all subsequent study stages.

The applied methodology followed the standards of Denzin's methodological triangulation (1989), which allowed to study a single phenomenon from variety of perspectives, therefore, increasing the credibility of the findings. The study integrates three types of research methods:

- Qualitative
- Quantitative
- Heuristic

The qualitative part involved data analysis of alliances websites and 41 official factsheets on alliances selected in two calls (2019 and 2020), prepared by the European Commission. A comparative analysis was also performed which allowed to group 18 selected alliances into two models: thematic and typological. The qualitative research consisted of in-depth interviews (IDI) performed with coordinators of 16 alliances (out of 18). Finally, the heuristic method used in this study was Delphi method, which enabled the verification of proposed models by the group of 16 experts in the research area of management and also practitioners in the area of EUI. Together all applied research methods provided a well-balanced research design which combined data analysis, practitioners perspectives and experts' feedback in order to effectively address the research problem on how to support the consolidation of higher education institutions within European Universities Initiative alliances.

The thesis includes five core chapters, each contributed to the investigation of collaborative strategies of higher education institutions within European Universities Initiative (EUI) alliances. Fig. 1 presents all core chapters included in this thesis with their titles.

Fig. 1. Main chapters of the doctoral thesis
(source: author's own elaboration)

Chapter 1 entitled **"Theoretical Framework of Strategic Management"** provides insights into key theories and models in the area of strategic management, with emphasis on strategic alliances and project management as effective instruments for collaborative strategies. It also introduces network paradigm which highlights the value of cross-organizational collaboration and partnerships not only among business organizations, but also among higher education institutions. This chapter delivers foundation for further analysis of the European Universities Initiative (EUI) as a form of institutionalized strategy within cross-border academic context.

Chapter 2 entitled **"European Universities Initiative Context"** situates the study within European Higher Education Area (EHEA) policy broader context by providing information on historical background, development, implementation phases and objectives of the European Universities Initiative. It also provides feedback on political motivations behind the Initiative, as well as institutional aspects and structural features of the formed alliances. Additionally, this chapter discusses implementation processes through calls for proposals and presents criteria used for selecting alliances. It allows to position EUI as not only a policy innovation, but also a transformative framework for transnational collaboration among HEIs in Europe.

Chapter 3 entitled **"Research Methodology"** outlines methodological approach and presents research design adopted in this study. Application of Denzin's methodological triangulation allowed to combine quantitative, qualitative and heuristic methods in order to examine collaborative strategies in a comprehensive way. Key research methods include: systematic literature review, in-depth interviews, comprehensive analysis of available key documentation

and expert verification of developed models through Delphi method. The chapter explains how each method provides answers to research questions and achieving study objectives.

Chapter 4 entitled **"Study Process"** presents sequential steps of the research process adapted in this study. It starts with the results of the systematic literature review, which laid foundations to empirical study. Then it details content analysis of alliances websites and alliances factsheets prepared by the European Commission. As a next step a description of data collected with in-depth interviews is provided. Finally, it explains how Delphi method was used to verify developed strategic models of the alliances. The chapter provides information on how empirical data were collected, interpreted and synthesized.

Chapter 5 entitled **"Empirical study findings"** provides information about core findings of this study. It begins with overview of the data from available official documentation on alliances focusing on geographical distribution, alliances' size and partnerships structure. It then presents empirical insights from in-depth interviews covering information on governance models, associated partners selection and roles, previous cooperation among alliance partners, creation of alliances, research initiative undertaken by alliances, chosen approach, added value, expected outcomes and achievements, future of alliances and limitations of European Universities Initiative. Furthermore, the chapter provides information on identification of three distinctive models of European university alliances – Thematic, Typological and Transversal (General) and presents their transformation into Business Model Canvases. Finally, these models are verified through Delphi method with participation of sixteen carefully selected experts.

Conclusions provide summary of key findings as well as EU policy recommendations related to European Universities Initiative alliances. This final part also outlines potential directions for future research.

1. THEORETICAL FRAMEWORK OF STRATEGIC MANAGEMENT

1.1. Conceptualization of Strategic Management

Each of the sub-disciplines of management science includes specific methods. One of them is strategic management. Based on some commonalities of past definitions, Jeffrey Bracker back in 1980 coiled a definition of **strategic management** which entails the analysis of internal and external environments of a company, to maximize the utilization of *resources* in relation to *objectives*. Furthermore, he stressed the importance of strategic management which gives companies a framework for developing tools to anticipate and cope with changes. By defining a procedure for accomplishing a variety of goals, it also enables to develop the capability to deal with uncertain future (Bracker, 1980).

Strategic management can also be defined as a kind of activity that focuses on the following areas:

- company's mission clearly defining vision, aspirations and identity of a management board that distinguish it from the environment;
- scope of business activity influenced by the ability to produce goods/services and by the ability to integrate with the environment;
- set of rules that determines effective allocation and usage of the enterprise potential;
- management action regulations;
- handling difficult situations as well as assumptions of cooperation with the external stakeholders and environment (Routley et al., 2013).

In the below table one can find different strategic management definitions coiled by various researchers over the course of more than 30 years (in chronological order).

Tab. 2. Definitions of strategic management
(source: author's own elaboration based on the below sources)

Strategic management definition	Source
Strategic management entails the **analysis** of internal and external environments of a company, to maximize the utilization of *resources* in relation to *objectives*	Bracker, 1980, p. 221
Strategic management is a **process** by which general managers of complex organizations	Jemison, 1981, p. 633

develop and use a strategy to co-align their organization's *competences* and the *opportunities* and *constraints* in the environment	
Strategic management is essentially **work** associated with the term *entrepreneur* and his *function* of starting and (given the infinite life of corporations) renewing organizations	Schendel, Cool, 1988, p. 28
The strategic management field can be **conceptualized** as one centered on *problems* relating to the *creation* and *sustainability* of competitive advantage, or the pursuit of rents	Bowman et al., 2002, p. 37
Strategic management as a process involves **activities** that lead to the development of *mission*, *goals*, and *strategy*, followed by the implementation and monitoring of the strategy, and, if necessary, taking corrective actions in the earlier phases	Kałkowska et al., 2010, p. 9
Strategic management is an **activity** that focuses on the following areas: company's *mission*, business *activity*, set of *rules*, management *actions* regulations, handling difficult situations	Routley et al., 2013, p. 38

Strategic management is based on **strategic planning** and **strategic thinking**. It is analytical in its nature and is related to formalized procedures for producing data and strategic thinking analysis. Once the strategy is determined, strategic planning involves control mechanisms that are used to implement it. Strategic management often involves two major processes: formulation and implementation of strategy (Mintzberg et al., 1996). The graph below (Fig. 2) shows subprocesses of formulation and implementation as well as related activities.

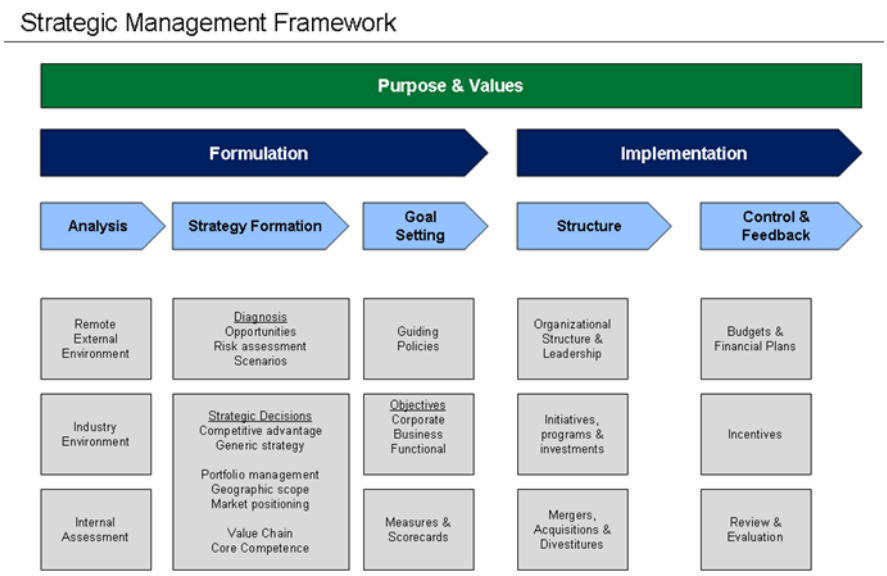

Fig. 2 Strategic Management Framework
(source: Mintzberg et al., 1996)

According to Mintzberg, strategic planning differs from strategic thinking. “The first one is analysis and the other one is synthesis”. He criticized the effectiveness of strategic thinking, despite its popularity among managers (Mintzberg, 1994). Strategic planning, though, has a positive, moderate, and significant impact on organizational performance in the private and public sectors, across international settings (George et al., 2019). Almost 30 years ago Mintzberg also questioned the use of artificial intelligence in formal systems utilized for strategic planning, stating that when it comes to information, they could never internalize it, comprehend it and synthetize it (Mintzberg, 1994). Is such notion still valid when we consider nowadays advances in artificial intelligence, such as different AI-driven tools like chat GPT? As of now, it cannot replace humans, but for sure it can comprehend and synthetize information and draw conclusions that can be extremely useful in strategic planning and strategic thinking processes. The future is yet unknown, but maybe we are closer to the point where artificial intelligence changes life on Earth to the unimaginable extent and influences our decisions to the point we can’t even foresee now.

The dual nature of strategic management is reflected in the concept of strategic controlling, which serves as a bridge between planning phase and execution. Bieńkowska et al. (2017) underline that strategic controlling can support not only monitoring of strategy but also its development through coordination mechanism that enhance strategic decision-making processes.

Elbanna et al. stresses the importance to use three components of the strategic management process in a company, that are:

a) Formulation
b) Implementation
c) Evaluation

Not only the company should develop the most suitable strategic plans, but it is essential that these plans are implemented and evaluated correctly (Elbanna et al. 2020). All in all, strategic management process may consist of three, four of five steps. It all depends on how they are labelled and grouped. All the approaches include similar basic actions, which brief description can be found below. Fig. 3 depicts the basic steps of strategic management process.

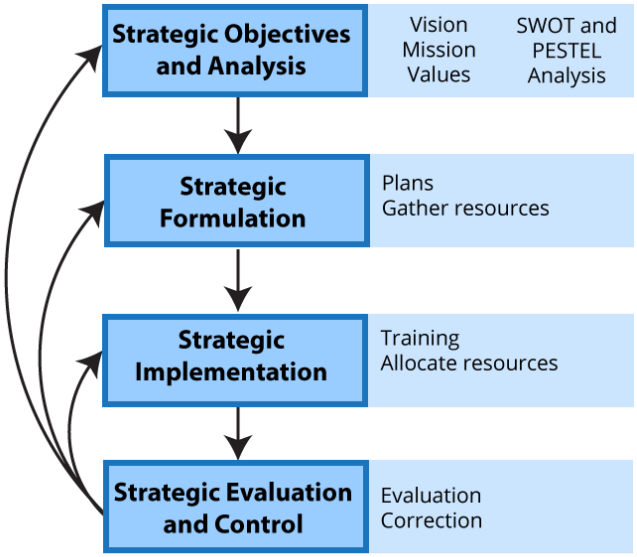

Fig. 3. Basic steps of strategic management process
(source: John Burton and Lumen Learning)

Furthermore, the enterprise success in the longer period of time constitutes the essence of strategic management and leads to increased value which guarantees stable and continuous development of the enterprise. Strategic management is based on continuous focus on mutual and dynamic adjustment of the company and its stakeholders within the environment. This adjustment emphasizes the need for strategic engagement of stakeholders, which is essential for the development of both – the organization and its environment (Glińska et al., 2025). One of the most commonly used division of strategy differentiates two types of strategies:

- **defensive (passive) strategy** resulting in continuance, regression, recession, focused on minimizing failures and preserving previous gains, as well as on routine activities with

an excessive control system - this strategy leads to stagnation in an unsuccessful attempt to prevent entropy of the company management system (particularly a strategy of isolation, hierarchy and excess)

- **offensive strategy (active, expansive)** which results in development, is focused on entrepreneurial activities that require imagination, ingenuity, flexibility and courage to make risky decision in order to increase benefits. Part of this strategy are: market mastery, market development, new product development and diversification strategy (pioneering strategy – leadership or imitation strategy – adaptation)

(Sikorska, Misztal 2020).

An important example of offensive strategy is **collaborative strategy**. Clarke and Fuller define it "as the joint determination of the vision and long-term collaborative goals for addressing a given social problem, along with the adoption of both, organizational and collective courses of action and the allocation of resources to carry out these courses of action". This approach seems to capture the efforts of organizations working not only individually (i.e., at the organizational level) but also jointly (i.e., at the collaboration level) toward their collaborative goals (Clarke, Fuller 2010). Collaborative strategy creates a framework for successful partnerships and alliances creation. It emphasizes the importance of planning ahead, necessary commitment and internal support. There is a need for clear common vision of such organizations in order to achieve mutually agreed goals. Without adequate planning and commitment, as well as without a clear vision and mutual purpose, many alliances may fail (Child, Faulkner 1998; Kumar 2012). A specific types of organizations are higher education institutions, however, they are facing similar challenges related to strategic management. Essential parts of the change process at higher education institutions are related to: setting out vision purpose and values, institutional planning, governance reform and targeted use of resources, recruitment and rewards (Kezar A. 2013). Bieńkowska et al. (2015) believes that universities require specially adapted forms of strategic controlling. These forms would integrate academic goals with efficiency and monitoring systems, which would harmonize academic institutional aims with long-term strategic approaches.

The expansion in recent years is taking on a global dimension, which is reflected in forming strategic alliances and joint ventures to increase the market and achieve goals unavailable to a single enterprise. In relation to the logic of creating alliances, there are also some similarities to the possibilities of creating academic alliances in the future. The following three identified types of alliances perfectly match the university goals (Sikorska, Misztal 2020):

1. **complementary alliance** – connects partners with different competences and goals; this means that universities which have resources focused on different scientific disciplines and offer different programs can create a joint, extended and complementary research and educational offer;
2. **close collaborative alliance** – focused on the same impact area; this means that universities of the same or similar specialization (e.g. humanities, medicine, economics, technology, life sciences) may jointly achieve scale benefits;
3. **additive alliance** – requires the total suspension of competition between partners who should behave as if they merged; this means that the universities with the same profile can build one common branding towards the student.

For many years, internationalization has been one of the most important factors in creating a university's strategy, building and developing educational quality as well as providing adequate branding and promotion of a university worldwide (Sikorska, Pietraszek, 2020). This strategic position is increasingly realized, among others, through innovative pedagogical approaches, such as Collaborative Online International Learning (COIL), which enhances the internationalization of business education and equips students with the competencies needed to navigate global challenges (Więcek-Janka et al., 2024). Therefore, internationalization aspect is so high on the agenda on the majority of higher education institutions' strategies. It is a necessary element to shape a new quality of education, increase the effectiveness of research and improve the ability to attract foreign students and highly qualified academic staff. Internationalization determines the value of universities on a global scale.

While strategic and collaborative management frameworks are very well described in theory, there is limited empirical evidence on how to apply these kind of frameworks within collaborations across border within higher education institutions, such as the European Universities Initiative alliances. Taking into account the importance of cross-organizational cooperation in very complex and dynamic environments, collaborative strategies, especially in the form of strategic alliances, have become key instruments for organizations that search for long-term impact and cooperation, innovation and better adaptability between different sectors, including also higher education area.

1.2. The Concept and Role of Strategic Alliances

The latest approaches to strategic management tend to consider strategic alliances as one of the main sources for a sustainable competitive advantage (Ferreira et al., 2016). The basic feature of strategic alliances is linking the competitiveness of enterprises with the declaration of mutual

cooperation. They can be considered as alliances of competitors that improve the management of a selected area of activity by coordinating competences, income and necessary resources in order to (Strategor, 1999, p. 240):

- achieve a better competitive position by all partners,
- make a merger, assignment or acquisition of any area of activity.

Strategic alliances are collaborative arrangements between different companies which aim at achieving shared goals, increase competitive advantage and adding value through sharing resources and developing capabilities. Such alliances are particularly important in markets which are very dynamic and competitive, as the companies seek to leverage the increase of their strengths through innovation and expansion (Mockler et al., 2002; Deng, 2016). Innovation is not only a driver for local development, but also a key factor when it comes to developing competitive regional ecosystems within EU framework (Szopik-Depczyńska et al., 2020).

However, selecting a partner to such a strategic alliance can be very challenging. Critical drivers of alliance formation are market complementarity and resource capability. Companies tend to search for partners whose strengths would fill in the gaps related to their own resources, for instance in the area of technology, access to market or expertise (Mindruta et al. 2016; Furlotti, Soda, 2018). Furthermore, alliances with matched partners improve company performance and survival chances (Mitsuhashi, Greve 2009). Hence, it is also important that managers develop their network perception by extending their scope of interest beyond immediate network surroundings, i.e. direct business relationships (Czakon, Kawa 2018). Legal aspects are another crucial factors in selection of partners to a strategic alliance. It is necessary to consider the legal framework and governing structures in order to enable smooth implementation as well as conflict prevention, their mitigation and resolution. This requires clear contractual agreements, negotiations and creation of standard governance (Duisters et al., 2011; Sokol, 2017).

When companies make alliance decisions, they seem to take into consideration not only capability-based arguments, but also social structural ideas (Gulati 1995). Due to the fact that partners, despite of an alliance creation, can preserve their inviolable autonomy, it becomes a road and a platform for achieving separate goals simultaneously. The alliance is, therefore, a form of organization that enables the existence of many decision-making centers and allows partners to shape their own policy within the alliance and to favor or defend their interests as part of joint decisions and actions (Sikorska, Misztal 2020). Decision-making process in strategic alliances involves various governance structures and different coordination mechanisms. This includes consensus-based decision-making process, which builds trust and

also reduces the emergence of conflicts. Trust is fundamental in this process, it may evolve over time and can be also influenced by emotions, which may impact the cooperation. Governance structure may be centralized or decentralized, where decisions are made through different bodies or committees from partner organizations. Still, effective decision- making is crucial at every stage of the partnership process (Henderson, Smith-King, 2015).

Another important aspect of strategic alliances is communication. It is a crucial factor that influences performance in four dimensions: willingness, commitment, behavior and quality. It appears that informal communication, that reflects established collaboration rather than contractual obligations is fundamental for achieving partner satisfaction, as well as understanding alliance goals and objectives. Such informal communication supports continuous development and tightens connections between partners, contributing to alliance success and sustainability (Franco et al., 2024).

Specific type of strategic cooperation is a cross-border collaboration. According to Sousa (2013), such cooperation is often influenced by different factors, such as economic, political, cultural and geographical. These factors create different levels of cooperation and institutionalization. The efforts to create cross-border collaboration often face obstacles related to different laws and procedures. The success of such initiatives often depends on the potential and possibility of local authorities to cooperate effectively and also political engagement. Many of these cross-border strategic cooperations are still a learning experience, as a lot of the initiatives are in the early stages. However, these alliances enhance branding and its visibility, as well as customer engagement and innovation by integration of resources and expertise (Qiao, 2023).

Even though, strategic alliances are broadly discussed in business and management literature, there seems to be a little research presenting the context of higher education alliances, in particular in relation to international, cross-border partnerships like European Universities Initiative. There is not much literature on how universities make decisions together, communicate in an effective way and build trust between each other, especially when coming not only from different countries, but also representing different cultures. This demonstrates that there is a clear gap, in both knowledge but also in practice in this regard. A lack of theoretical and practical framework related to the formulation and management of strategic partnerships among higher education institutions in Europe, led the author to the identification of research gap based on the analysis of world literature.

Moreover, many alliances like these, operate in the project-based environment, especially in the early stages of development. Therefore, project management plays a key role in making these strategic collaborations operational.

1.3. Project Management as a Strategic Tool in University Collaborations

Some strategic alliances may be established within a framework of a project at least at an initial stage. Project management is a specific type of management that is used to reach common goals and objectives of project principles with the use of project teams. Since 1950s project management has focused on scheduling issues, making an assumption that the development of scheduling techniques would improve project management, and as a result, successful completion of a project. Hence, there are many factors, not only related to management, that influence the success of a project (Belassi, Tukel, 1996).

According to one of NASA public technical reports, major variables that affect the success of projects include (Murphy et al., 1974):

1) From a perspective of a project manager:
    - Commitment to project goals
    - Authority and influence
    - Task orientation
    - Administrative skills
    - Human skills
    - Technical skills
    - Early and continued involvement
    - Participation in goal setting and criteria specification
2) From a perspective of a project team:
    - Capabilities
    - Commitment to goals
    - Participation in: goal, budget and schedule setting, major decision-making, problem solving
    - Early and continued involvement
    - "Sense of mission"
    - Structural flexibility

More and more project managers consider quality as being one of the most important objective for project success (Tukiel, Rom, 1998). Managing stakeholders is also an important factor

when it comes to project results, so as the support of project management office (PMO). Furthermore, it seems that both components are key elements for successful project management, especially as they increase the likelihood of concluding projects within the predicted time and cost (Rabechini et al., 2022).

Often when it comes to project management, team composition changes over project lifetime. Optimal intactness of team shifts according to project context. Higher success occurs at lower levels of intactness when projects require more innovation. However, optimum between fluidity and stability should be followed (Buengeler et al., 2021).

Project management can be also differentiated into:

1) Traditional project management (TPM)
2) Agile project management (APM)

Lean and agile concepts have been introduced in the early 1990s. The lean concept started in manufacturing sector in Japan in order to eliminate waste and improve customer satisfaction, whereas agile was introduced in the 20th century manufacturing enterprises strategy later on. The lean and agile concepts have become managerial paradigms applicable to different industrial sectors and processes (Mostafa et al., 2020). Furthermore, Pareto Principle (Juran, 1951) can be useful in defining processes to be subject to lean management. There is a functioning belief that 20% of processes involve 80% of available resources (such as time, labor or finances) and, at the same time, that about 20% of the tasks and operations performed in those processes, generate about 80% of the overall outcomes or value delivered by the process. Such imbalance stresses the importance of identifying and optimizing the most meaningful and impactful activities, as this may significantly improve effectiveness and efficiency in projects and operational management (Trzcieliński et al., 2013).

The agile approach is being now used also in project management. Additionally, there is yet another factor that influences the success of project management, mainly teamwork quality (TWQ) and it has been considered even as a critical factor in project management (Hoegl et al., 2003; PMBOK, 2021; Malik et al. 2021). According to a recent study, three profiles of project managers' differences in teamwork quality and type of project management were identified: pure agile, TPM leaning hybrid and APM leaning hybrid. TPM leaning hybrid resulted in the highest score when it comes to the project success. Furthermore, organizations should have their teams develop both skills related to TPM and APM, so that specific risks presented by either approach can be compensated by the use of the other. And finally, before implementing

agile practices, organizations should have good TPM practices developed first (Agbejule, Lchtincva, 2022).

Universities are specific type of organizations where many activities are considered to be project-based. Therefore, project management processes at higher education institutions should be carefully planned and implemented. Due to their formalized structures, universities face several imperfections and difficulties that may hamper their ability to achieve the objectives of the project in a successful manner. These barriers to success include, but are not limited to, the following (Klaus-Rosinska, Zablocka-Kluczka, 2014):

- rigid organizational structures that are unsuitable for the implementation of projects
- lack of formal authority for projects and their managers
- poor internal and external communication
- inadequate or overly formalized project documentation
- inadequate or poorly designed mechanisms of project quality management
- lack of qualified project personnel

Hence, in order to be successful in project management, not only in university environment, it is required, among others, to plan with a commitment to complete the project, carefully appoint well-skilled project manager, spend time to adequately define and plan the activities and ensure adequate and correct information flow (Camilleri, 2011).

One can identify three basic phases of project management at university level (Grzech et al., 2011):

a) The projects planning phase, including two sub-processes:
   - drafting
   - initiating the project
b) The projects implementation and closure phase, including the following sub-processes:
   - realization of substantive and administrative tasks in various stages of the project
   - the current management state of the project
   - verification of the results obtained under a given stage
   - project monitoring
   - support for external and internal controls and audits of the project
   - closing a project
c) The supervision of the project sustainability phase, including:
   - supervising the archiving of project documentation
   - supervising the implementation of results indicators

- supervising the sustainability of project outcomes

At the university strategic management level, all these three basic project management phases are supported by other areas of university operational management, among others: financial, human resources and IT (see Fig. 4 below).

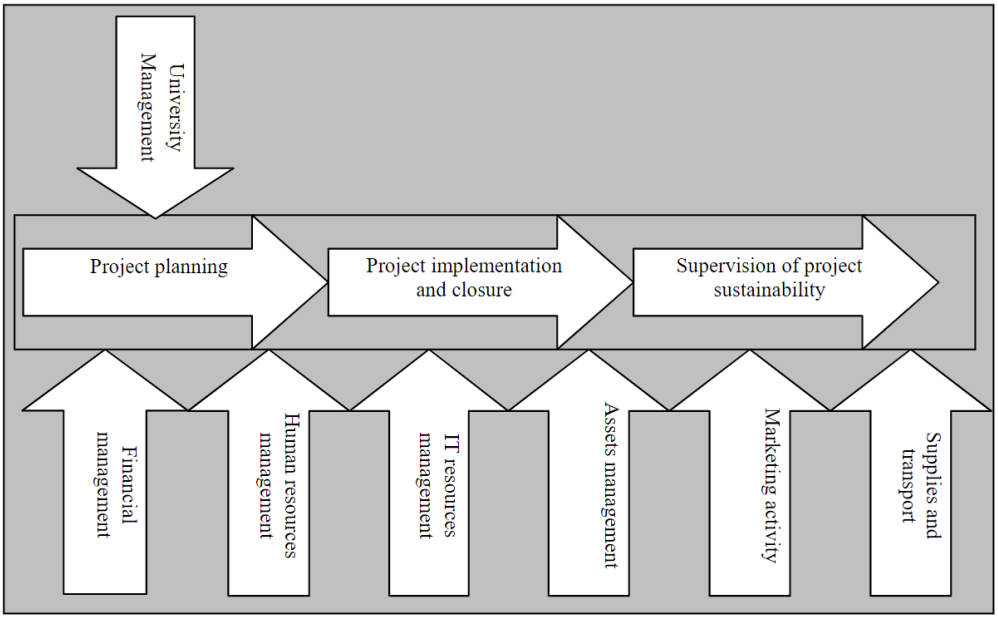

Fig. 4. General map of the project management process
(source: Grzech et al., 2011)

Financial management is particularly important in projects co-financed from European Union funds, as there is a threat that part or all costs are considered ineligible, which may result in a need to cover the funds from the university's own financial resources. As public universities tend to obtain significantly growing amount of EU funding, therefore, not only successful completion of the project, but also university financial security depends on the level of safety of EU-funded project management systems. In order to reduce a risk of ineligible costs arising in projects and, as a result, increase safety of EU project management system in public universities, the below recommendations can be followed (Szczepaniak, 2020):

- increasing frequency of applying popular project management methodologies, such as: PRINCE2,
- introducing clear procedures for managing EU projects,
- engaging employees with high knowledge about project management in project teams,
- directing members of project teams for regular training or other forms of raising qualifications in implementation of EU projects.

Another important aspect of project management is human resources component. As researchers are an important part of projects teams in terms of human resources, particularly in the academic setting, it is crucial for the universities to continuously cater for the conditions of research staff at work. Therefore, Human Resources Strategy for Research - HRS4R (European Commission, 2023a) is an adequate tool to meet these needs.

It is an initiative promoted by the European Commission which objective is to improve the working conditions of research staff. Its implementation is divided into three stages:

- application
- implementation
- renewal

It is therefore similar to a process of analysis and continuous improvement (Sanchez-Ruiz et al., 2023).

Agile and lean project management practices, mentioned before, can be successfully implemented also at higher education area in order to increase flexibility and better respond to students' needs and job market changes. However, in higher education, projects are almost exclusively handled using traditional project management techniques. Agile approaches require a continuous engagement, observation, exploration, feedback and adjustment, therefore, it is much more difficult to implement them in more bureaucratic environments, such as universities, especially public ones (Ivetić P., Ilić J, 2020). Furthermore, since organizations, such as universities, are composed of individuals, therefore, they often experience individual myopia, which is a persistent focus on the here and now, at the expense of neglecting a more or less uncertain future challenges (Czakon, 2020). Nowadays, the collaboration between universities and industry sector is strongly encouraged by governments as means of enhancing national competitiveness and wealth (Barnes et al., 2002). Therefore, the specific context of the university-industry collaboration from the perspective of project management, demands also an effort to produce specific guidelines. Pursuing this effort, Fernandes et al. (2020) proposes creating a Programme and Project Management Office (PgPMO) in order to support collaborative university-industry R&D funded projects. The goal of such office and similar offices is to boost the innovation and entrepreneurial activity regionally by supporting both local grass-roots student entrepreneurial movements and university lead commercialization activities, increasing the local societal impact of research (Denden et al., 2023).

As universities tend to engage more and more in cross-border and cross-sector collaborations, particularly in the context of European Universities Initiative, successful cooperation depends

not only on well-organized project management, but also on building on strong and long-lasting relationships between the partners. While project management supports organization and implementation of specific objectives, it is the network approach that supports long-term and ongoing collaboration, building trust and sharing knowledge. The next chapter explores how the network paradigm enhances strategic management by shifting the focus onto partnership and sharing common values.

1.4. Network Paradigm in the Context of Strategic Management

Lean and agile approaches as management meta-concepts proved to be successful and provided a competitive advantage of Japanese companies in automotive markets (Trzcieliński et al., 2013). In strategic management, network paradigm is yet another important aspect that influences competitive advantage of an organization. Building a competitive advantage based on the network provides the following opportunities:

- achievement of privileged operating conditions
- higher efficiency
- reducing uncertainty

At the same time, it remains difficult to imitate, because it is embedded in an arrangement of relationships between specific partners (Czakon, 2011). In digital economy, competition is not between companies, but between collaborative networks, which means that a company that builds a better network will be more successful (Cyrson, 2013). When a company wants to enter international markets, networking emerges as a key strategic option that brings new possibilities, sharing resources and reduction of risk (Fonfara et al., 2000). There are different forms of cooperation for companies to choose from, depending on their resources, goals and anticipated level of involvement, including:

- export – selling products abroad
- non-equity cooperation and joint-ventures – collaboration without shared ownership
- foreign subsidiary – establishing a branch or office abroad
- international strategic alliances – forming partnerships in order to combine strengths by entering new markets together

These different options provide diversified possibilities for companies in relation to commitment and integration, where strategic alliances offer the most engaging, yet flexible, collaborative pathway to internationalization. Furthermore, in the development policy of international corporations, networking aspect is extremely important and is strictly related to

growth strategy. When referring to mergers and acquisitions, strategic alliances can be built with other companies, including the ones who are competitors. As far as conglomerate development is concerned, strategic alliances can be developed in new sectors. More details about this policy concept are presented in the below figure (Fig. 5).

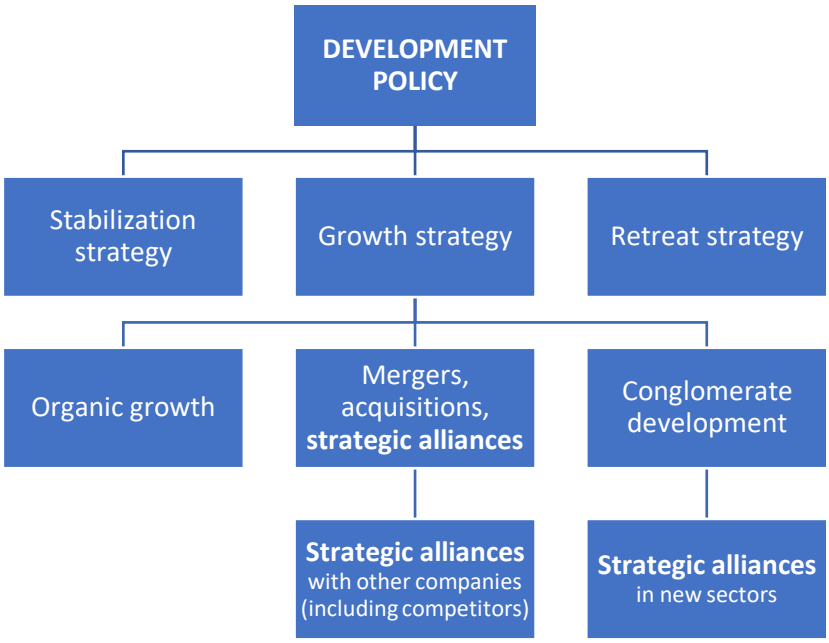

Fig. 5. Strategic alliances as a component of corporate development policy (source: author's own elaboration based on Branowski et al., 2013)

Figure 5 presents a view of corporate development policy, showcasing three main possible strategic directions: stabilization, growth and retreat. When it comes to growth strategy, one can observe internal (organic) growth and possible external pathways, including mergers, acquisitions and strategic alliances. These strategic alliances can be created in two ways: through collaboration with other companies (that include direct competitors) and through entering new sectors by conglomerate development. This visualization confirms that strategic alliances are embedded into growth and innovation strategies of companies. They not only provide access to new technologies, new markets and creation of knowledge networks, but also allow companies to remain competitive in evolving environments. Taking into account broader context of strategic management, this model supports network paradigm that emphasizes the value and importance of such partnerships and advantage a company can gain by being part of an alliance. These aspects are clearly increasingly relevant well beyond the corporate world – particularly in the higher education area, where universities face complex challenges which

enforce cross-border and long-term collaborative solutions. As Danielak and Sobotkiewicz (2019) note, managerial controlling is an important factor, which facilitates strategic coordination and decision-making processes across organizations, particularly in networks or alliances.

As the higher education sector adopts network-based approaches in order to respond to global competitiveness and reaching academic excellence, European Universities Initiative seem to emerge as a key example of institutionalization of strategic alliances in academia. The next chapter provides information on emergence and evolution of this innovative initiative which aligns with a broader context of the networked strategic management.

2. EUROPEAN UNIVERSITIES INITIATIVE CONTEXT

2.1. Historical Background

The Erasmus program, which was launched in 1987, is one of the European Union's most successful initiatives in the European Higher Education Area (EHEA). Its goal is to globalize European education, improve student mobility, and foster international cooperation. Since then many different programs and initiatives were launched by the EU over the years to enhance collaboration among European and international institutions (Sikorska, Misztal, 2020).

The figure below (Fig. 6) showcases the different support programs for international cooperation launched by the European Union in the last decades.

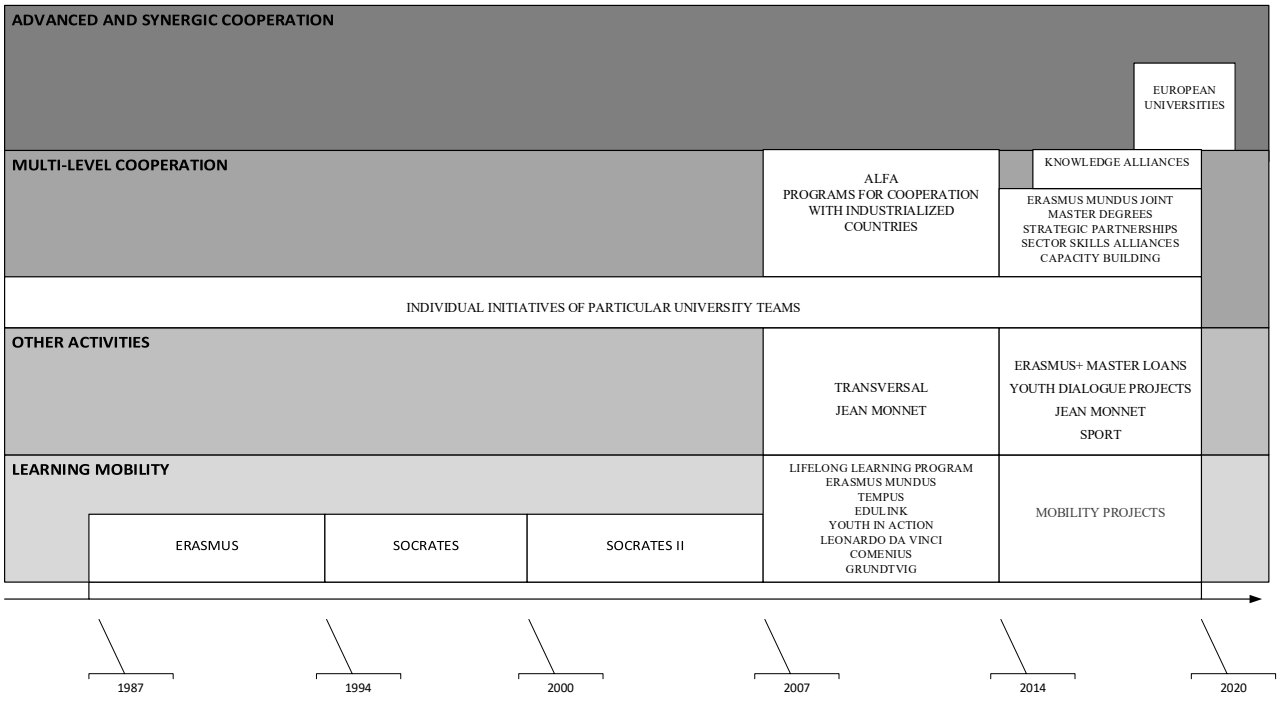

Fig. 6. The European Union support for international cooperation
(source: Sikorska and Misztal, 2020)

Figure 6 visualizes the progression and diversification of the EU's international cooperation efforts in education and mobility. It reflects how the Erasmus program has evolved and expanded, along with other significant programs like Socrates, Tempus, and Erasmus Mundus. These initiatives have significantly contributed to globalizing European education, enhancing students' mobility, and strengthening internationalization of higher education institutions in Europe. European Universities Initiative is the most recent initiative aimed at strengthening

long-term cooperation between higher education institutions across Europe and raising global competitiveness of European universities.

2.2. Political and Institutional Aspects

On 26 September 2017, at the beginning of his term as French president, Emmanuel Macron delivered a famous speech at the University of Sorbonne, entitled *New Initiative for Europe,* during which, among many aspects concerning the future of European continent and European Union, he laid down foundations for European Universities Initiative that transformed European Education Area. Emmanuel Macron said at the University of Sorbonne: "*I believe we should create European Universities – a network of universities across Europe with programmes that have all their students study abroad and take classes in at least two languages. These European Universities will also be drivers of educational innovation and the quest for excellence. We should set for ourselves the goal of creating at least 20 of them by 2024. However, we must begin setting up the first of these universities as early as the next academic year, with real European semesters and real European diplomas."* (Macron's Sorbonne speech, 2017).

However, Macron's concept derived from earlier proposals presented by Rectors' conferences in France (Conférence des Présidents d'Université – CPU) and in Germany (Die Hochschulrektorenkonferenz – HRK), discussed at different forums with participation of other Rectors' conferences bodies of different member states. Initial proposal, both from CPU and HRK contributed greatly to the creation of early concept of European Universities Initiative (Szapiro, 2022).

French Conférence des Présidents d'Université – CPU in its document on European Universities (CPU, 2017) proposed creating alliances comprised of 4-6 higher education institution. The document also emphasized the necessary links between Erasmus+, H2020 programs and structural funds, as well as real research links and interactions with the strategy implemented by higher education institutions. CPU also stressed reinforcements of links between public and private sectors, integration of life-long learning, strengthening inter-institutional ties between partners and use of shared digital tools to facilitate development and implantation of programs' curricula. Parallelly, German Hochschulrektorenkonferenz – HRK worked on a concept of *Distributed Excellence* as early as in 2017. The political objective of *Distributed Excellence* is the functioning of a stable and strong system of science and higher education in the European Union, growing out of all European regions and allowing them to

compete against each other in the presence of differences in development due to historical circumstances, differences in starting points, and differences in research and educational capacities. HRK proposed to make the concept of *Distributed Excellence* a fundamental principle of European higher education systems and a label capable of describing objectives and goals of the future policy (Szapiro, 2022).

Two months after Macron's speech the document entitled "Territorial Connections - a proposal for a new action on behalf of European excellence in territorial innovation ecosystems" was published already in its 15th version. This joined document of CPU, HRK and CRASP (Conference of Rectors of Academic Schools in Poland) is based on the concept that a few regions sharing one or several smart specializations join their forces and challenge their ecosystems to develop together disruptive innovations corresponding to their chosen targets and to the framework program (H2020) priorities. Universities will be the key actors for research, while companies will provide R&D as well as internationalization and business models to promote the most promising results. To reinforce the cooperation of ecosystems, special attention would focus on the knowledge triangle interfaces: research/education, research/innovation and innovation/education. (CPU – HRK – CRASP, 2017).

Following that, in May 2018, three conference of Rectors from France, Germany and Poland coined a joint declaration entitled: *Living up to the Significance of Universities for the Future of the EU Proposals for Future EU Funding Programmes by the French, German and Polish Rectors´ Conferences (CPU, HRK, CRASP).* The document described the role and tasks of universities in Europe and their value. Moreover, it proposed three options for funding programs in Europe:

1. Developing "European Universities" as excellence networks of universities
2. Territorial Connections – supporting universities as the center of regional innovation ecosystems of the EU
3. Capacity building in less competitive higher education systems via excellence initiatives.

The document also discussed the two opposing concepts of European universities as 1) French vision of universities as *lighthouses* – where single world-class institutions are the only opportunity for European universities to be competitive and visible worldwide, and attract top-level researchers and 2) German *Distributed Excellence* or swarm model where the broad distribution of good institutions in the EU achieving excellence at least in certain fields of activity is considered as the necessary condition for a fair chance of development in all of its regions. Hence, the Rectors considered decentralized excellence in frontier research as a

constitutive feature of higher education systems in Europe. A central part of the declaration was the presentation of the French concept of European Universities - university networks of excellence, coordinated with the German concept of Territorial Connections supporting universities in their role as regional centers of innovation ecosystems (CPU – HRK – CRASP, 2018).

According to Macron's concept at least 20 alliances were to be formed by the year 2024, each consisting of a number of higher education institutions focused on implementing a joint goal. The concept was mirrored by Rector's conferences proposals in terms of creation around 20 alliances made up of several universities. However, their proposal supported a rapid pilot of the program in 2018 and the creation of five universities as early as in 2020. The pilot could include joint educational programs at any degree and lifelong learning programs, sharing of infrastructure and functional areas. European University, understood in these documents as an institution integrating higher education, research and innovation creation, could be organized trans-territorially, thematically – on topics such as energy, health, etc. - or transversally, e.g. uniting universities of technology (Szapiro, 2022).

Macron's credo presented at the Sorbonne speech as well as all the actions undertaken by Rectors' conferences in the EU, European Universities Association and other associations in Europe, did not have to wait too long for European higher education sector and European Commission itself to respond. Two months after Macron's speech, in November 2017, 28 EU leaders debated about the future of education at the Gothenburg Social Summit in Sweden. European heads of state or government that participated in the Summit, supported the measures to deepen higher education cooperation and agreed to:

• Promote mutual recognition of upper secondary education diplomas and the development of new curricula allowing for exchanges across European high school systems

• Promote multilingualism by aiming at all students speaking at least two additional European languages

• Launch a reflection on the 'Future of Learning' to respond to future trends and the digital revolution, including artificial intelligence

• Promote the mobility and participation of students in cultural activities through a 'European Student Card.

In an official communication, *Strengthening European Identity through Education and Culture*, addressed to the European Parliament and European Council – submitted to the leaders' meeting in Gothenburg – the European Commission identified a set of key challenges that can

be addressed via education and culture. A vision for its flagship initiative of the European Education Area called European Universities Initiative was presented, which would enable new generations of Europeans not only to cooperate across borders, disciplines and languages creating new strategic alliances, but also develop a strong European identity. The European Commission's proposals for a European Area of Education included:

• "Making mobility a reality for all, by expanding participation in the Erasmus+ student and staff exchange program and the European Solidarity Corps and creating an EU Student Card to offer a user-friendly way to store information on a person's academic records

• Mutual recognition of diplomas by initiating a 'Sorbonne process', building on the 'Bologna process', to prepare the ground for the mutual recognition of higher education and school-leaving diploma

• Improving language learning by setting a new benchmark for all young Europeans finishing upper secondary school to have a good knowledge of two languages in addition to their mother language by 2025

• Promoting lifelong learning by seeking convergence and increasing the share of people engaging in learning throughout their lives with the aim of reaching 25% by 2025.

• Creating a network of European universities so that world-class European universities can work seamlessly together across borders, as well as supporting the establishment of a School of European and Transnational Governance

• Investing in education by using the European semester to support structural reforms to improve education policy, using EU funding and EU investment instruments to fund education and setting a benchmark for member states to invest 5% of gross domestic product in education".

(University World News, 2017)

Following the Gothenburg Summit and presented recommendations, intensive work on implementing the idea of European Universities Initiative had started, including the preparation to announce the first European Commission call for proposals for European Universities Initiative.

2.3. EUI Development and Implementation Phases

At the beginning of February 2018, within Directorate-General for Education, Sport and Culture, Higher Education Unit was created to support European Universities Initiative. The Unit then created Consultative Group (that consisted of fifty representatives from universities and student organizations) and an Ad-hoc Expert Group (representatives from all member states). In the below figure (Fig. 7), one can find a timeline proposed by the European Commission for the pilot phase of the European Universities Initiative.

Fig. 7. Pilot phase timeline of European Universities Initiative by the European Commission (source: European Commission, 2020)

The aims of European Universities are as follows:

- Promoting common European values and multilingualism
- Strengthening European identity
- Increasing attractiveness and international competitiveness of European HEIs
- Enabling students to obtain a degree by combining studies in several EU countries.

Expected outcomes of European Universities Initiative would focus on sharing a long term strategy for education with links to research and innovation and establishing a European higher education inter-university campus. Such campus would enable students to customize their choice of where and what to study, mobility would be embedded into study program in which new joint and flexible curricula are created.

During the roll-out phase, the European Commission initiated two calls for the European Universities Initiative. First one was launched in October 2018, during which first 17 alliances were eventually selected (out of 54 applicants) in June 2019. The total number of 114 higher education institutions got involved in the first call. The list of European Universities Initiative

alliances selected under the 2019 Erasmus+ call can be found in Annex 1. The second call was launched in November 2019. It resulted in the selection of 24 alliances out of 62 applications in July 2020. A total number of 165 higher education institutions were affected by this selection. The list of European Universities alliances selected under the 2020 Erasmus+ call can be found in Annex 2 (European Commission, 2023).

One of the important factors when selecting the alliances was a criterion of good geographical balance among alliances' partners. The below figure (Fig. 8) shows the geographical distribution comparison of coordinators and partner institutions in both calls 2019 and 2020.

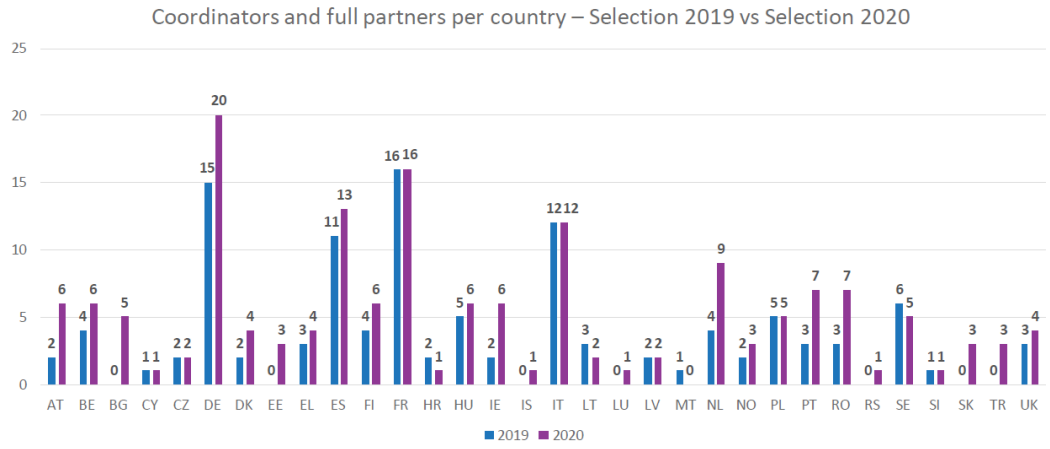

Fig. 8. Geographical distribution of coordinators and full partners in call 2019 and 2020 (source: presentation of the European Commission for alliances selected in 2020 at the kick-off online meeting with coordinators – 3/12/2020)

Apart from including partners from all types of higher education institution and covering a broad geographic scope across Europe, the alliances (European Commission, 2023):

- are based upon a co-envisioned long-term strategy focused on sustainability, excellence and European values
- offer student-centered curricula jointly delivered across inter-university campuses, where diverse student bodies can build their own programs and experience mobility at all levels of study
- adopt a challenge-based approach according to which students, academics and external partners can cooperate in inter-disciplinary teams to tackle the biggest issues facing Europe today.

This new project of European Universities Initiative launched by the European Commission is a key pillar of European Education Area (EEA) and brings new dimension and plenty of new

possibilities to the international cooperation area. By 2022 European Universities Initiative included 5% of all higher education institutions in Europe which created 41 strategic and long-term alliances with potential to transform the European Education Area in the future.

However, according to the European Strategy for universities, the European Commission planned to include up to 10% of all higher education institution in Europe to EUI concept. The prognosis was to create up to 60 alliances in total by mid-2024 and increase their potential. The European strategy for universities aims at supporting and enabling universities to adapt to changing conditions, to thrive and to contribute to Europe's resilience and recovery.

The European Universities are actually a flagship initiative of this document. The others include:

- a legal statute of higher education institutions
- a joint European degree to be delivered at national level
- use of the European Student Card initiative for all mobile students in Europe

(European Commission, 2022).

In the below figure (Fig. 9), there is a new, updated timeline of the European Commission for the European Universities Initiative.

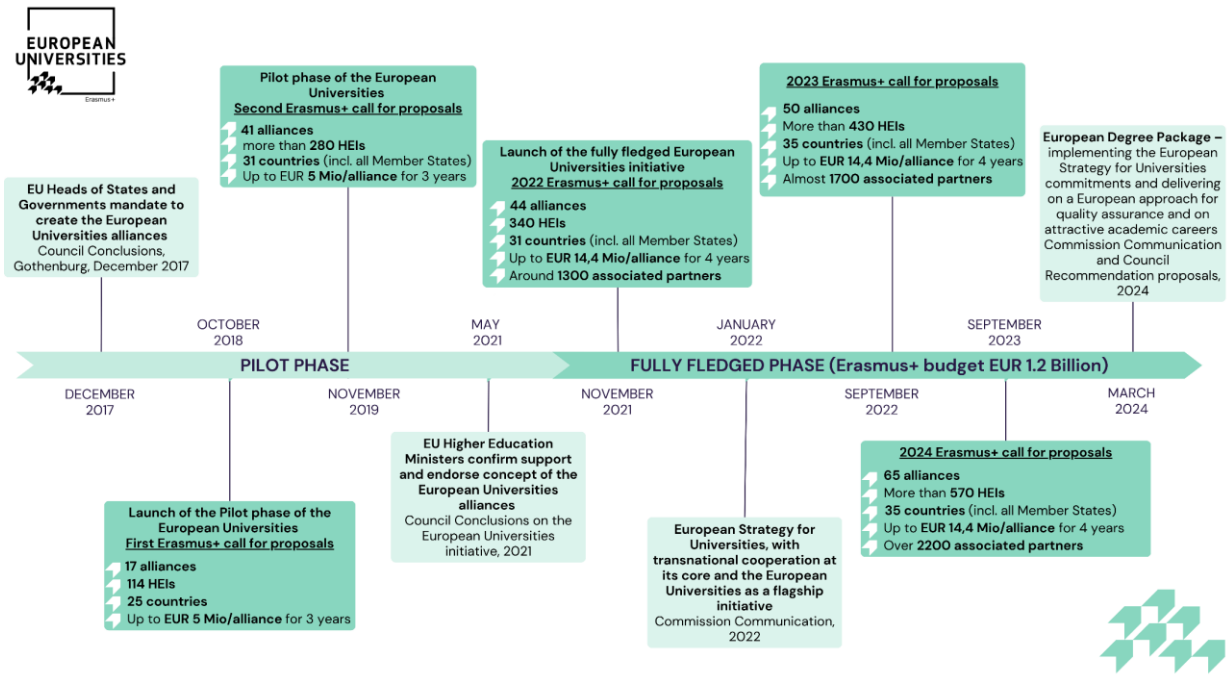

Fig. 9. Updated timeline for the European Universities Initiative by the European Commission (source: European Commission, 2025)

In order to reach that new objective, the EC created two subsequent calls for the European Universities Initiative. Call in 2022 selected 4 new alliances and provided extended, sustainable

funding, beyond 3-year pilot phase, to 16 alliances out of 17. The total number of applications received in that call was 52. As many as 175 higher education institutions were involved in this call. A year later, in 2023, the EC, in yet another call selected 30 alliances in total. The extended funding was provided to 23 out of 24 alliances selected previously for pilot phase in 2020. As many as 7 new alliances were selected in this call. All 30 alliances selected involve more than 250 higher education institutions. A novelty under this call was that higher education institutions from the Western Balkans countries not associated to the Erasmus+ program, were eligible to become full partners. As a result, higher education institutions from Albania, Bosnia and Herzegovina and Montenegro have joined the initiative, on top of those from the Republic of North-Macedonia and Serbia. Also alliances could involve higher education institutions from Bologna Process countries as associated partners. Under the 2023 call, close to 30 higher education institutions from Ukraine were also able to join the alliances. After the 2023 Erasmus+ call for proposals, there were 50 European Universities created involving more than 430 higher education institutions in both capital cities and remote regions of 35 countries. In order to reach 60 alliances target, the EC opened one last call for proposals in autumn 2023 (European Commission, 2023). This call attracted as many as 65 proposals (record number) involving around 500 HEIs. Eventually, 30 alliances were selected in this call, 23 existing alliances received renewed funding and only 7 new alliances were created. In June 2024, the European Commission announced the results of the final call which selected 14 new alliances. In December 2024, the EC decided to fund one more alliance (EU-GIFT), bringing the total number of alliances to 65 with involvement of nearly 570 higher education institutions in Europe in this innovative Initiative. Additionally, the European Commission supported the creation of FOR-EU4All project, a community of practice, enhancing collaboration and exchanging best practices among all 65 alliances (European Commission, 2025).

2.4. Objectives and Strategic Significance

Up to date strategic alliances among HEIs have been limited to certain disciplines and areas of cooperation, whereas European Universities Initiative has a much larger and broader perspective. It is based on long-term strategy in four pillars: education, research, innovation as well as European identity and values. European Universities are ambitious, transnational alliances of higher education institutions developing long-term structural and strategic cooperation. European university alliances are innovative networks that currently transform European Higher Education Area and will have a broad impact on the future of European universities and their position globally. This is clearly a very new and innovative formula of

collaborative strategies among HEIs in Europe. It implements a new and innovative way of cooperation between different higher education institutions in Europe. The project of European Universities Initiative launched by the EU in 2018 brings new dimension and plenty of new possibilities to the international cooperation area. Erasmus+ Strategic Partnership program was limited to certain disciplines and areas of cooperation, whereas European Universities program has a much broader perspective. It definitely goes beyond any potential existing bilateral or multilateral cooperation. The aim of European Universities Initiative is to reach substantial improvement in quality of teaching, student performance, attractiveness and international competitiveness of European higher education institutions mainly with American and Chinese universities (Sikorska, Misztal, 2020).

The European Universities Initiative (EUI), that emerged from political vision of French President Macron and institutional involvement from rectors' conferences across Europe, has rapidly transformed into innovative network of 65 transnational university alliances. These alliances are strategic models of cooperation, integrating education, research, innovation and European values areas. EUI has resemblance to economic and business alliances, especially in the context of structure, governance and strategic approaches. This resemblance requires scientific verification. Still, the academic literature in this regard remains sparse. The creation of such innovative and new academic alliances raise fundamental questions: Why do universities become part of European Universities Initiative? How do they create EUI consortia? What are the recommendations for newly created EUI alliances? What are the lessons learned so far? And finally - are European University Alliances evolving into a new type of institution? These are questions that require scientific investigation.

The next chapter presents a comprehensive overview of early academic studies on the European Universities Initiative presenting different perspectives on alliance formation, governance structures, identity building, policy frameworks and institutional practices.

2.5. State-of-the-art Research on the European Universities Initiative

As the first European alliances were created only in 2019, not much research was conducted in this area so far. However, there are some early studies on European Universities Initiative alliances presenting preliminary results from different approaches and angles.

Charret and Chankseliani performed a rhizomatic analysis to explore how universities build the alliances and how do they function in practice. The analysis used the six principles of the rhizome (asignifying rupture, connection, heterogeneity, multiplicity, cartography, and

decalcomania) to compare the alliances from the first pilot call. Each of the principles reflects on how networks are formed, where they come from, what they are made of, what they are building, and how they move. They discovered that many partners which created European university alliances were already part of different pre-existing alliances, mostly research networks, such as: LERU (League of European Research Universities), COIMBRA group, UNICA (Networks of Universities from the Capitals of Europe), CESAER (Conference of European Schools for Advanced Engineering Education and Research) or SGroup (formally known as Santander Group of Universities). At the same time, the alliances experimented to foster a diversity of institutional forms in order to reach the objectives of "European Universities" creation (Charret, Chankseliani, 2023). Nonetheless, this analysis was characterized by some serious limitations as it was based on only three (out of 17) newly-created alliances from the first call of 2019 (pilot phase). The interviews with key persons representing alliances were conducted in spring 2020, which means around 6 months after the creation of those alliances, that were formed only in autumn 2019. The coordinators which were interviewed, among other staff members, were hired by the universities only in January/February 2020, which means they had only a couple of months' experience at the time of the interview. The authors do admit that further studies are much required and that data need to be collected at different points in time. Also, they stress that perspective of academics and students needs to be included.

Similarly, Gunn (2020) offered a historical perspectives on alliances creation in the context of supranational university concept explored over the past 70 years and rooted in Germany. EUI though, seeks to realize the goals of supranational university in a different format, adopted to contemporary needs. He also stressed the importance of European cultural integration, which is central to EUI objectives and resonates with Macron's initial focus on multilingualism, European identity and values, as well as solidarity. The findings also revealed that even though EUI has a potential to transform cross-border collaboration among HEIs in Europe, there are still significant legal and administrative barriers to overcome.

The formation of the alliances is also studied by Craciun et al. (2023), who made an observation that early EUI alliances were often formed by institutions already experienced in EU project-based cooperation. The study on the European Universities Initiative (EUI) alliances involved 44 of them. It was prepared for the Committee on Culture and Education (CULT) and it outlines a key recommendations related to the effectiveness and sustainability of the European Universities Alliances (EUAs):

- improve the financial position of alliances
- address economic disparities
- reconsider selection criteria and expected impacts
- enhance regulatory conditions
- strengthen learning processes

The recommendations are to support the European Parliament as a co-legislator and also make sure that EUI can contribute to the goals of European integration and excellence in education.

Complementing this broad view in the educational context, a case-specific study based on a single European university – Athena, was performed by Escudeiro et al. (2023). The authors provided the overview of Athena's Joint Education Model with the emphasis on two of its main components: Competence Clusters and Embedded Mobility. They also stressed Athena's commitment to inclusivity and effective societal service, at the same time utilizing digitalization in order to enhance educational opportunities and outcomes for all. However, this study had a limited impact as it showcased only one alliance.

Equality, Diversity and Inclusion (EDI) strategies, in the context of European University Alliances, also showcased only one alliance – Ulysseus (Siri et al., 2022). The study emphasized the need for inclusive academic practices and the importance of addressing transition from education to work, especially through EDI. The authors suggested to implement micro-actions, which were inspired by European values, in order to counteract disadvantages of underrepresented groups of staff and student in academia. This approach was used for promoting EDI strategies by creating focus groups within Ulysseus alliance. The challenges were identified even within 1 alliance, since it comprises of universities from different countries, each with its own cultural and institutional context. Different interpretations and implementations of EDI strategies among one alliance partner made it difficult to set up a unified approach across the whole alliance, not to mention a strategy for many or all alliances.

In a similar approach, though in a broader context, promoting inclusion, is studied in the paper entitled "The European Universities Imitative: between status hierarchies and inclusion" (Lambrechts et al., 2023). This study explores if European Universities initiative had successfully balanced high-quality education and inclusiveness among different higher education institutions. The research highlighted the tensions that arise when attempting to implement inclusive policies within institutions that have a long history of hierarchical structures. The study revealed that, even though, EUI provided a framework for greater inclusion, the success of these initiatives would depend on how well they are integrated into the

existing institutional cultures and long-standing frameworks of the participating universities. These concerns are further reflected in the paper of Brooks and Rensimer (2023) in the national context. The analysis revealed that that there are many different perspectives related to geographical boundaries within the European Higher Education Area, inclusivity level of higher education and the role of member states in this evolving landscape. EUI is perceived as creating a great potential for further integration of HEIs in Europe, yet, there are challenges posed by national differences. The role of supranational interests and overarching European agenda was considered in the study by Kanniainen and Pekkola (2023). The future of international and supranational integration requires a redefinition of the evaluation framework related to collaborations among HEIs in Europe. In these new collaborative strategies the focus should be shifted from intergovernmental processes to institutional collaborations. Strong support from the member states is essential for successful implementation of the new types of supranational higher education institutions. A multi-level analysis on data from policy documents and mission statements of EUI partnerships, together with semi-structured interviews with European policy officers, was performed by Marques and Graf (2024). Their study revealed the complex correlation between policy and partnership levels, which highlighted EUI's transformative potential for European higher education cooperation. European University Imitative is considered as a case of transnational institution building, through the analysis of its regulative, normative and cultural dimensions. This research emphasized the importance of missions statements as documents reflecting norms and values embedded in the EUI policy.

Another approach to European Universities Initiative was undertaken by Frame and Curyło (2023). Their research introduced an original concept of "Everyday Europeanhood". The concept evolved from "everyday nationhood" model of Skey and Antonsich (2017). This new concept examined European collective identity as well as the creation and maintenance of European consciousness through means of day-to-day social interactions and practices. The 'European Universities Initiative' is presented as an example of 'banal Europeanism' often reflected in pro-European policies adopted by EU policies and governance. It also serves as testing ground for the "everyday Europeanhood" notion when it is introduced by different stakeholders, such as academic staff, students and others. Based on an exemplary alliance selected in 2019, the authors categorized main features, actions, aspects and outputs achieved so far, taking into account four dimensions of "Everyday Europeanhood": "Talking Europe", "Choosing Europe", "Performing Europe" and "Consuming Europe" (Frame, Curyło, 2023).

The authors admitted that if and to which extent "Everyday Europeanhood" concept can be observed generally within alliances is a matter of several different factors. Furthermore, they tested the concept only on one, single alliance, which is a huge limitation of their research. However, they do hope that the concept of "everyday Europeanhood" can be further investigated not only in theory, but also in practice to a much greater extent.

A regional innovation perspective was provided by Zenkienė and Leišytė (2024) in demonstrating how alliances contribute to enhancing university capacity in regional ecosystems, based on the example of Lithuanian universities involved in EUI alliances. The key findings showed that universities involve in cross-sectoral collaborations with different societal stakeholders, government and industry partners, which enhances innovation in teaching, but also in research. At another national level, the participation of Polish universities in the European Universities Initiative was presented in two key studies: a monography by Antonowicz et al. (2024) "Polish universities in the European Universities Initiative" and also in edited volume by Poszytek and Budzanowska (2023) "European Universities in Poland". Both publications provided insights into strategic motivations, institutional transformations and also challenges encountered during implementation phase by Polish HEIs within European Universities Initiative.

A more extensive and broad research related to EUI was conducted by Valdes and Comendador in 2022. It displayed early quantitative evaluation of 41 alliances from the EUI pilot phase (chosen by the EC throughout two calls in: 2019 and 2020). The authors selected 5 of the most advanced in order to evaluate their best practices and contribution to the achievement of Civic Universities (CivUs) concept. The authors originated the European Universities Initiative to the idea of Civic Universities. CivUs was formulated back in 1996 by Boyer who discussed the "scholarship of engagement" as "…connecting the rich resources of the university to our most pressing social, civic, and ethical problems, to our children, to our schools, to our teachers, and to our cities" (Boyer, 1996). Five selected alliances were then analyzed based on the evaluation criteria for good practices implemented by them and how these good practices were aligned and could contribute to the concept of CivUs. Analytical hierarchy process (AHP) provided a quantitative framework in order to rank the good practices, applied by selected alliances, against the previously established evaluation criteria. The result showed that, even though, all selected alliances put into effect good practices, which cover common areas such as: mobility (for students and staff), innovation, sustainability, research on SDGs or governance; all 16 best practices identified, significantly differ from each other. The reason for this might be the fact

that the alliances were selected in a very competitive call (41 out of 116 applications), so the evaluators may have chosen more original proposals where diversity and differentiation played crucial role (Valdes and Comendador, 2022). The authors also performed a quantitative analysis on 41 alliances (see Fig. 10), related to the countries that participated in the EUI calls from 2019 and 2020 and concluded that the countries with highest representation are Germany, France, Italy and Spain (where more than 15 universities are part of EUI). German universities are the most represented in the European Universities Initiative – as many as 31 are part of 41 alliances selected in the pilot calls.

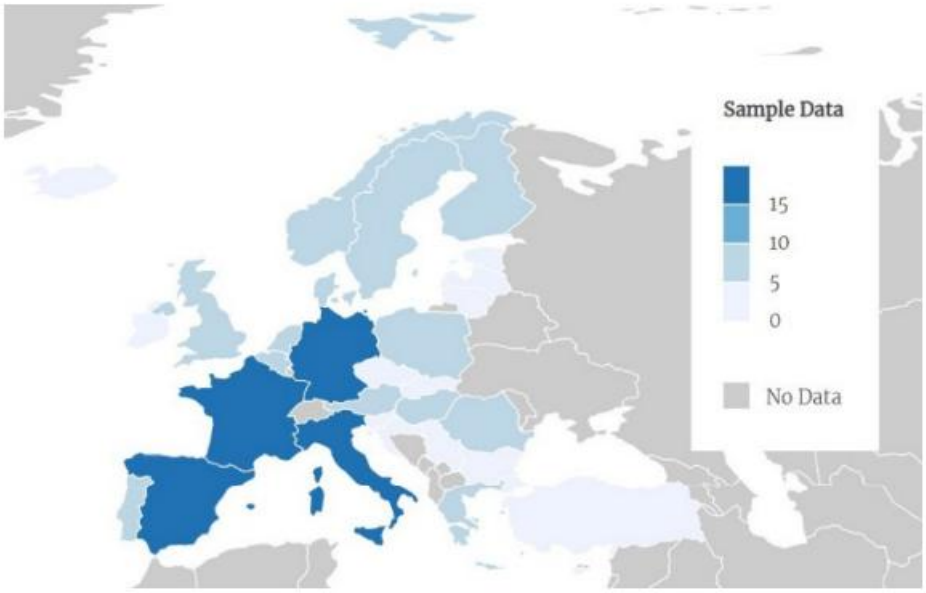

Fig. 10. Countries participating in the European Universities Initiative – 41 alliances (source: Valdes and Comendador, 2022)

The next figure (Fig. 11) displays the detailed spread of participation in EUI between countries. Interestingly, some countries have only single representation and these are: Slovakia, Iceland, Malta, Serbia, and Turkey. The United Kingdom and Norway, although not being members of the EU, have eight and five universities represented in EUI, respectively.

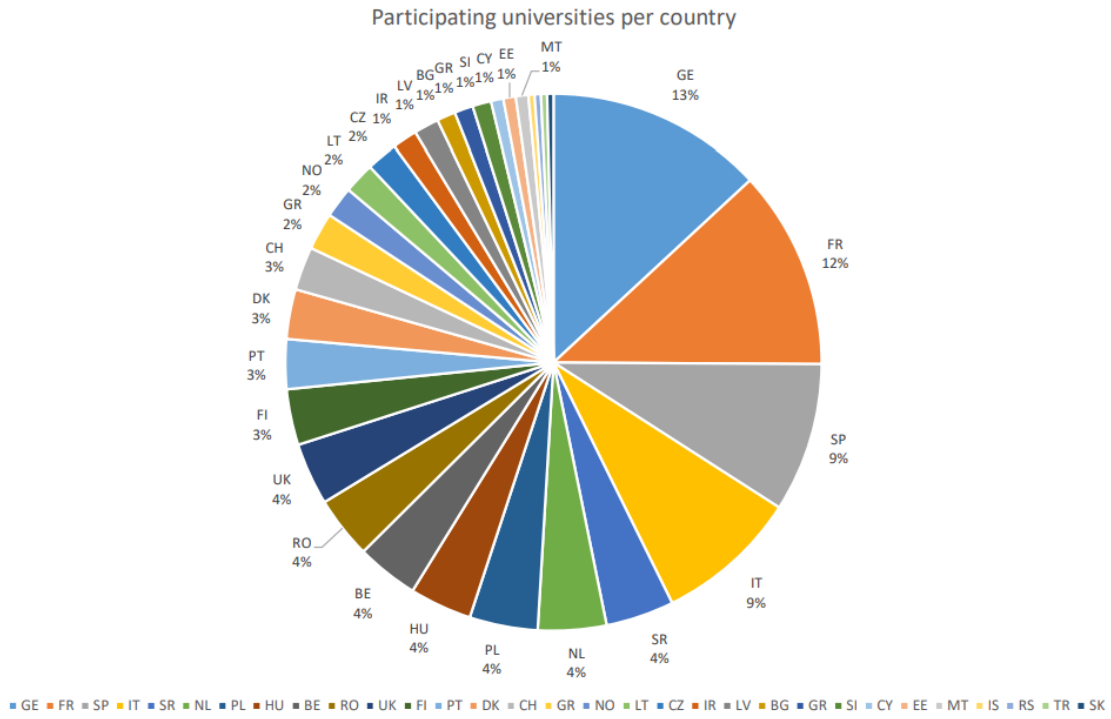

Fig. 11. Participation in the European Universities Initiative by countries – first 41 alliances (source: Valdes and Comendador, 2022)

An interesting voice on the concept of European Universities Initiative was heard from Marina Pagliarello (2022). She was trying to answer the following question "what role does the European Universities Initiative play in advancing (and enhancing) market integration in European higher education? Even though higher education sector is under the competence of member states, since the introduction of Lisbon Strategy (2020), the HE sector has gained a status as an instance of the single market (Sin, Tavares, 2018). In order to showcase the role of EUI alliances in advancing market integration, as well as to implement the alliances in regards to their policy design, the author (Pagliarello, 2022) adopted the analytical concept of Borrás and Radaelli called 'governance architectures' which are 'strategic and long-term political initiatives of international organizations on cross-cutting policy issues locked into commitments about targets and processes' and as they are a specific form of institutional arrangements, they possess 'three main features; namely, they address complex problems from a strategic and holistic long-term perspective; they set substantive output-oriented goals, and they are implemented through a combination of old and new organizational structures within the international organization in question' (Borrás, Radaelli, 2011). While taking into consideration, European Commission's role in the governance of architecture of European Universities Initiative, the EUI can be illustrated in the context of three dimensions:

- pragmatic strategy (resolving shortcomings of Bologna Process, involvement of stakeholders, strengthening organizational capacity)
- economic strategy (emphasis on mobility, investment in industry, technology and innovation, involvement of private and public employees, European degree)
- political strategy (Europeanisation, fostering common values and identity)

(Pagliarello, 2022, p. 158).

On the other hand, three features of the 'governance architectures framework' outlined by Borrás and Radaelli (2011, p. 464) can be represented in European University Initiative by:

1) a long-term problem definition that considers the EUI to be a 'flagship example for modern and inclusive higher education institutions of the future in Europe' (Council of the European Union, 2011)
2) goals and output-oriented targets – e.g. 50% target of mobile students, 20% of mobile staff, joint degrees and micro-credentials, but also legal status
3) combination of old and new organizational arrangements, which can be observed in governance structure incorporation of European Higher Education Area (EHEA) and European Research Area (ERA), but also combined with top-down and bottom-up governance models with supranational coordination.

(based on Pagliarello, 2022 with own input).

One of the most detailed early studies on the EUI alliances governance models was conducted by Estermann et al. (2021, p. 19). It identified certain challenges related to the EUI alliance governance when it comes to achieving alliance objectives:

- close connection with institutional governing bodies
- various legal and regulatory barriers
- need for sustainable funding
- improved alignment with institutions' strategic priorities
- being aware of opportunity costs and existing alternatives.

Estermann studies indicated critical tensions between ambitious vision of the EUI and the operational reality of the initiative operating in diverse higher education systems in Europe. They also demonstrated that alliances' governance structures cannot be perceived as technical structures, since they are deeply rooted in institutional, political and financial contexts. (Estermann et al., 2021). These findings were also addressed in analysis that framed alliances as multi-dimensional meta-organizations, which experience issues related to internal

coordination, conflict resolution and integration. In this concept a critical test for EUI success is finding the right balance between integration and institutional autonomy (Massen et al., 2022)

All in all, one can observe a growing interest in research related to the European Universities Initiative (EUI). Yet, despite of its strategic significance and scale, academic research on the EUI still remains at its early stages. Initial studies, even though valuable, are limited in their scope, often focus on single alliances or specific areas like identity formation, inclusion, governance or simply offer general reflections on the initiative. There seems to be a lack of in-depth studies on developing long-term collaboration strategies by the alliances, in particular beyond short-term project phases. This PhD thesis aimed to fill in this gap by demonstrating how alliances initiate, manage and strengthen their collaborations. By providing the analysis of 41 alliances selected in 2019 and 2020 call of the European Commission, this research presented new insights into the evolution and transformative potential of higher education institutions engaged in the European Universities Initiative.

3. RESEARCH METHODOLOGY

The European Universities Initiative (EUI) have been attracting many universities in Europe. A key question is why universities decide to be a part of these consortia. Some of the reasons may include: enhancing educational quality, increasing research opportunities and improving global competitiveness. The creation of the European university alliances resulted in identifying common goals and forming long-lasting strategic partnerships. A crucial issue to consider is what binds these universities together. Many universities were already engaged in common educational and research activities, student and staff exchanges before becoming a part of EUI, and that created a solid ground for further cooperation in the future.

In this study the author investigated 41 university alliances created under the European Commission Erasmus projects from 2019 and 2020 calls. For newly created EUI alliances, several recommendations and lessons have emerged. Establishing clear objectives, developing strong governance structures, ensuring sustainable funding, promoting inclusive participation, and implementing continuous evaluation are essential for success (European Commission, 2022a). These strategies help maximize the benefits of being part of the EUI and contribute to the initiative's overarching goals.

The main rationale for addressing the chosen topic was the research gap identified based on the performed analysis of the literature on the subject of European Universities Initiative. The author carried out literature analysis using systematic literature review (SLR). Since the first alliances were created only in 2019, performed SLR indicated that there were not many research studies yet related to the topic in question. The first informal European Universities Initiative research group was created only back in 2022 and the author is a member of this group. The group currently unites around 50 EUI researchers in Europe.

3.1. Research Design and Concept

The research methodology employed by the author in this study was based on Denzin's Methodological Triangulation, which utilizes multiple research methods to enhance the quality and credibility of the findings (Denzin, 1978). By incorporating various approaches, this methodology allows for a more comprehensive examination of phenomena, ensuring that different perspectives complement each other. This approach is particularly effective as it is guided by the nature of the objects being studied, allowing for a deeper and more complex understanding. Fig. 12 presents the overview of research methods adopted in this study.

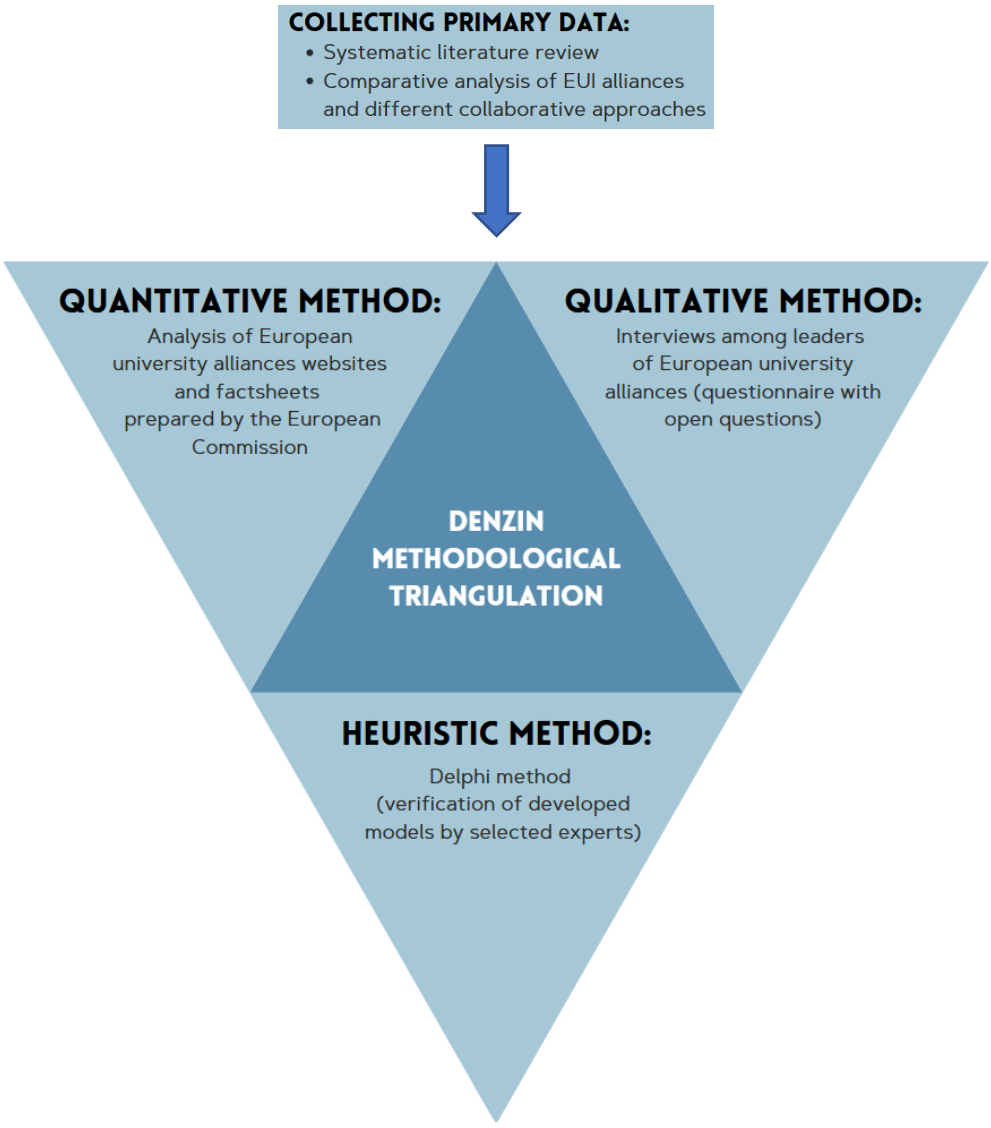

Fig. 12. Research methods applied in this study
(source: author's own elaboration)

The author decided to focus in this research on the analysis of 41 European university alliances that were selected by the European Commission in 2 calls:

11/2019 – 17 European university alliances (out of 54 applications)

02/2020 – 24 European university alliances (out of 62 applications)

Research concept adopted in this study can be divided into five stages as presented in the below flowchart (Fig. 13):

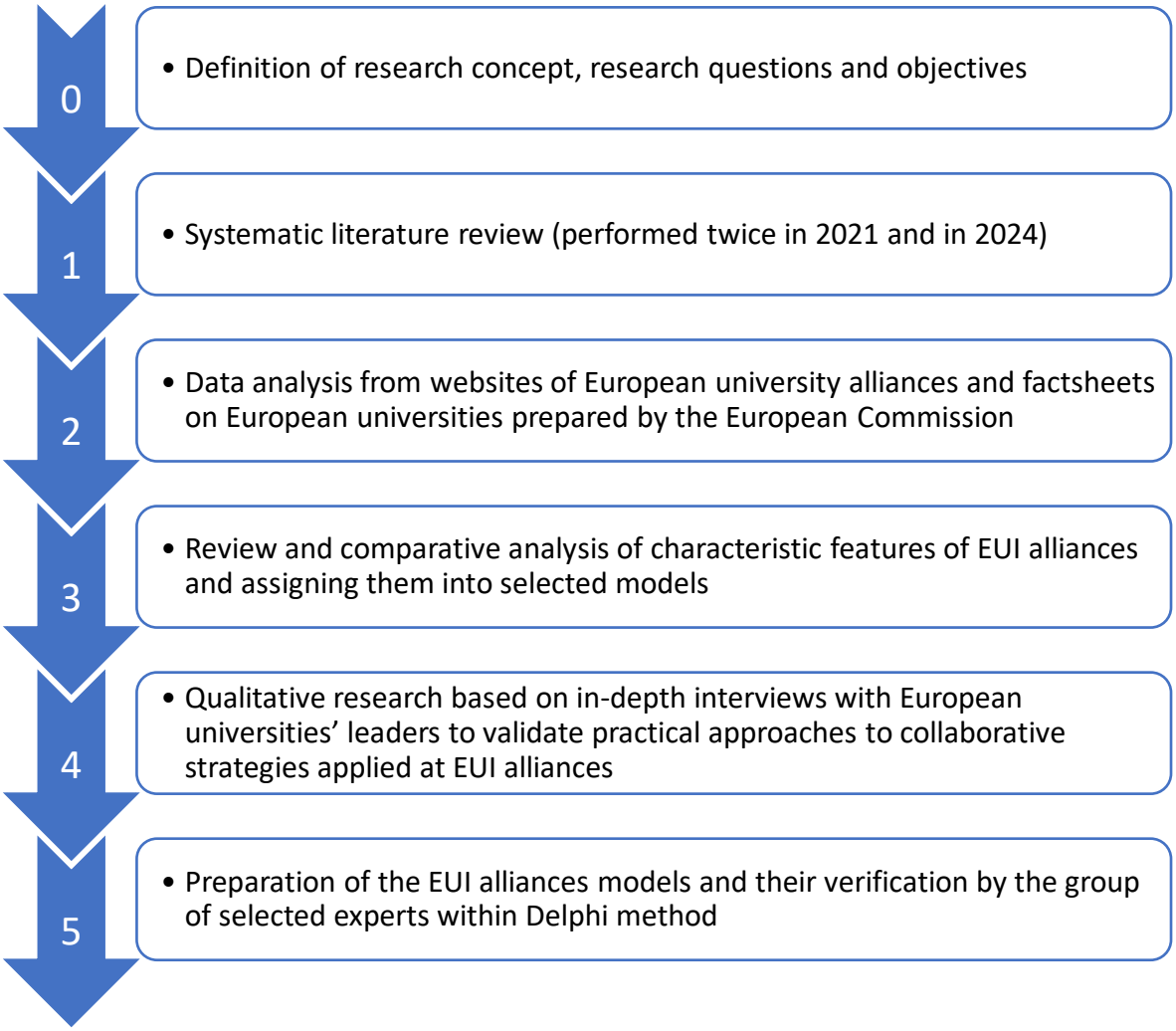

Fig. 13. Five stages of research concept adopted in this study
(source: author's own elaboration)

3.2. Systematic Literature Review (SLR)

The European Commission proposed the European Universities Initiative to European Union leaders in November 2017, as part of an overall vision for the creation of a European Education Area by 2025. The initiative was endorsed by the European Council in its conclusions at the meeting in Gothenburg in December 2017, which initially called for the emergence of at least 20 European Universities by 2024. The concept of European Universities was developed under the guidance of the European Commission, in close cooperation with member states and higher education institutions as well as student organizations.

The aim of the systematic literature review (SLR) was to thoroughly verify and assess the current state of the European Universities Initiative (EUI). This review was seeking to provide a comprehensive understanding of how the EUI is being implemented, its impact on participating institutions, and the broader implications for European Higher Education Area

(EHEA). Through detailed analysis and synthesis of existing literature, the SLR aimed to clarify the successes, challenges, and future directions of the EUI.

The methodology of systematic literature review involved a structured and rigorous approach to analyzing existing research in a comprehensive and objective way. Various studies highlight the importance of SLR in different fields. SLR is essential in synthesizing prior work to enhance the understanding and reduce bias, particularly in fields like management and quality sciences, where such reviews are less common (Amjad et al., 2023).

Sauer and Seuring (2023, p. 1902) identified four generic steps in systematic literature review in the management area:

- design - identification of the need for the study where the goal is to address research goals in existing guidelines and enhance research process
- conduct – focused on collecting literature that provides guidelines
- analysis – involves analyzing the collected papers
- structuring and writing the review – focused on structuring and writing the review discussing the findings to align them with state-of-the-art approach

However, Durach et al. (2017, p. 70) recognize that, regardless of the field, discipline, or philosophical perspective, SLRs commonly follow six steps:

- defining the research question
- determining the required characteristics of primary studies
- retrieving a sample of potentially relevant literature
- selecting the pertinent literature
- synthesizing the literature
- reporting the results

According to Sauer and Seuring (2023, p. 1903), when performing SLR in management research, the process requires to make following 14 distinct decisions:

- research question decision: formulating a clear research question to guide the systematic literature review process, ensuring the focus and relevance of the study
- primary study characteristic decision: identifying and defining the key characteristics of the primary studies to be included in the review, such as publication date, research methods, and sample size
- literature retrieval decision: developing a strategy to retrieve a sample of relevant literature, including defining search terms, databases to be searched, and inclusion/exclusion criteria

- literature selection decision: applying criteria to select relevant studies from the retrieved sample, ensuring the inclusion of studies that align with the research question and objectives
- synthesis decision: synthesizing the selected literature by analyzing and summarizing key findings, themes, and trends across the included studies to derive meaningful insights
- reporting structure decision: deciding on the structure of the paper to effectively communicate the review process, findings, and implications to the readers
- theoretical framework presentation decision: presenting a refined theoretical framework derived from the analyzed literature and discussing its contributions to the field of study
- journal selection decision: identifying an appropriate journal for publication based on the nature of the analyzed papers and the target audience for the research findings
- design decision: identifying the need for the study based on experiences in reviewing SLR manuscripts and engaging in discussions on critical decisions in the SLR process
- conduct decision: collecting literature that provides guidance on individual SLR parts to enrich existing SLR guidelines in the management domain
- analysis decision: analyzing the collected papers using the six-step SLR process as proposed by Durach et al. (2017) to enhance the research process
- structuring decision: structuring and writing the review based on the synthesized guidance and critical enrichment of existing SLR guidelines to ensure meaningful contributions to the field
- enrichment decision: enriching existing SLR guidelines in the management domain by synthesizing and refining the SLR process model through 14 key decisions
- presentation decision: presenting the method without a theory section and directly discussing the findings to align with the integrative review nature of representing the 'state of the art' in the field.

The systematic literature review methodology guarantees rigor in data collection, objectivity in the evaluation of scientific evidence and effectiveness in labelling complex research questions, therefore, it seems to be fundamental to scientific research. This methodology comprehensively covers review of existing literature, as well as enhances reliability and validity of research findings. Synthesis of available studies, provided by SLR, allows researchers to provide well-founded conclusions and identify research gap in the current knowledge, which allows further investigations (Stępień, 2023; Anastasiadou et al. 2023; Çakmak, 2024). However, limited

accessibility to academic material and desk rejection related to lack of quality and contribution to knowledge can impair the effectiveness of SLR (Alsadi et al. 2024; Dhiman et al. 2023). Despite these limitations, SLRs still remain valuable tools for researchers in quality and management sciences that allow to consolidate knowledge and advance further investigations. All in all, the author decided to follow in her research the four-step model of SLR as identified by Sauer and Seuring (2023) due to its clarity and strong focus on identifying research gap.

3.3. Data Analysis and Synthesis

As a follow-up to systematic literature review, the author performed content analysis and data synthesis of available materials related to 41 selected European university alliances, such as:

- 41 websites of European university alliances
- 41 factsheets on European universities prepared by the European Commission.

In management research the most effective methods of performing data analysis and synthesis involve a combination of quantitative and qualitative approaches. Qualitative methods, such as case study, ethnography, focus groups, participant observation or interviews, provide in-depth insights into the context and nuances of the data. On the other hand, quantitative methods like surveys and self-completion questionnaires, experiments, simulation modelling and quantitative data analysis offer statistical rigor and generalizability to the findings (Bryman et al. 2011; Easterby-Smith et al. 1991). By integrating these diverse methods, researchers can triangulate data, enhancing the verification and reliability of their conclusions. As noted by Sułkowski et al. (2021), the combination of multiple methods of analyzing data and synthetizing them, increases the credibility of research results in management sciences, in particular when it comes to dealing with interdisciplinary and complex research problems. This approach is particularly valuable when evaluating European Universities Initiative with its multilayer nature related to strategic management, governance and international cooperation among higher education institutions in Europe. Furthermore, data analysis is not a linear process, but it is rather a sequential one, which includes different paths. Some of them come with fruitful solutions, the other may have unproductive outcomes. This approach must be understood by researchers to effectively carry out their research and data analysis process (Cowley et al., 1986). It is a time-consuming and complicated process to reach effective results of the data analysis, therefore, it is important to associate the data based on their type or classification. This association ensures that the data are well-organized and can be easily accessed and understood by all recipients (Narancic, 2006). Extracting meaningful insights from analyzed data requires

multi-method and very meticulous approach which sometimes may result in detours and be very time-consuming. Therefore, grouping data in alliances' types (thematic and typological) allowed to ensure structural analysis and supported the development of strategic models for both types of alliances. Multi-method research process requires not only systematic literature review and data analysis and synthesis, but it is also important to include qualitative research method, such as in-depth-interviews (IDI). More insights into the methodology of IDI is provided in the next chapter.

3.4. Methodology of In-Depth Interviews (IDI)

As a next step in-depth interviews (IDI) were performed with European University Alliances leaders. IDIs are pre-planned and detailed systematic interviews with respondents based on predetermined scenario.

In qualitative research, in-depth interviews are a valuable method for gathering rich and detailed data. Warren and Karner (2010) emphasize the significance of qualitative interviews in social science research, providing guidance on conducting interviews effectively. IDI interviews allow researchers to explore deeply into participants' perspectives and experiences, capturing different insights, contributing to a deeper understanding of the research topic. By utilizing in-depth interviews, researchers can uncover nuanced details, understand complex phenomena, and generate comprehensive insights that quantitative methods alone may not capture. In this research, IDIs were performed among the high-level representatives of university management, such as university leaders, senior administrators or university executives. Therefore, there was a need for a focused strategy to be applied in these kind of elite interviews. In such IDIs, it is very important to build trust with elite interviewees in order to gather high-quality data. There is a need to establish rapport from the initial contact through the interview process and beyond, build trust with interviewees, setting the interview tone and be ready to handle difficult and unexpected situations in order to obtain feedback from respondents. Researchers are often faced with challenges, such as limited time to interact with elite subjects, which requires a structured approach to obtain focused responses efficiently. It is also important to find balance between obtaining qualitative and quantitative data in elite interviews, where open-ended questions can be complemented by close-ended questions for a comprehensive data collection approach (Harvey, 2011; Knott et al., 2022). Therefore, the designing part of the in-depth interviews is a key element in the process. The most important steps would include: formulating questions, developing a guide for the interview and ethical considerations, such as participant reciprocity

and confidentiality (Osborne, Grant-Smith, 2021; Knott et al., 2022; Virole, Ricadat, 2022; Pilbeam et al., 2022).

As a result of the analysis involving systematic literature review, data analysis and synthesis of alliances websites and factsheets, following by the in-depth interviews with high-level representatives of European Universities Initiative alliances, the author developed three strategic models of alliances. In order to verify these models, the next research step in the process involved the application of one of the heuristic methods – namely, Delphi method.

3.5. Delphi Method

Delphi method is one of the complex heuristic methods, which is used to solve difficult and challenging problems in the uncertain conditions (Apanowicz, 2003). The method was developed in the 1950's and 1960's by the RAND Corporation and since then has been used in many fields and for different purposes, such as: creating policy, establishing guidelines, identifying trends and more. A Delphi method is based on the idea that collective group responses are better and more reliable than individual responses (Sablatzky, 2022). This method structures group communication process in order to ensure effectiveness of independent persons (usually experts), that strive to solve a complex problem. It is based on developing a solution to a specific research problem on the basis of consensus of experts' opinions generated in a sequence of interactions, solely in the context of indirect communication between study participants (Chybalski, Matejun, 2013).

Its course is characterized by four fundamental principles (Cieślak, 2002, p. 165):

- complete freedom and independence of experts' opinions
- anonymity of expressed judgments and proposed solutions
- a multi-stage procedure
- aiming at reaching consensus and aggregating participants' opinions.

An essential part leading to the results of the study is the expert selection. Their knowledge and experience in terms of education and professional practice should be diverse in order to provide wide range of perspectives. The experts should have positive personality traits, such as independent thinking (Sudoł, 2016).

The stages of Delphi method used by the author for the evaluation of the three models were the following:

Stage 1 – Problem definition

Stage 2 – Expert selection

Stage 3 – Preparation of a questionnaire

Stage 4 –Distribution of the questionnaire

Stage 5 – Analysis of the experts responses to the questionnaire

The details are presented in the below figure (Fig. 14).

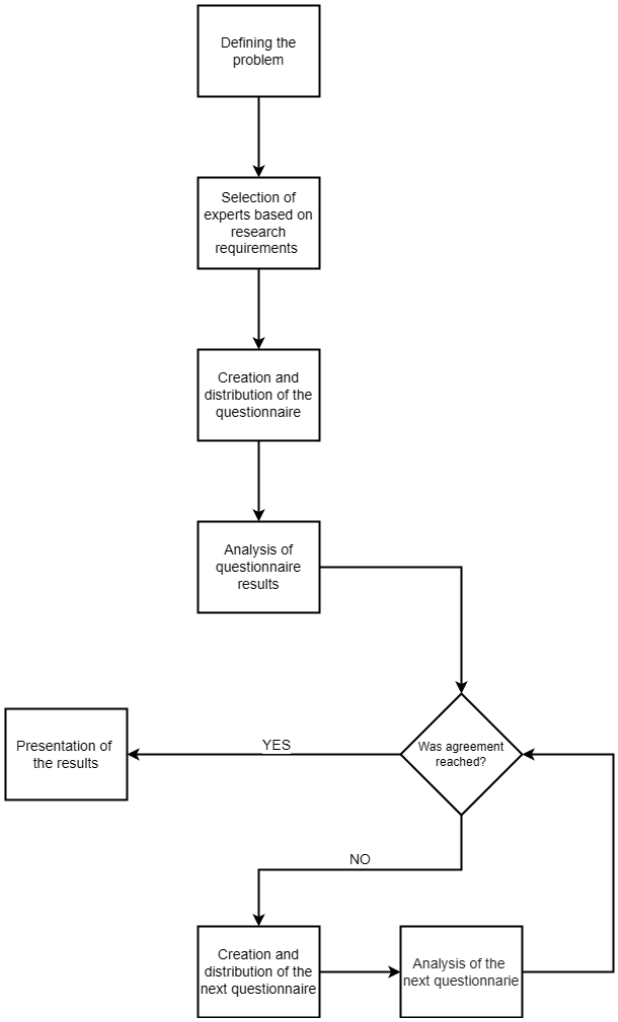

Fig. 14. Stages of the Delphi method
(source: Cieślak, 2002)

As far as the last stage is concerned, it is important to establish a threshold for consensus in Delphi method in order to assess if the agreement among the experts was reached. The author adopted a 75% agreement level of positive responses from experts as the benchmark for finalization of expert verification. This adopted threshold matches empirical findings of Barrios et al. (2021) who demonstrated that 75% agreement among experts functions as a cutoff point when considering another round of verification with experts involvement. This approach mirrors also similar, earlier methodological findings (Diamond et al., 2014; Foth et al., 2016).

Based on these findings, a 75% threshold was used by the author in alliances' strategic models evaluation process as a consensus criterion among experts.

The models were created using the Business Model Canvas (BMC), which is a strategic management tool developed by Osterwalder and Pigneur (2010). It provides a visual framework for developing, describing, and analyzing business models. It is widely used for its simplicity and effectiveness in helping organizations understand and communicate their business strategies.

4. STUDY PROCESS

4.1. Systematic Literature Review Results

Following Sauer and Seuring (2023) identified four generic steps in systematic literature review in the management area, the author designed the SLR for the purpose of this thesis. The aim of SLR was the verification of the current state related to the concept of European Universities Initiative. For the purpose of systematic literature review, the following initial questions were raised by the author:

1) Why do Universities become part of European Universities Initiative?

2) How do they create the EUI consortia?

Universities have been increasingly seeking to collaborate on an international scale, which led to the creation of the European Universities Initiative (EUI). The evolution from international cooperation among universities to the European Universities Initiative represents a new dimension and quality of collaborative strategies between higher education institutions, as launched by the European Commission. This initiative marks a significant advancement in how universities across Europe collaborate, enhancing deeper integration and innovation in educational and research endeavors. The evolution of this process is presented in the below figure (Fig. 15).

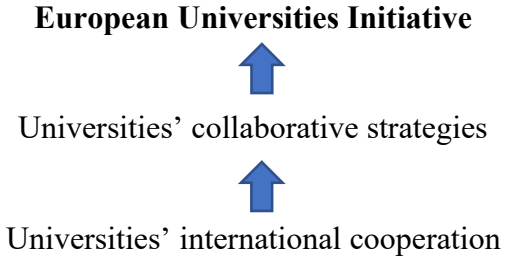

Fig. 15. Evolution of international cooperation among European universities
(source: author's own elaboration)

This raised further questions: Was there any structured international cooperation between universities prior to the creation of the EUI and what binds these universities together?

However, key questions in the process of designing the SLR were the following:

a) What are the recommendations for newly created EUI Alliances?
b) What lessons have been learned so far?

The author decided to select Web of Science database based on its reputation as primary international scientific database. In order to ensure a comprehensive search for relevant literature, Google scholar was also selected in order to provide completeness check. After analysis of the above raised questions, the following keywords for this SLR were selected:

- "European Universities Initiative" (or "European Universities") and
- "European Commission"

The author chose English language as the language of the systematic literature review and performed two systematic literature reviews. The first one was conducted in December 2021 and allowed to identify the initial research gap. The second one was conducted in May 2024 to include in the selection process also the most recent publications within the selected research area. Therefore, in the second SLR in order to include the recent research developments, but also to take into account the novelty and uniqueness of the topic related to the European Universities Initiative, the range for publications dates were extended from 01/01/2020 to 01/05/2024. The details of the second SLR query can be found in the below figure (Fig. 16).

Fig. 16. Chosen query in the Web of Science database search for systematic literature review (source: author's own elaboration based on Web of Science)

The search results in Web of Science ended with 224 articles that were matching the criteria. As a result of this search, data extraction table was prepared in the form of an Excel file with 224 records. The following records content were extracted: authors, article title, source title, abstract, publication date, publication year, volume, issue, start page, end page and DOI number.

As a next step a filtering procedure was adopted which was based on verification of:

- Article title
- Article abstract

Post-verification, 16 articles were selected for their high relevance to the objectives of the systematic literature review.

To ensure the completeness of the search, the top 100 items in Google Scholar were thoroughly reviewed. After this verification process, 5 additional articles were identified and added to the list. Consequently, the final number of articles included in the SLR was 21.

4.2. Content Analysis of European University Alliances' Websites and Factsheets

The analysis of 41 European university alliances websites was performed, followed by the analysis of 41 factsheet of European Universities that were prepared by the European Commission. The following data were collected:

- European university alliance name
- Leading institution
- Partner institutions
- Main concept
- Description of the adopted model
- Associated partners
- Information on Horizon 2020 research project of the alliances
- European university website URL
- Online link to the corresponding factsheet

The foundational data collected were gathered in two files constituting Annex 3 (data related to 17 European Universities Initiative alliances selected in 2019) and Annex 4 (data related to 24 European Universities Initiative alliances selected in 2020).

4.3. Phases of Conducting In-Depth Interviews (IDI)

The process of performing in-depth interviews (IDI) constituted of four phases:

Phase 1 – Preparation phase

The areas and questions were carefully selected in order to correspond to research objectives and research questions. The initial questions raised during the preparation for systematic literature review constituted the ground for raising the questionnaire questions. The main investigated areas and questions from the questionnaire are listed below:

GENERAL INFORMATION

What is the name of your alliance?

What is the selection year?

What is your role in the project?

GOVERNANCE MODEL

What is the governance model of your alliance? How is governance organized?

What are the main governance bodies?

What is the involvement of students in governance? Do you have a separate student governance body?

Are there any barriers/limitations of the chosen governance model?

ASSOCIATED PARTNERS

How many associated partners do you have?

How did you select your partners for this alliance? Which criteria were taken into account when selecting partners?

What are the roles of your associated partners in your alliance?

PREVIOUS COOPERATION

What was your previous cooperation with other partners like (prior to creating this alliance)?

How long before the creation of your alliance did you cooperate with your alliance partners?

RESEARCH

Can you indicate leading research areas within your alliance?

Is this alliance joint research a priority compared to other research initiatives undertaken beyond the alliance?

CREATING YOU ALLIANCE

What are the biggest obstacle/barriers in creating your alliance?

How did the creation of your alliance contribute to the reinforcement/enhancement of your current university activities?

Do you find common concept approach in creating your alliance a limitation or an asset? Would you chose a different approach today? If so, what would you do differently?

What are your biggest achievements so far within the alliance?

What is the added value of your alliance creation and cooperation between partners?

FUTURE OF YOUR ALLIANCE

What are the expected outcomes after 3-year pilot phase of this project?

What are the biggest threats to your alliance?

What are the main limitations of EUI?

How do you foresee the future of your alliance in 2030?

The fully designed questionnaire is presented in Annex 5.

Phase 2 – Selection of respondents

As part of the research concept, in-depth interviews with coordinators (leaders) of European university alliances were planned. A thorough selection of respondents was performed based on the content analysis of European universities website and factsheets in order to identify the most suitable interlocutors. Since the alliances are structured differently in terms of their governance models, the roles of interviewees differ from each other. The detailed roles of interviewed leaders' representatives are presented in Fig. 17.

Fig. 17. Roles of interviewed leaders of European university alliances (source: author's own elaboration)

Fig. 17 provides information on the distribution of different leadership positions that were interviewed during in-depth interviews with some roles being more dominant than the others. The highest number of interlocutors were Alliance Coordinators and Heads of management office (5 in each category). The other roles of interviewees were Secretaries General and Executive Directors, which were less represented (3 in each category).

The intended target was to conduct the interviews with representatives of all 18 European university alliances. Despite aiming for 100% alliances to be interviewed, the author was able to interview 16 leaders of European university alliances, which constitutes nearly 90% of all respondents. Still the participation in these interviews was really high, which underscores a significant engagement of alliances' coordinators in this study. Furthermore, almost complete coverage of respondents makes the results reliable and credible in terms of research findings.

Phase 3 – Interview performance

Interviews were performed during the period of 7 months between 21/04/2022 and 8/11/2022. The vast majority of interviews were performed online via zoom platform. Two interviews were performed onsite during a face-to-face meeting with respondents. One interview was made during a site visit to one of the coordinating institution of a European university alliance and the other one was made during a conference meeting. All interviews lasted for approximately 1 hour.

Phase 4 – Data gathering

All interviews were recorded and transcribed. In order to ensure confidentiality of the participants, the interview data were anonymized, since the priority was given to protection of the identity of those taking part in the study, in order for the participants to feel comfortable in providing answers to questions. Therefore, each alliance was assigned a number and was encoded from 1 to 16 (e.g. EU6 means European university alliance no. 6). All the answers were collected into a single Excel file and a detailed analysis of the answers in each category pertaining to each question was performed.

4.4. Implementation of Delphi Method

In order to verify the strategic models developed in this research, the author used one of the heuristic method called Delphi method. This method allowed to increase the reliability of the developed models. The process was based on five stages (as presented in Fig. 14 in chapter 3.5) described in details below.

Stage 1 – Problem definition

The expert were asked to verify 3 collaborative models of European Universities Initiative alliances created based on author's research involving literature review, data analysis and synthesis, as well as questionnaire-based interviews with coordinators of selected European university alliances. The three created models were:

a) Thematic Alliance Model
b) Typological Alliance Model
c) Transversal Alliance Model (generic model, representing the most universal and common features of a European university alliance)

Stage 2 – Expert selection

Selection of experts was done based on research requirements. The selected experts possessed knowledge in the area of management research discipline and/or experience related to management of European university alliances. Overall, 16 experts were selected with research expertise in the areas presented in Fig. 18.

Fig. 18. Distribution of research expertise among Delphi method participants (source: author's own elaboration)

One of a the experts was a former European Commission expert in EUI call and some experts were not only involved in the management of their own alliances, but also involved in the management of FOR-EU4All community of practice project uniting all currently existing 65

Alliances. The majority of experts possessed a professor title (either: full professor, assistant professor or associate professor). The detailed distribution of scientific titles among the experts are presented in Fig. 19.

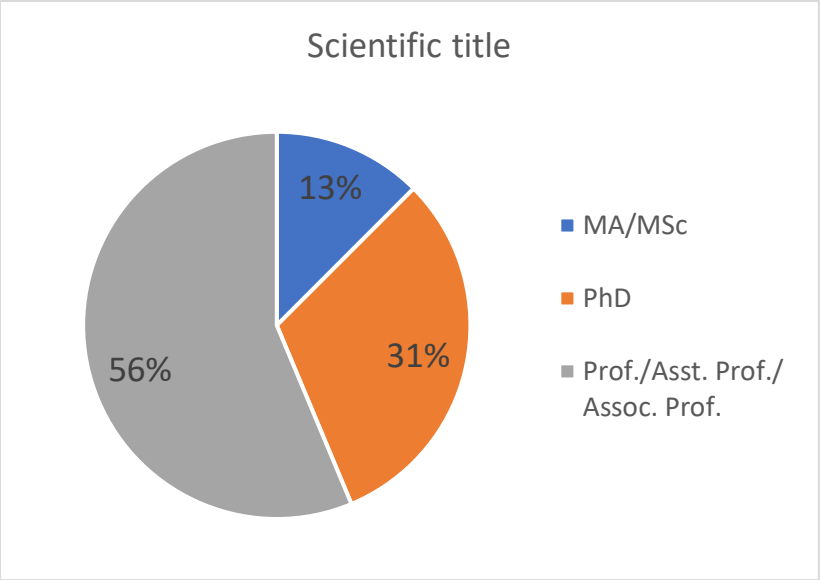

Fig. 19. Scientific titles of Delphi method panel experts
(source: author's own elaboration)

The experts also represented diverse nationality profiles. The below Figure 20, presents different nationalities among the experts of Delphi study.

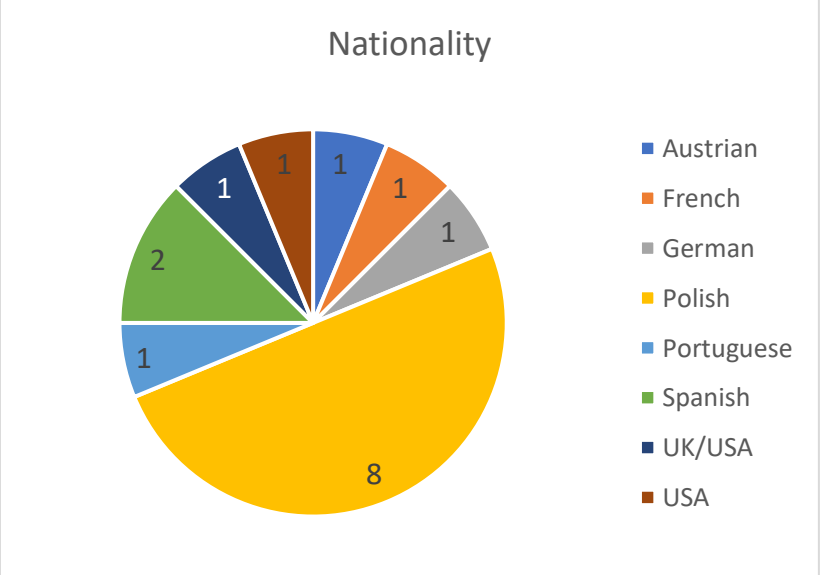

Fig. 20. Nationality breakdown of Delphi method verification experts
(source: author's own elaboration)

Furthermore, 75% of the experts were actively involved in one of the existing European university alliance as presented in Fig. 21.

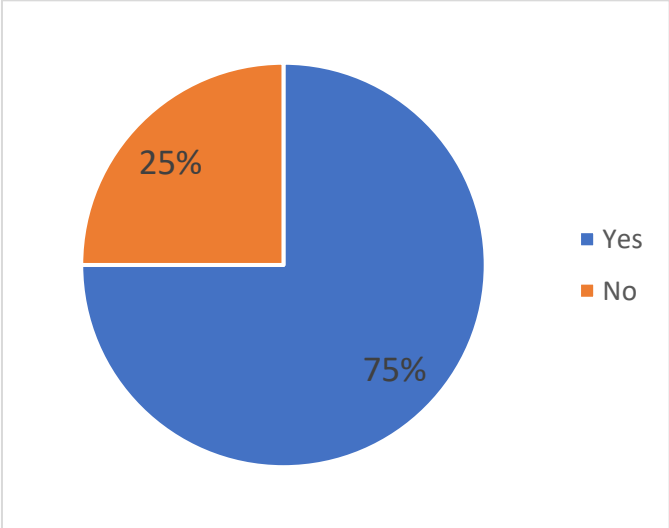

Fig. 21. Share of Delphi method experts actively involved in a European university alliance (source: author's own elaboration)

Those 75% of experts represented the following alliances:

- EUNICE
- EU-CONEXUS
- ACROSS
- EUNIWELL
- INGENIUM
- SEA-EU
- UNIC
- UNITA
- YUFE

Stage 3 – Preparation of a questionnaire

The questionnaire for experts was prepared using Google forms. The first part of questionnaire concerned identification data and included the following fields to fill in:

- Name and surname
- Scientific title

- Nationality
- Your research discipline/expertise
- Are you a EUI practitioner (actively involved in one of the existing European University Alliances)? If yes, which one?

The second part of questionnaire was a set of 5 closed questions which were repeated after presentation of each of the 3 models. The following set of questions was compiled:

1) Is the presented model clear for you? – YES/NO
2) Is the content accurate? YES/NO
3) Is the terminology used correctly? YES/NO
4) Are the descriptions precise and complete? YES/NO
5) Are the characteristics classified properly? YES/NO

In case of a negative answer to any of the above questions, an expert was requested to provide comments. After each round of questions related to a particular model, an expert could provide also general comments to each presented model. The length of the survey completion was estimated at 15-20 minutes.

Stage 4 – Distribution of the questionnaire

The questionnaire was distributed by e-mail to selected experts. The e-mail contained short information about author's PhD research and an explanatory note related to the presented models' origin. The distribution of questionnaire (in the form of the link in an e-mail message) and data collection was performed between 6/04/2025 and 25/04/2025.

Stage 5 – Analysis of the experts responses to the questionnaire

The analysis of the expert responses to the questions in the questionnaire was performed as a next step. The results are presented in the next chapter. The author considered the first wave of responses of the experts enough to reach the consensus among exerts, as the level of positive responses from experts reached 75% threshold (which is the required threshold for Delphi method consensus, as described in 3.5). The detailed percentage of positive answers from experts, related to each of the evaluated models were as follows:

- Thematic Alliance model (Fig. 45) – 81.25%
- Typological Alliance model (Fig. 46) – 87.5%
- Transversal (General) Alliance model (Fig. 47) – 90%

Therefore, the preparation of the next questionnaire and next round of questions for further verification among experts was not performed.

5. RESEARCH RESULTS

5.1. Databases Search Results

Subject of the study was the comparative analysis of data related to 41 European University Initiative alliances (17 alliances from European Commission call 2019 and 24 alliances of European Commission call 2020). It allowed to identify three groups of alliances that the consortia can be divided into. Eight (8) alliances were identified as possessing common thematic concept (so called "thematic alliances") and another ten (10) alliances were identified as uniting universities of the same type (so called "typological alliances"). The rest of alliances (23) were grouped as others, since they were not demonstrating any clear common features. The comparison was based on the deepened analysis of data available at the European universities websites and factsheets. See Fig. 22 below for more details.

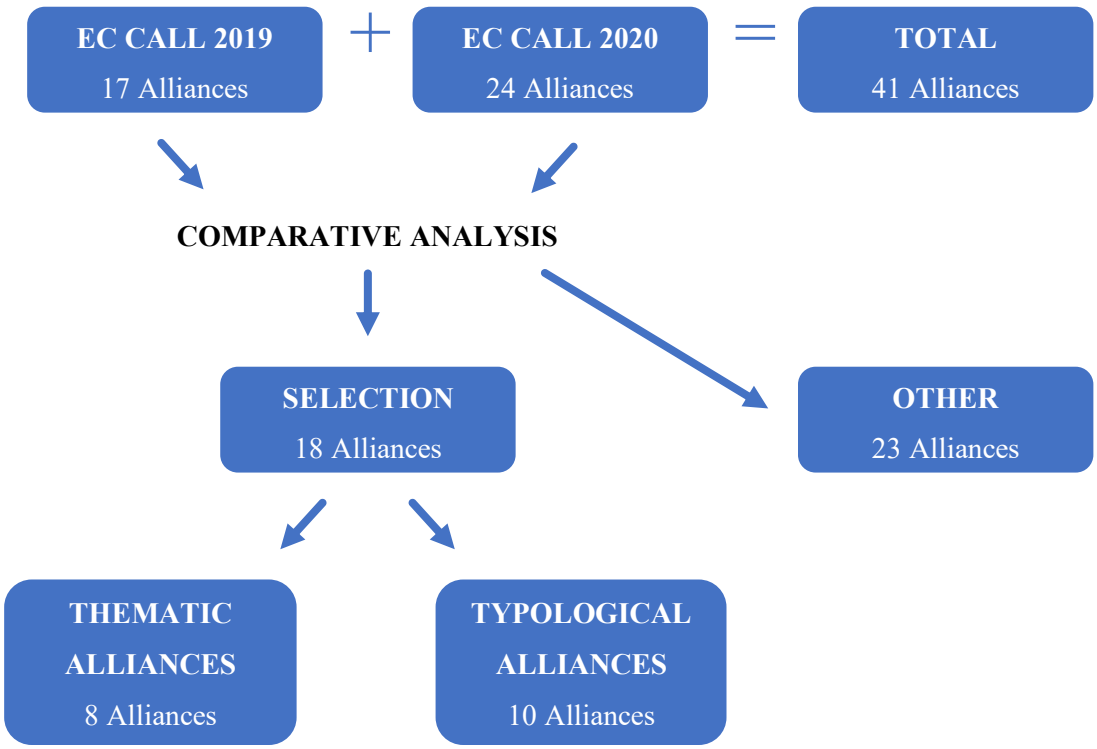

Fig. 22. Identification of thematic and typological alliances based on comparative analysis of 41 alliances
(source: author's own elaboration)

As already mentioned in chapter 1.2 of this thesis, strategic alliances in higher education area, similarly to the alliances in business context, may form around:

- shared goals and mission (thematic)
- institutional profiles (typological)

This division is also reflected in the typology of complementary, collaborative and additive alliances (Sikorska, Misztal, 2020) referenced in chapter 1.2. Thematic alliances can be classified as collaborative alliances, where different strengths are united with shared mission. Whereas typological alliances, would be matched with additive alliances, where institutions of the same type are united together.

Eight alliances were identified as thematic alliances and ten alliances were grouped as typological alliances. Thematic alliances had diverse partners' profiles, but were determined by a common societal challenge or a joint research mission. The concept was based on developing problem-solving abilities through thematic approach. When it comes to typological alliances, they comprise of institutions with shared structure and/or institutional identity. The focus is based on benchmarking and capacity-building among partners from similar institutions. The categorization of typological alliances was based on the dominant institutional profiles among member universities. Even though some slight disciplinary variations may exist within certain alliances, all members demonstrated a strong shared identity in their academic category.

While each type of alliances represent distinct models, some alliances may overlap in terms of their construction, but they were categorized based on their predominant characteristics. Such overlaps reflect developing, multidimensional nature of European university alliances.

The models' distinction also harmonizes with European Universities Initiative ambitions to support innovative ecosystems through challenge-based approaches on one hand, and promote institutional excellence among the same university types on the other.

Among eight thematic alliances, six thematic areas were eventually determined. The areas of global health and sea region were both identified among 2 alliances. The other areas were identified in single alliances.

Among ten typological alliances, five categories of universities were recognized. Four alliances were recognized as uniting universities of technology, which makes this type of typological alliances most popular of all. Two alliances were identified as bringing together universities specializing in the area of social sciences and economics, while two others were classified as alliance of creative arts universities. The details of both thematic and typological alliances and their identified categories are presented in the Tab. 3 below.

Tab. 3. Identification of thematic and typological alliances categories
(source: author's own elaboration)

Thematic Alliances	Typological Alliances
• Global health (2x) • Sea region (2x) • Brain & technology • Romance languages/regional development • Post-industrial cities • Space-oriented	• Technology (4x) • Creative arts (2x) • Social Sciences & economics (2x) • Reformist/Transformative • Young

The full list of all 18 European University Initiative alliances selected for this study with distinction into 2 types of models are presented in the Tab. 4 below.

Tab. 4. List of selected European university alliances within two models:
thematic and typological alliances
(source: author's own elaboration)

NO.	CALL	UNIVERSITY NAME	AREA/TYPE	MODEL
1.	2019	EU-CONEXUS	Sea region	THEMATIC ALLIANCE
2.	2019	EUGLOH	Global health	THEMATIC ALLIANCE
3.	2019	SEA-EU	Sea region	THEMATIC ALLIANCE
4.	2020	EUniWell	Global health/well-being	THEMATIC ALLIANCE
5.	2020	NeurotechEU	Brain and technology	THEMATIC ALLIANCE
6.	2020	UNIC	Post-industrial cities	THEMATIC ALLIANCE
7.	2020	UNITA	Romance languages and regional development	THEMATIC ALLIANCE
8.	2020	UNIVERSEH	Space-oriented	THEMATIC ALLIANCE
9.	2019	YUFE	Young universities	TYPOLOGICAL ALLIANCE

10.	2019	EU4ART	Creative arts universities	TYPOLOGICAL ALLIANCE
11.	2019	UNITE!	Technology universities	TYPOLOGICAL ALLIANCE
12.	2019	CIVICA	Social sciences & economics universities	TYPOLOGICAL ALLIANCE
13.	2020	ENGAGE.EU	Social sciences & economics universities	TYPOLOGICAL ALLIANCE
14.	2020	ENHANCE	Technology universities	TYPOLOGICAL ALLIANCE
15.	2020	ERUA	Reformist/transformative universities	TYPOLOGICAL ALLIANCE
16.	2020	EuroTeQ	Technology universities	TYPOLOGICAL ALLIANCE
17.	2020	EUT+	Technology universities	TYPOLOGICAL ALLIANCE
18.	2020	FILMEU	Creative arts universities	TYPOLOGICAL ALLIANCE

The analysis of available data (websites and factsheets) was divided into the following sections:

- Geographical balance analysis
- Numerical data analysis
- Associated partners' analysis
- Relation between the size of alliances and the number of associated partners

Each section contains introduction, analysis of all alliances and separate analysis of thematic alliances and analysis of typological alliances.

A 2-step summary concludes:

Step 1: Comparative analysis of all selected alliances (the number of alliances varied depending on the availability of the data in each category, the maximum number was 18)

Step 2: Internal and comparative analysis of both models:

a) Thematic alliances
b) Typological alliances

In the first step, a comparative analysis of all selected alliances was conducted. This phase focused on identifying general patters in order to establish an understanding of the overall landscape. The aim was to reveal trends and show specific structural and thematic variations. The initial step set the stage for a further, more detailed internal analysis in the next phase.
In the second step the analysis was performed by examining internally each of the two selected models and identifying respective similarities and differences between the two models. This allowed for a targeted analysis which demonstrated unique characteristics of each model.
Such approach ensured that the findings were both, comprehensive on one side, and tailored on the other side, providing insights into similarities and differences between thematic and typological models of alliances.
Final comments were provided after each analytical section.

5.1.1. Geographical Balance Analysis

Introduction

Geographical balance plays an important role in the evaluation of European university alliances, as it is a factor that ensures diversity and inclusivity across different European regions. Recognizing its importance, the European Commission considered geographical balance as a key factor in both calls (2019 and 2020) for the European Universities Initiative. In view of this significance, the author decided to analyze the geographical balance among selected 18 alliances in this study. The analysis examined the involvement of alliances across different European countries focusing on diversity and different levels of engagement in these transnational partnerships in Europe.

All Alliances

In Fig. 24 below, one can find graphical representation of geographical balance across Europe of all 18 analyzed alliances.

Fig. 24. Geographical balance across Europe of all 18 selected alliances
(source: author's own elaboration)

Countries marked in blue were represented in particular alliance. These maps illustrate a very diverse selection of universities from different European countries in each alliance. Every alliance covered a very unique combination of European regions and countries, which displayed the diversity of academic collaborations within EUI across the continent.

As a following step, the numerical compilation of the geographical balance data from the above maps was performed and the results are presented in Fig. 25.

Countries	
Germany	16
France	13
Italy	9
Spain	9
Sweden	7
Netherlands	6
Hungary	6
Romania	5
United Kingdom	4
Poland	4
Croatia	4
Portugal	4
Bulgaria	3
Irleand	3
Belgium	3
Finland	3
Norway	2
Austria	2
Denmark	2
Greece	2
Latvia	2
Cyprus	2
Türkiye	2
Lithuania	1
Estonia	1
Czech Republic	1
Malta	1
Luxembourg	1

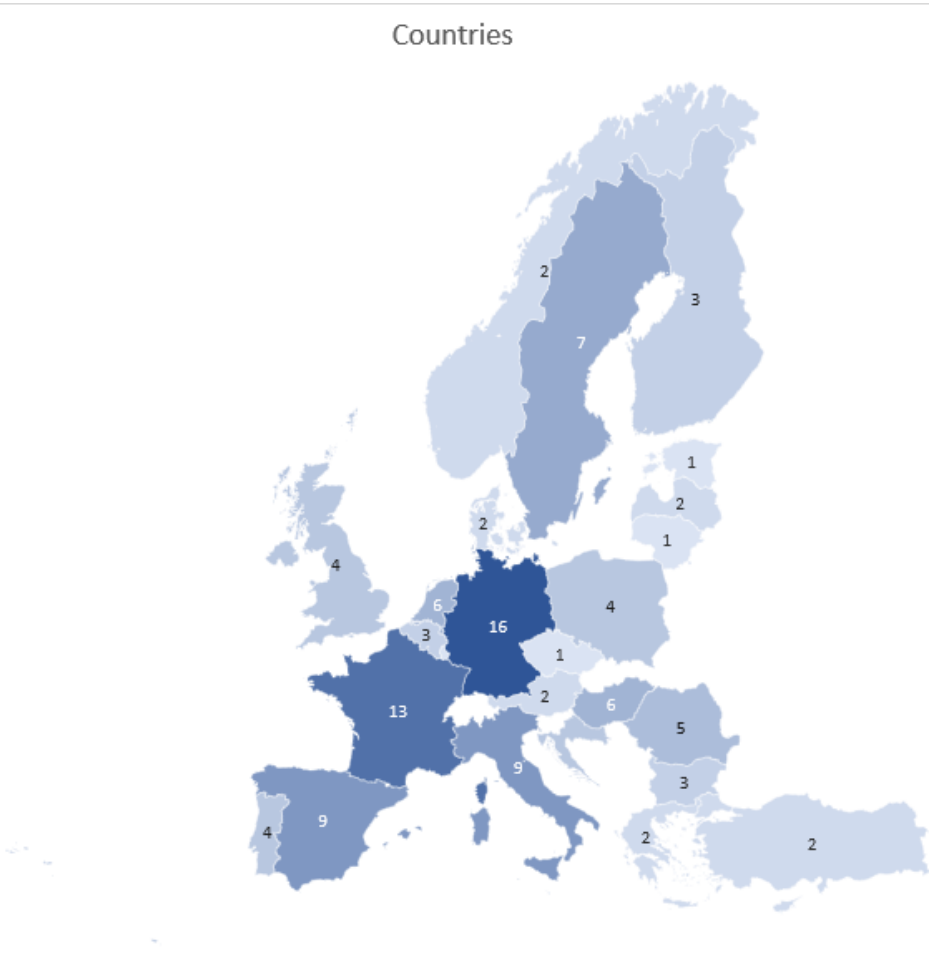

Fig. 25. Distribution of universities across European countries among all 18 alliances (source: author's own elaboration)

When analyzing European university alliances' engagement in different countries, it appeared that 28 countries were represented in total, which proves a diverse coverage among universities in Europe. The data demonstrated a differentiated level of engagement across Europe in the involvement in EUI, with countries, such as Germany and France, presenting most active participation. The range of data covered just minimum one university in the least represented countries (Lithuania, Estonia, Czech Republic, Malta and Luxemburg) to a maximum of 16 universities in Germany, which was the most active participant of all, followed by France, which had 13 universities represented in the European university alliances. This contrast displayed the difference in capacity for international academic collaborations across European areas, reflecting the influence of national education policies, different resources and variety in priorities in higher education at the national level.

Thematic Alliances

Analysis of the geographical balance for the thematic alliances is displayed in Fig. 26, which presents the numbers of countries represented in 8 thematic alliances.

Countries	
France	7
Germany	6
Spain	5
Sweden	4
Romania	3
Netherlands	3
Hungary	3
Croatia	3
Italy	2
United Kingdom	2
Poland	2
Portugal	2
Türkiye	2
Greece	1
Lithuania	1
Ireland	1
Belgium	1
Malta	1
Finland	1
Luxembourg	1

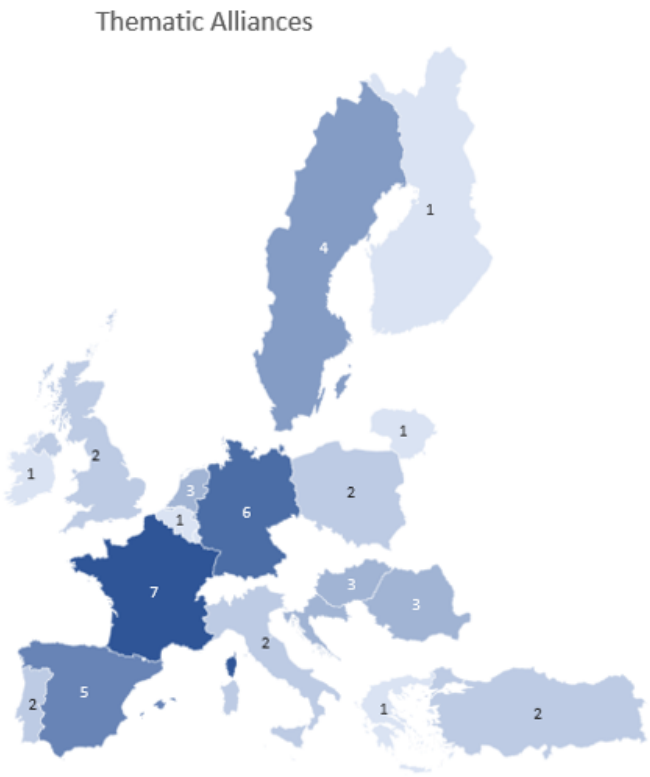

Fig. 26. Distribution of universities across European countries among thematic alliances (source: author's own elaboration)

When analyzing 8 thematic alliances and their geographical representation, one can notice that there were 20 different countries represented in only 8 thematic alliances. This time France had the biggest representation with 7 universities, whereas Greece, Lithuania, Ireland, Belgium, Malta, Finland and Luxemburg had only 1 university representative. Therefore, the data demonstrated that there was a huge variation in the capacity and involvement of different countries across Europe in the EUI. In thematic alliances, France was mostly represented, confirming that France, along with Germany (second highest number), had a strong commitment in cross-border collaboration and were leaders in this type of integration.

Typological Alliances

As a next step, the geographical diversity in 10 typological alliances was analyzed. Fig. 27 presents the number of countries represented in these types of alliances.

Countries	
Germany	10
Italy	7
France	6
Spain	4
Sweden	3
Netherlands	3
Bulgaria	3
Hungary	3
Romania	2
United Kingdom	2
Norway	2
Austria	2
Poland	2
Denmark	2
Latvia	2
Portugal	2
Irleand	2
Cyprus	2
Belgium	2
Finland	2
Greece	1
Croatia	1
Estonia	1
Czech Republic	1

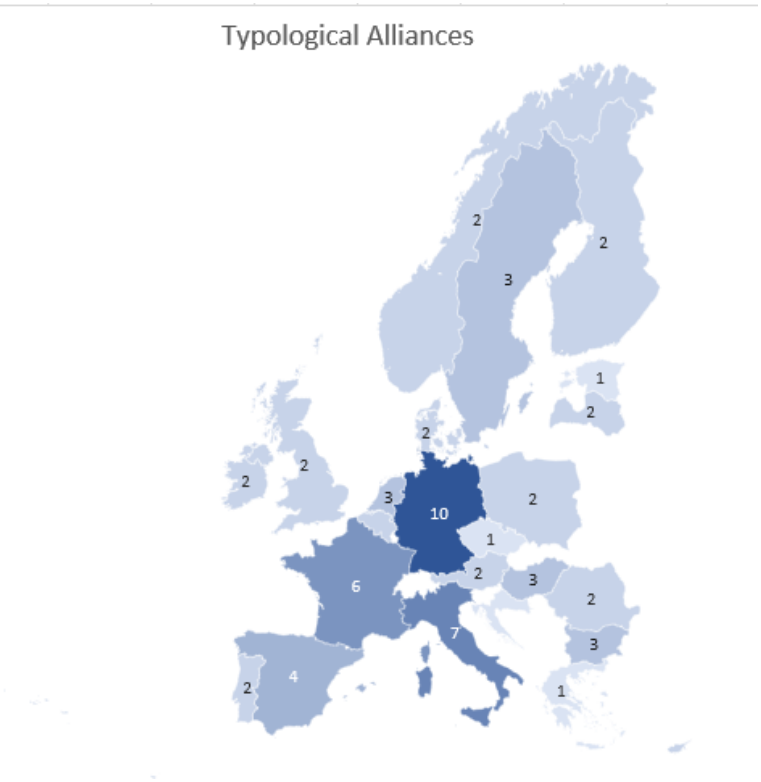

Fig. 27. Distribution of universities across European countries in typological alliances (source: author's own elaboration)

The analysis of geographical diversity of typological alliances provided information on 24 different countries being represented among these alliances. In this case Germany was the most represented one, with 10 universities involved and Italy, running second, with 7 universities involved; whereas Greece, Croatia, Estonia and Czech Republic had minimal representation - only 1. The data may indicate that universities from countries like Germany and Italy were mostly eager to get involved in typological alliances, focused on specialization in particular academic fields and on institutional types. Interestingly, Italy, which in all 18 alliances is represented by 9 universities, had the vast majority of its universities (7) present in typological alliances. This implied that Italian universities were more eager to engage in the European Universities Initiative within alliances that unite universities of the same type.

Conclusions

Step 1 – All Alliances

- 28 countries involved, confirming diverse cross-border collaboration
- Uneven participation levels among European countries
- Highest participation: Germany (16) and France (13)
- Minimal representation: Lithuania, Estonia, Czech Republic, Malta and Luxemburg (1)

Step 2 – Analysis of Thematic and Typological Alliances

a) Similarities

- Multiple countries representation
- France and Germany strong representation in both thematic and typological alliances

b) Differences

- Thematic (20 countries)/typological (24 countries)
- Thematic (France with the largest presence)/typological (Germany with the largest presence)
- Italy – vast majority of universities (7) present in typological alliances, whereas only 2 Italian universities were represented in thematic alliances, which may indicate preference for collaboration focused on specific institutional types for Italy

Final comments

Both thematic and typological alliances promoted geographical balance and diversification, however, their structures attracted different levels of engagement from specific countries, which may indicate diverse national priorities, different capacity levels and policy frameworks in higher education across different European countries. Furthermore, analysis of varied levels of representation in different regions in Europe revealed that some regions (for instance: Eastern Europe) were less represented in the European University Initiative alliances. Therefore, strategic support for these regions could help to improve this imbalance and promote inclusivity.

5.1.2. Numerical Data Analysis

Introduction

The European university alliances aim to enhance cooperation between higher education institutions in Europe by supporting student and staff mobility and by fostering innovation. The alliances' factsheets (the links to all factsheets are displayed in the tables in Annexes no. 3 and 4) prepared by the European Commission, provided insightful information on each Alliance in relation to their missions in the context of sustainability and cross-disciplinary education.

All Alliances

The detailed analysis of factsheets on European university alliances prepared by the European Commission based on the data provided directly by the alliances, allowed to compile the set of data related to all 18 alliances gathered in Tab. 5 presented below. The data included: the number of member universities, the number of associated partners, the number of students, the total number of staff, the number of academic staff/researchers, the number of faculties and the number of research groups/centers/institutes. Some data were not provided by the alliances and they were marked with "no data" label.

Tab. 5. Comparison of data gathered from factsheets related to the 18 European university alliances (source: author's own elaboration)

Alliance name	No. of member universities	No. of associated partners	No. of students	Total no. of staff	No. of academic staff/researches	No. of faculties	No. of research groups/centers/institues
CIVICA	8	no data	50000	no data	10000	no data	no data
ENGAGE.EU	7	no data	100000	7550	4350	48	no data
ENHANCE	7	30	228101	44867	24518	83	no data
ERUA	5	27	71709	5796	3338	28	200
EU4Art	4	6	5207	725	415	18	24
EU-CONEXUS	6	13	41223	5421	3592	34	65
EUGLOH	5	30	210000	no data	23000	73	450
EUniWell	7	102	255000	36500	no data	83	677
EuroTeQ	6	45	115000	26000	no data	86	53
EUT+	8	39	100000	no data	7000	no data	no data
FILMEU	4	35	5000	500	no data	no data	12
Neurotech EU	6	250	170000	70000	35000	51	no data
SEA-EU	6	32	122832	16909	10427	68	117
UNIC	8	27	224778	30669	no data	no data	no data
UNITA	6	30	165000	15000	10100	no data	55
UNITE!	7	no data	167000	no data	no data	no data	no data
UNIVERSEH	5	68	130977	13030	no data	43	207
YUFE	10	4	190000	32000	no data	52	153

The number of universities per alliance averaged at 6.39 with the highest number being 10 (YUFE) and the lowest 4 (EU4Art and FILMEU). This discrepancy reflected very different strategic focus and operational models in each alliance, suggesting that some alliances favored broader partnerships, while others preferred more specialized and smaller collaborations. Furthermore, the number of associated partners varied widely, with an average number of 49.2, with 3 alliances not providing data in this area. The highest number of associated partners was 250 (NeurotechEU) and the lowest number was 4 (YUFE), highlighting huge discrepancies between alliances. As far as the number of students is concerned, the average number was 130,657, the lowest 5,000 (FILMEU) and the highest 255,000 (EUniWell). The total number of staff averaged at 21,783, however 4 alliances did not provide data in this area. The highest number of staff was 70,000 (Neurotech EU) and the lowest was 725 (EU4Art). The number of academic staff/researchers averaged at 11,976, but only 11 Alliances provided this information. The highest number was 35,000 (NeurotechEU) and the lowest 415 (EU4Art). The diversified academic staff/researchers numbers also demonstrated variety in research and teaching resources available across alliances. Only 12 alliances reported data related to the number of faculties, which averaged at 55.58, with the highest number being 86 (EuroTeQ) and the lowest – 18 (EU4Art). When it comes to the number of research groups/centers/institutes, the average number was 183, with the data available for 11 alliances. Highest number – 677 was reported by EUniWell and the lowest number – 12 by FILMEU. Indeed, some alliances have a big number of faculties and research centers possibly to support diverse, interdisciplinary research and specialized studies, while others, with fewer research centers or faculties, appear to focus more on specific academic disciplines or have more centralized research framework. Several alliances did not report data in some categories, suggesting that reporting and data transparency may be different among alliances. These inconsistencies could result from different organizational structures, different data collection practices or also the fact that these were newly created alliances that were established not long time ago. All in all, alliances displayed diversity in terms of partnerships models, students and staff capacities as well as research infrastructure and resources frameworks.

Thematic Alliances

The numerical data from factsheets for thematic alliances were gathered in Tab. 6.

Tab. 6. Comparison of data gathered from factsheets related to 8 thematic alliances (source: author's own elaboration)

Alliance name	No. of member universities	No. of associated partners	No. of students	Total no. of staff	No. of academic staff/researches	No. of faculties	No. of research groups/centers/institues
EU-CONEXUS	6	13	41223	5421	3592	34	65
EUGLOH	5	30	210000	no data	23000	73	450
EUniWell	7	102	255000	36500	no data	83	677
Neurotech EU	6	250	170000	70000	35000	51	no data
SEA-EU	6	32	122832	16909	10427	68	117
UNIC	8	27	224778	30669	no data	no data	no data
UNITA	6	30	165000	15000	10100	no data	55
UNIVERSEH	5	68	130977	13030	no data	43	207

In thematic alliances, when it comes to the number of member universities, the largest alliance was UNIC with 8 member universities, and the smallest EUGLOH and UNIVERSEH with 5 member universities. The average number of member universities was 6.13. As far as number of associated partners is concerned, the average number was 69, with Neurotech EU having the most extensive network of 250 associated partners and EU-CONEXUS having as few as only 13 associated partners. The average number of students in thematic alliances was 164,976, with EUniWell having the largest student body of 255,000 students and EU-CONEXUS having the lowest number of students – 41,223. Almost all alliances reported the number of staff, except for one (EUGLOH). NeurotechEU had the highest number of staff with 70,000 and EU-CONEXUS the lowest number, which was 5,421. The average number was 26,790. NeurotechEU had also the highest number of academic staff/researchers which was 35,000 and again EU-CONEXUS had the lowest number of academic staff/researchers. The average number of academic staff/researchers was 16,424. As far as the number of faculties was concerned, the highest number was 83 (EUniWell) and the lowest number was 34 (EU-CONEXUS), with average number of 58.7. When comparing the number of research groups/centers/institutes, EUniWell again stood out with the number of 677 research groups, whereas UNITA had the lowest number of all – 55. The average number of research groups was 262.

The data showed large differences in associated partners networks, as well as students and faculty numbers across thematic alliances. NeurotechEU stood out for its extensive network of associated partners, as well as number of staff and academics. In contrast, EU-CONEXUS had the smallest numbers in almost all categories.

Typological Alliances

The numerical data from factsheets for typological alliances were gathered in Tab. 7.

Tab. 7. Comparison of data gathered from factsheets related to 10 typological alliances (source: author's own elaboration)

Alliance name	No. of member universities	No. of associated partners	No. of students	Total no. of staff	No. of academic staff/researches	No. of faculties	No. of research groups/centers/institues
CIVICA	8	no data	50000	no data	10000	no data	no data
ENGAGE.EU	7	no data	100000	7550	4350	48	no data
ENHANCE	7	30	228101	44867	24518	83	no data
ERUA	5	27	71709	5796	3338	28	200
EU4Art	4	6	5207	725	415	18	24
EuroTeQ	6	45	115000	26000	no data	86	53
EUT+	8	39	100000	no data	7000	no data	no data
FILMEU	4	35	5000	500	no data	no data	12
UNITE!	7	no data	167000	no data	no data	no data	no data
YUFE	10	4	190000	32000	no data	52	153

In typological alliances, when it comes to the number of member universities, the largest alliance was YUFE with 10 member universities, and the smallest were EU4Art and FILMEU with 4 member universities. The average number was 6.6. Comparing the number of associated partners one can notice that EuroTeQ had the highest number (45), while YUFE had only 4 APs. The average number of APs in typological alliances was 26.57, however, 3 alliances did not provide data in this area. While the average number of students was 103,202, it was ENHANCE that had the highest count of students (228,101) and FILMEU that had the lowest number of students (5,000). The same alliances were on 2 extremes when it comes to the number of staff – ENHANCE had the highest number – 44,867 and FILMEU the lowest number – 500. The average number of staff was 16,777. When it comes to the number of academic staff/researchers, ENHANCE had the highest count again (24,518), whereas EU4Art had the lowest count (415). The average number of academic staff was 8,270, however, as many as 4 alliances did not provide data here. The highest number of faculties was with EuroTeQ – 86, while EU4Art had the lowest number – 18. The average number was 52.5, but 4 alliances did not report that data. Comparing the number of research groups/centers/institutes, ERUA had the highest number (200), whereas FILMEU had the lowest number (12). The average number was 88, but as many as 5 alliances did not provide data in this area.

The data suggest a big range of strategic focuses among typological alliances with different sizes of alliances, extensiveness of associated partnerships' networks and other metrics. YUFE had the highest number of member universities, whereas EU4Art and FILMEU had the lowest. EuroTeQ had the largest network of associated partners, however many alliances lacked data in this category. ENHANCE had the highest count of students and staff, while FILMEU

presented the lowest numbers in these metrics. Overall, FILMEU and EU4Art displayed many similarities in all metrics, reflecting their unique focus on creative arts and indicating more niche academic disciplines specialized in film, media and the arts.

Conclusions

Step 1 – All Alliances

- Alliances are different in size which suggests different partnerships models
- Associated partners networks represented diversity in terms of numbers - from 250 in Neurotech to only 4 in YUFE, which indicates different levels of external collaborations
- A lot of diversity was also observed in research groups count where EUniWell was leading with 677 and FILMEU having only 12
- Several alliances lacked data in certain areas suggesting different reporting practices and different standards for data collection among alliances

Step 2 – Analysis of Thematic and Typological Alliances

a) Similarities

- Both types of alliances showed a wide range of member universities (from 4 to 10)
- Visible diversity in staff and student numbers among both types
- Differences in availability of data in some categories was present in both types of alliances

b) Differences

- Thematic alliances compared with typological had higher numbers when comparing average student population (164,976/103,202 respectively) and average staff count (26,790/16,777 respectively) – suggesting that thematic alliances may have created much broader or more diverse models
- Thematic alliances also tended to have more associated partners than typological alliances (average of 69 vs. 26.57), possibly indicating broader interdisciplinary collaborations than typological alliances

- Typological alliances, including creative arts alliances like FILMEU and EU4Art, had partly lower metrics, when it comes to staff, students and research groups, indicating a focus on more niche arts education, whereas thematic alliances like NeurotechEU or EUniWell covered wider fields of research and providing more educational resources.

Final comments

All in all, thematic and typological alliances represent diversified models of European higher education cooperation. Thematic alliances were more prone to create larger networks with bigger resources and much wider research environments. Typological alliances, particularly in the case of more creative fields, tended to form smaller, focused consortia which specialized in more niche academic areas. This differences highlighted various approaches within European Universities Initiative which allowed the alliances to reach more diversified objectives, and at the same time enhance more interdisciplinary cooperation within different educational environments.

5.1.3. Associated Partners

Introduction

This part of the analysis examined the associated partners' involved in selected European university alliances. It included qualitative and quantitative analysis of their distribution, classification, strategical relevance within both thematic and typological models.

All Alliances

This part focused on comparative analysis of key metrics related to associated partners of the different European universities alliances. Fig. 28 presents a visual representation of the number of associated partners for 15 alliances (out of 18) that provided this information (3 alliances did not report on the number of associated partners).

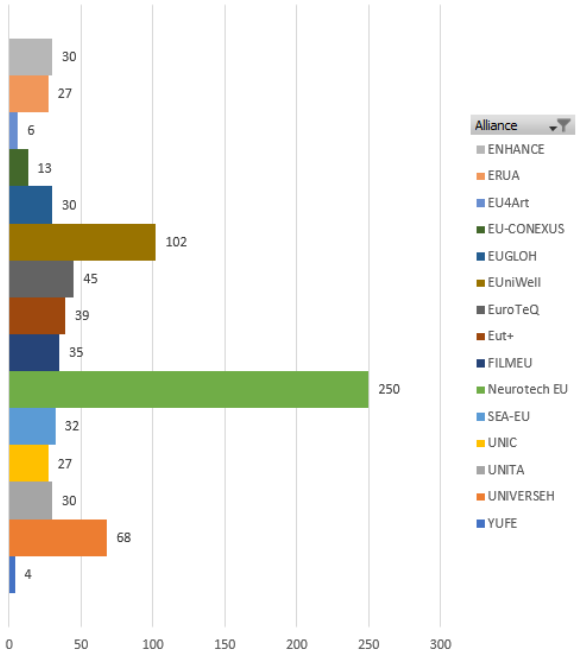

Fig. 28. Comparative data on the number of associated partners in 15 alliances (source: author's own elaboration)

The above graph demonstrated significant disproportion in the number of associated partners among alliances. In particular, NeurotechEU stood out with notably the highest number of APs of all – 250, whereas EU4Art had the lowest number of APs – only 4. The detailed analysis of different types of associated partners among all selected alliances was performed based on the data presented in the factsheets prepared by the European Commission. Due to a large variety of categories of APs included in the factsheet, the author decided to merge similar categories in the following way:

Businesses + Enterprises + Companies → Businesses, Enterprises & Companies

Higher education institutions + European universities + Educational institutions and universities → Educational institutions and universities

Research centers + Research networks → Research centers & networks

National authorities + Regional authorities + Provincial authorities → National, regional and provincial authorities

Clusters + International clusters → Clusters

European Engineering Associations + National Engineering Organizations + Regional Engineering Chambers → Engineering Associations, Organizations and Chambers

Public bodies + Public entities + Public agencies + Public organizations → Public bodies, entities, agencies & organizations

Quality assurance and Accreditation agencies + Quality agencies → Quality assurance and Accreditation agencies

International associations + Networks → International associations & networks

The graphical representation of different types of associated partners of 15 alliances are presented in Fig. 29. The graph includes cluster of the categories as indicated above.

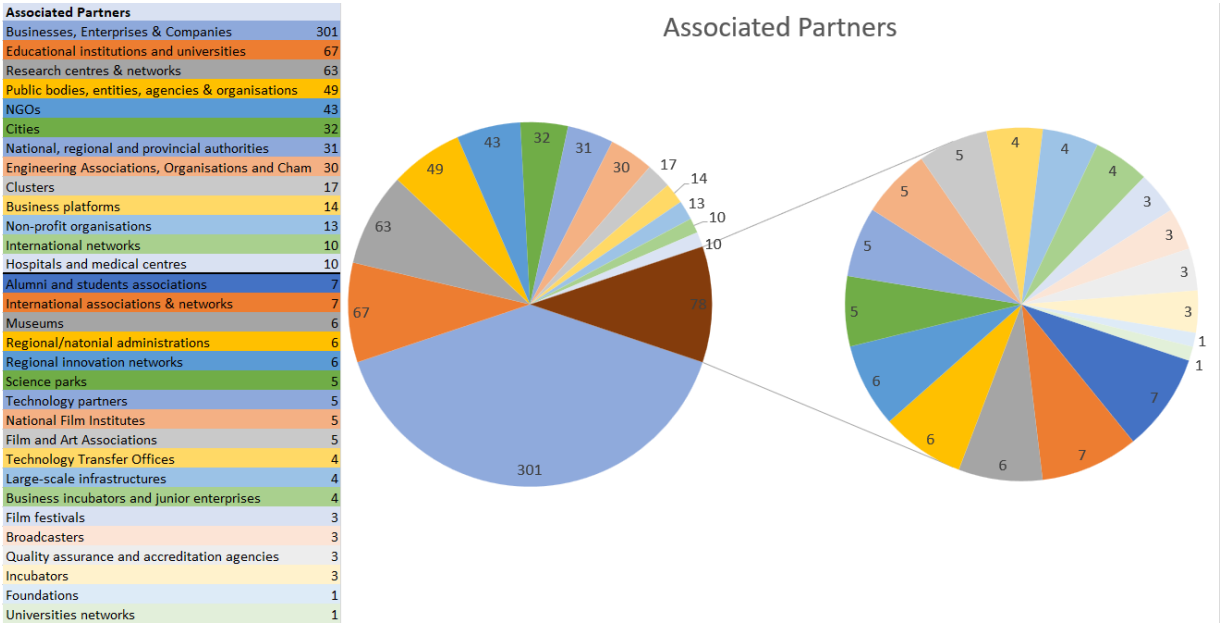

Fig. 29. Different types of associated partners among 15 alliances
(source: author's own elaboration)

Business partners (301) were the mostly represented group of associated partners among alliances, which highlights strong cooperation between academic environment and private sector. Through collaborations with companies and enterprises, alliances created possibilities for students to possess practical, hands-on experience, such as internships. This way the academic community gained access to valuable resources and industry expertise, so much needed to boost students' employability. Partnerships with educational institutions and other universities (67) were also highly represented in alliances. These partnerships reinforced further in-depth academic cooperation as well as knowledge exchange. Such collaborations may have also contributed to offering more diverse educational programs by the alliances. Another highly represented group of associated partners were research centers and networks. This proves alliances' strong focus on advancing their research capacity and innovation development. Such partnerships allowed alliances to access state-of-the-art technologies, specialized expertise and explore collaborative research opportunities. Cooperations with different public organizations

and entities were quite popular among alliances. Such partnerships enabled alliances to play an important role in regional development, community engagement and local innovation ecosystems. In this way alliances can contribute to different social initiatives and boost their commitment through societal impact.

Thematic Alliances

The next part is focused on the associated partnerships within thematic alliances. Fig. 30 provides insights into the number of associated partners for each thematic European university alliance. All 8 thematic alliances provided information in this category.

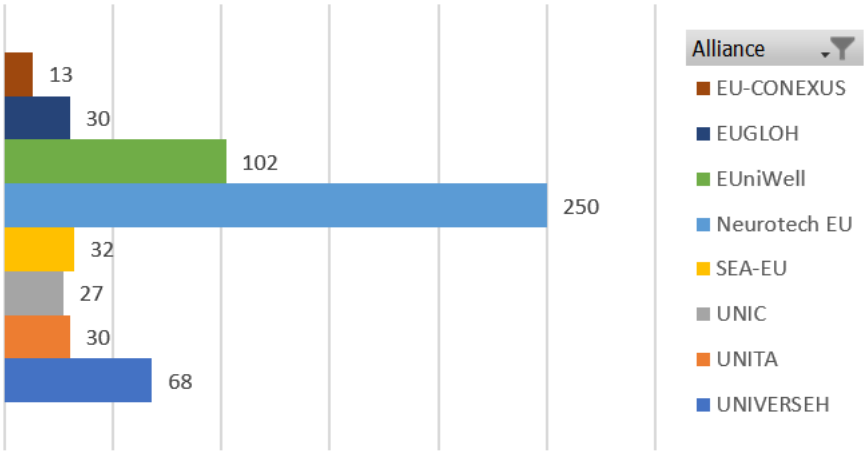

Fig. 30. Comparative data on the number of associated partners in thematic alliances (source: author's own elaboration)

Among thematic alliances, it is NeurotechEU that stood out with 250 associated partners. The next largest network belonged to EUniWell, which had more than 100 APs, while EU-CONEXUS had only 13 such partners. However, the rest of alliances were relatively balanced when it comes to the number of APs, still suggesting diversified strategies and scope, however in a similar quantity of partnerships. As a next step, the analysis of the different types of associated partners of thematic alliances was performed. The graphical representation of these APs are presented in Fig. 31.

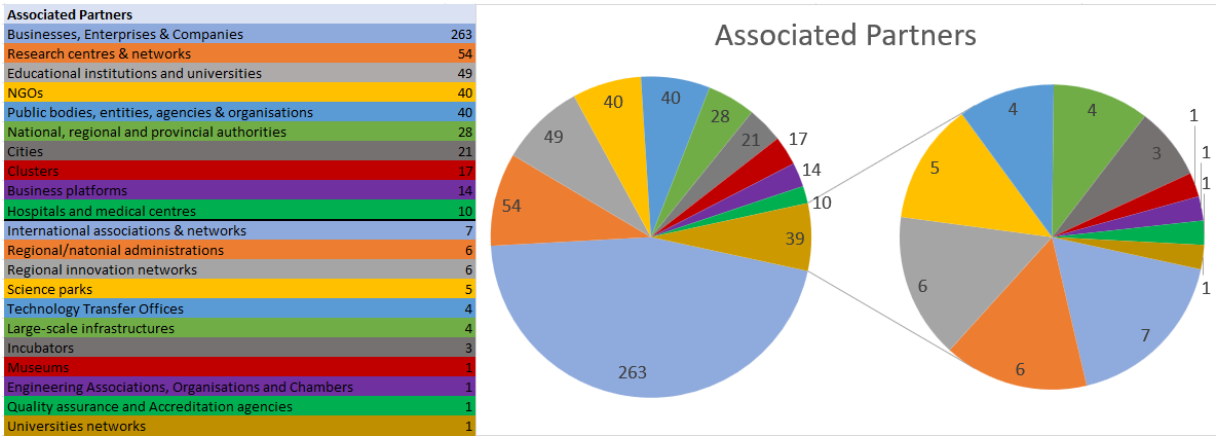

Fig. 31. Different types of associated partners among thematic alliances
(source: author's own elaboration)

The category "Businesses, Enterprises & Companies" (263) was overwhelmingly the largest group of all APs. Even though, 100 of APs in this category were associated with NeurotechEU only (that had the largest count of APs in all selected alliances – 250 in total), still the number of business partners stood out in the comparison. This suggests a strong relationship with the private sector in the area of research, transfer of technology and employability for the graduates. The second largest group was research centers & networks (54), which highlighted the importance of research-focused collaborations. Such partnerships allowed students and staff to benefit from real-world application of their knowledge. Also they enabled the alliances to attract research-related funding. Partnerships with other educational institutions and universities (49) allowed the alliances to further expand their collaboration and benefit even more from sharing and exchanging their best practices and facilitate knowledge exchanges with even more external educational partners. NGOs (40) were also widely represented in the comparison. Partnering with NGOs allowed the alliances to engage with community-related projects, such as: health care, education or environmental protection. Public organizations were also high in the ranking with 40 representatives. As public bodies often lead or fund projects that are aimed at regional development, partnerships with these institutions allowed the alliances to contribute to the social and economic development of their local communities. Quite popular category were also cities with a total count of 21. The majority of municipal partners within thematic alliances were associated with 2 alliances – EUniWell and SEA-EU. Partnerships with cities allowed alliances like EUniWell and SEA-EU to work collaboratively on projects that have immediate impact on local communities. When it comes to thematic alliances ranking of APs, there were also hospitals and medical centers with 10 representatives, which were directly linked with EUniWell alliance, that is focused on well-being/global health.

Typological Alliances

The following part is focused on the associated partners with typological alliances. Fig. 32 provides information on the number of associated partners for typological European university alliances. Only 7 out of 10 alliances provided information in this category.

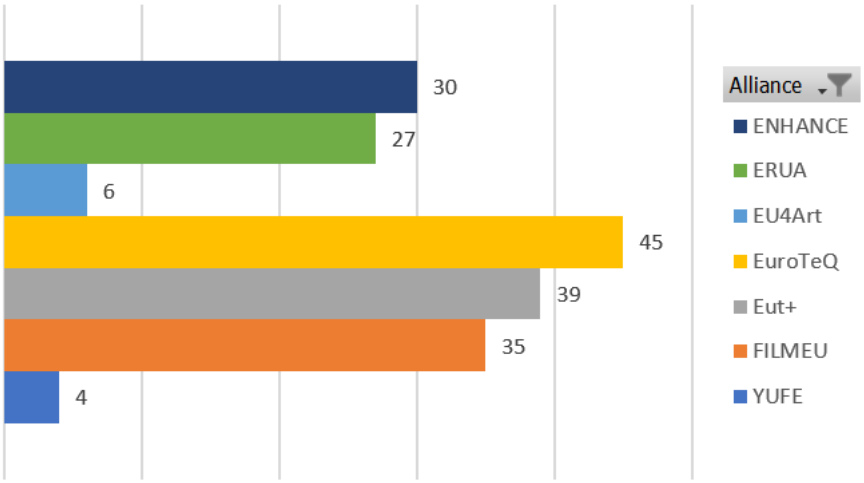

Fig. 32. Comparative data on the number of associated partners in typological alliances (source: author's own elaboration)

EuroTeQ had the highest number of associated partners (45), whereas YUFE had the lowest – only 4. All 3 alliances in the area of technology had a high count of APs (EuroTeQ – 45, EUT+ - 39, ENHANCE – 30), which indicates a strong network of partnerships due to their engineering and technology focus. As a next step, the analysis of the different types of associated partners of typological alliances was performed. The graphical representation of these associated partners is presented in Fig. 33.

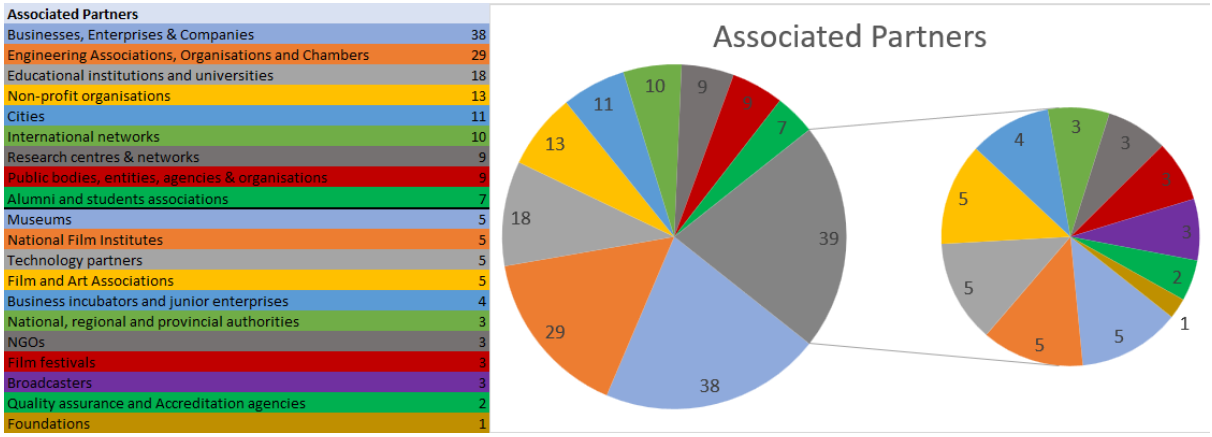

Fig. 33. Different types of associated partners among typological alliances (source: author's own elaboration)

Also in typological alliances, business organizations had the highest count (38) proving that partnerships with private sector were highly valued among that group of alliances as well. They not only provide additional funding opportunities, but also support practical research applications, technology transfer and allow to equip students with internships in order to offer them job placements in the future. Partnerships with engineering associations were second in terms of numbers – 29. These collaborations concerned technology alliances – mainly EuroTeQ (19) and EUT+ (9), suggesting that engineering-focused collaborations were a significant part of these alliances network. They also reflected a strong focus on STEM (Science, Technology, Engineering and Mathematics) fields and provided access to industry standards, resources and expertise. Third most counted category belonged to educational institutions and universities (18). This way alliances opened up to even more cooperation with other educational institutions, which gave boost to collaborative research projects, student exchanges and sharing best educational experiences. It is also worth noted that there were 5 museums among associated partners within typological alliances. Three of them were associated with EU4Art and two of them with ENHANCE. The latter ones were science museums, which underlines a specific connection and focus of the ENHANCE alliance (technology universities). Furthermore, there were also 5 national film institutes among the associated partners. All of them collaborated with FILMEU, which is an Alliance in the area of film and media. This targeted collaboration demonstrate a strategic ties between FILMEU and key institutions on film industry, which suggest a shared vision in order to cooperate in the area of cinematography.

Conclusions

Step 1 – All Alliances

- There was a big disparity in the number of associated partners
- Business organizations were the most represented category among alliances
- Partnerships with educational institutions and universities as well as research centers were also highly represented

Step 2 – Analysis of Thematic and Typological Alliances

a) Similarities

- Both types of alliances had extensive partnerships with business and industry organizations

- Research-oriented partnerships were very well represented in both types as well
- Both types of alliances also engaged with public organizations and municipal partners, which addressed local needs

b) Differences

- NeurotechEU had the highest count of associated partners (250) and definitely stood out of all alliances
- Thematic alliances, such as EUniWell (focused on well-being) and SEA-EU (focused on sea regions) had specific partnerships (e.g. with hospitals and municipal partners)
- Typological alliances, such as EuroTeQ, EUT+ and ENHANCE, which are focused on technology, had partnerships with engineering associations, technology-oriented companies that support STEM research and education
- Specialized partnerships that involve museums and national film institutes are connected with typological alliances such as EU4Art and FILMEU, respectively.

Final comments

The analysis of associated partners provided information about diversified partnerships among alliances, often related to their typological or thematic focus. There was a common emphasis on business, research and educational collaborations, however each type of alliances was associated with unique partners that were supporting particular goals and objectives of the alliances. Thematic consortia had a specialized focus on collaborative strategies, such as for instance health, sustainability or the arts, which resulted in partnerships with organization in the area of public health, local community engagement or cultural activities. When it comes to typological alliances, in particular those focused on technology and engineering, they prioritized collaborations with technology companies and institutions.

5.1.4. Relation between the Size of Alliances and the Number of Associated Partners

Introduction

The statistical analysis aimed to verify if there was a relation between the size of alliances and the number of associated partners (APs). Two types of variables were used in order to determine the size of alliances. One of them was the number of member universities and the other one was the number of students. The relationship was first verified for all 15 alliances (only 15 out of 18 provided information about the number of their APs) using both types of variables of alliance size (source data used for statistical analysis related to all alliances can be found in Tab. 5). And then the verification was performed separately for thematic alliances (source data used for statistical analysis related to thematic alliances can be found in Tab. 6) and typological alliances (source data used for statistical analysis related to typological alliances can be found in Tab. 7), also using both types of variables of alliance size. In the first step, in order to perform this analysis, a scatter plot visualization was used using Jamovi program (The Jamovi program, 2024). It is a method of visualizing a relationship between two given variables. Before performing further statistical analysis it was crucial to establish if the data follows a normal distribution. To verify this, the Shapiro-Wilk test (Shapiro, Wilk, 1965; Razali, Wah, 2011) was used for all relevant variables: number of member universities, number of students and number of associated partners. The Shapiro-Wilk test (using W statistics value) was used in order to determine the normal distribution of dataset. Interpretation of W-value can be found below in Tab. 8.

Tab. 8. Interpretation of W-value
(source: author's own elaboration based on Royston, 1992)

W-value	Interpretation
0.99-1.00	normal distribution
0.95-0.99	likely normal distribution
0.90-0.95	mild deviation from normality
0.85-0.90	moderate deviation from normality
< 0.85	strong deviation from normality

Furthermore, p-value was assessed for normal distribution hypothesis and:

- if **$p < 0.05$** → normal distribution hypothesis was rejected and it means that the data do not follow a normal distribution

- if **$p \geq 0.05$** → no grounds for rejecting the normal distribution hypothesis and it means that the data follow a normal distribution

It should be noted that Shapiro-Wilk test does not always give positive results despite $p<0.05$ and often requires visual interpretation (histogram). Therefore, histogram with kernel density estimate (KDE) was also prepared for each dataset. Depending on the results of the Shapiro-Wilk test and p-value, the appropriate correlation coefficients were used:

If both indicators have a normal distribution → recommended correlation coefficient is **Pearson** (Pearson, 1896)

If one indicator follows a normal distribution and one does not → recommended correlation coefficient is Spearman (Spearman, 1904) or Kendall (Kendall, 1938)

Eventually **Kendall** correlation coefficient was used in this case since the sample was small (< 30 in all cases). Furthermore, a key distinction lies in the type of relationship each coefficient measures: Pearson's evaluates a linear relationship, whereas Spearman's and Kendall's assess a monotonic relationship.
In order to determine the Shapiro-Wilk test, Kendall or Pearson correlation coefficient, Jamovi program was used. This program allows to calculate value of two parameters: τ and p. These are parameters that determine the strength and direction of the relationship between 2 variables. The interpretation of Pearson correlation coefficient r and Kendall correlation coefficient τ parameters was as follows.

This parameter takes values in the range $-1 \leq \tau \leq 1$, $1 \leq r \leq 1$ where:

- **$r>0$ or $\tau>0$** — indicates positive correlation: higher values of one variable usually correspond to higher values of the other
- **$r<0$ or $\tau<0$** — indicates negative correlation: higher values of one variable correspond to lower values of the other
- **$r=0$ or $\tau=0$** — no monotonic correlation.

This thesis adopted the following general interpretation of the τ value (strength of correlation) for positive correlations. For negative correlations, the values had a parallel meaning, but in the opposite direction. The general interpretation of correlation strength is presented in Tab. 9 below.

Tab. 9. Interpretation of r value/τ value
(source: author's own elaboration based on Evans, 1996)

r value / τ value	Interpretation
0.00-0.19	very weak
0.20-0.39	weak
0.40-0.59	moderate
0.60-0.79	strong
0.80-1.00	very strong

In further calculations performed using Jamovi program, the τ-b factor was determined. It improves the accuracy of calculations in case there are ties in the values of the variables. Additionally, in Jamovi program, it is possible to conduct a test of statistical significance by determining the p-value. It is "the probability of obtaining such (or more extreme) correlation result under the assumption that the correlation in the population is zero - null hypothesis: no relationship between variables" (Moore et al., 2014, p. 237). The following interpretation of the p-value is conventionally accepted (Field, 2018; Wasserstein, Lazar, 2016):

- **$p < 0.05$** → statistically significant result: the null hypothesis can be rejected, so the correlation is significant (the null hypothesis means no relationship between variables)
- **$p \geq 0.05$** → no grounds to reject the null hypothesis: the correlation is not statistically significant.

All Alliances (Relation Between the Number of Member Universities and the Number of Associated Partners)

As a first step the analysis of the relation between the size of all 15 alliances (taking into account the number of member universities) and the number of associated partners was performed using scatter plot analysis. The details are presented in Fig. 34 where a point on the graph represents a single data point; X-axis correspond to the number of member universities in the alliance (size of the alliance) and Y-axis correspond to the number of associated partners. Each dot on the plot represents one alliance, with the position being marked on its size and number of APs.

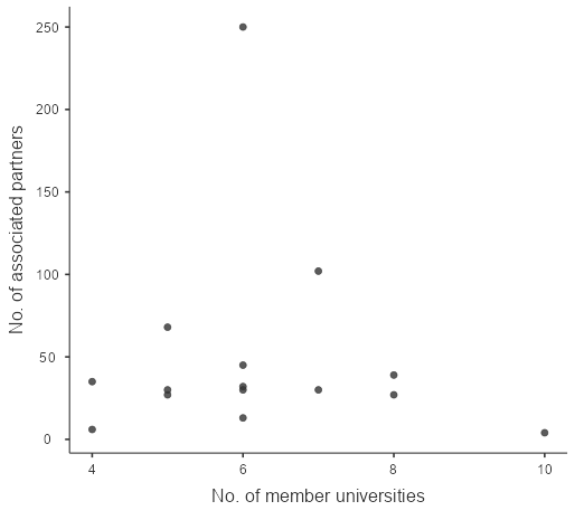

Fig. 34. Relationship between the size of the alliance (measured by the number of member universities) and the number of associated partners among all 15 alliances (source: author's own elaboration using Jamovi, 2024)

On Fig. 34, we can see that the points on the graph are scattered without forming any clear upward or downward line, which implies that there is no strong correlation between the two variables as the plot does not show a clear linear relationship. That means that there is no proportional increase in APs as the number of universities grow, nor no proportional decrease when the number drops. Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for each variable (number of member universities – Fig. 35 and number of associated partners – Fig. 36 respectively).

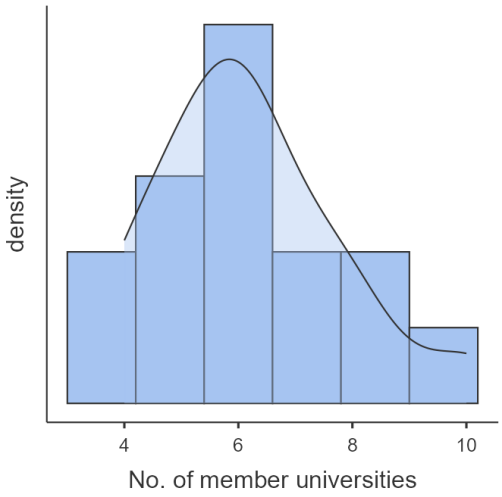

Fig. 35. Distribution of the number of member universities among all 15 alliances (source: author's own elaboration using Jamovi, 2024)

Fig. 35 presents histogram with kernel density estimate which shows a distribution that is mostly symmetric with majority of alliances having between 5-7 member universities. The curve is very close to normal distribution. This observation is consistent with the result of the Shapiro-Wilk test (W=0.926, with p-value=0.241).

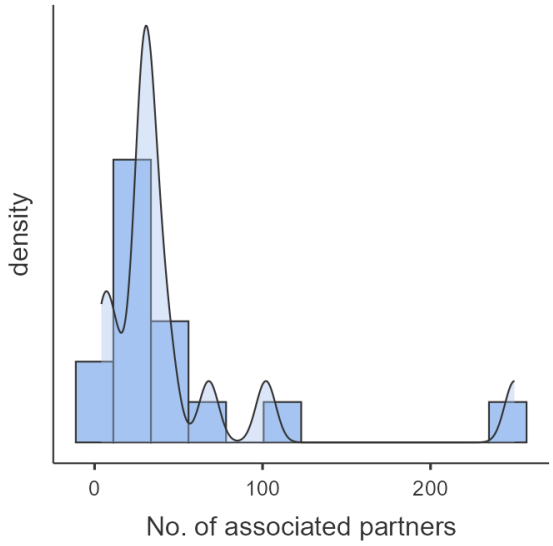

Fig. 36. Distribution of the number of associated partners among all 15 alliances (source: author's own elaboration using Jamovi, 2024)

Fig. 36 presents the distribution related to the number of associated partners which is positively skewed. Most alliances have only a few associated partners, whereas one alliance has a high number of partners and therefore, the distribution is deformed. There are also some multiple peaks. This clearly indicates non-normal distribution of data and is consistent with the Shapiro-Wilk result (W=0.614, with p-value <0.001).

Since p-value for at least one indicator is <0.05, it means that the data do not follow normal distribution in at least one dataset, therefore, Kendall's τ -b correlation coefficient was used, since it is the choice for small samples and non-normal data.

The results of the τ -b Kendall correlation is –0.032 with p-value=0.869. It suggests that there is no statistically significant relationship between the number of member universities and the number of associated partners. The number of APs do not consistently increase or decrease as the number of member universities increases.

All Alliances (Relation Between the Number of Students and the Number of Associated Partners)

As a next step, analysis between the size of alliances (based on the number of students) and the number of associated partners (AP), was performed. A scatter plot visualization was used first. The results of this analysis can be found in Fig. 37 below.

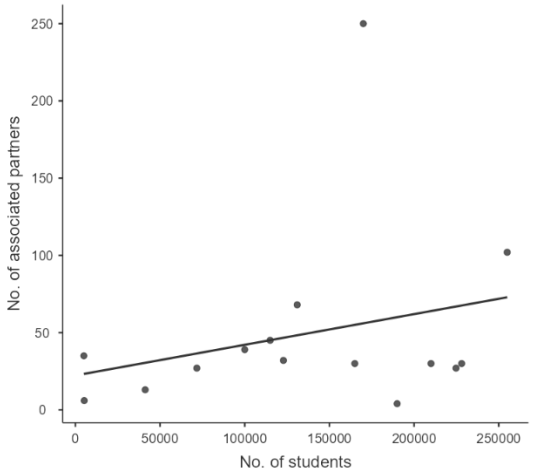

Fig. 37. Relationship between the size of the alliance (measured by the number of students) and the number of associated partners among all 15 alliances (source: author's own elaboration using Jamovi, 2024)

The trendline shows slight upward way indicating a weak positive relationship between the number of students and the number of associated partners. Generally, institutions with higher number of students tend to have slightly more APs, however, this is not a consistent trend. There are also deviations presented on the graph, therefore, this suggests that other factors (apart from student population) may influence the number of partners. Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for the number of students – Fig. 38.

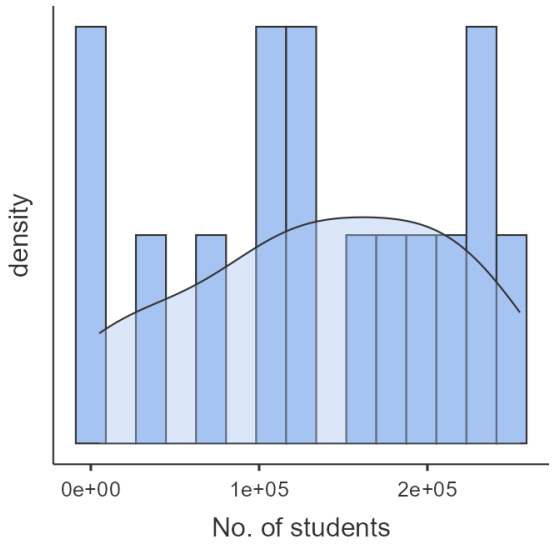

Fig. 38. Distribution of the number of students among all 15 alliances
(source: author's own elaboration using Jamovi, 2024)

Fig. 38 presents histogram with the number of students among all 15 alliances. The graph displays irregular shape with some multiple peaks but no skewness, which suggests roughly symmetrical distribution. The visual presentation is confirmed with the Shapiro-Wilk test (W=0.952 and p-value = 0.553), which proves that the data can be considered as normally distributed. The histogram for the distribution of the number of associated partners in all 15 alliances is presented in Fig. 36 above and a strong deviation was associated with that variable (W=0.614, with p-value <0.001). Since p-value for at least one variable is <0.05, it means that the data do not follow normal distribution in at least one dataset, therefore, Kendall's τ -b correlation coefficient was used, since it is the choice for small samples and non-normal data. The results of the τ -b Kendall correlation is 0.165 with p-value=0.391. This indicates that there is no strong or reliable relationship between the size of alliance (measured by the number of students) and the number of associated partners. Even though the scatter plot suggests a weak positive relationship, it is not consistent among dataset. Therefore, other factors than number of students may influence the number of APs.

Thematic Alliances (Relation Between the Number of Member Universities and the Number of Associated Partners)

For thematic alliances an analysis of a relation between the size of alliances (based on number of member universities) and the number of APs was performed using scatter plot visualization. The details are presented in Fig. 39.

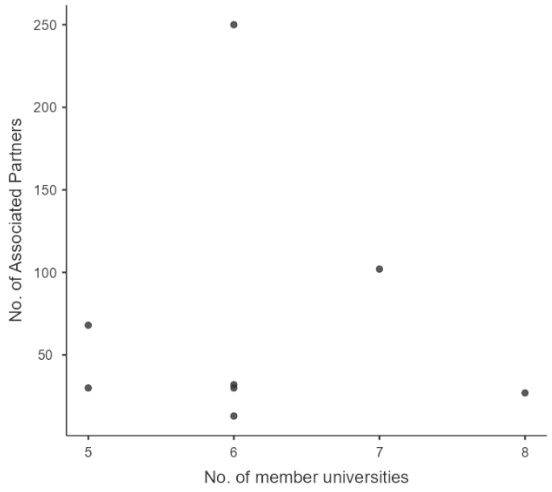

Fig. 39. Relationship between the size of the alliance (measured by the number of member universities) and the number of associated partners in thematic alliances (source: author's own elaboration using Jamovi, 2024)

Based on Fig. 39, we could observe that the number of associated partners do not increase or decrease proportionally with the number of member universities. In this case it was clear that other factors (beyond the number of member universities) influence the number of partnerships. Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for each variable (number of member universities – Fig. 40 and number of associated partners – Fig. 41, respectively).

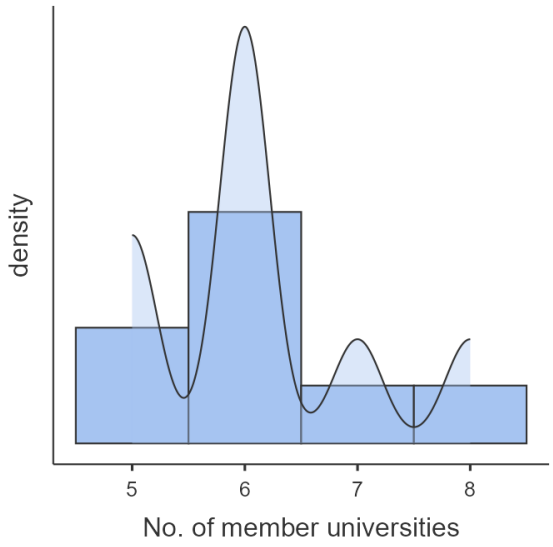

Fig. 40. Distribution of the number of member universities in thematic alliances
(source: author's own elaboration using Jamovi, 2024)

Fig. 40 presents histogram with kernel density estimate which shows an approximately symmetrical distribution. This observation is consistent with the result of the Shapiro-Wilk test (W=0.872, with p-value=0.156), which indicates no statistically significant deviation from normal distribution. Even though W-value is slightly lower than the ideal result, but still it implies only mild deviation from the normal distribution.

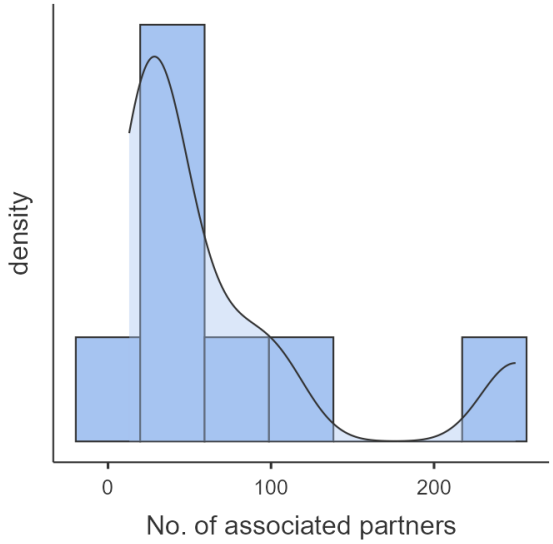

Fig. 41. Distribution of the number of associated partners in thematic alliances
(source: author's own elaboration using Jamovi, 2024)

Fig. 41 presents the distribution related to the number of associated partners in thematic alliances. The histogram, combined with the kernel density estimate, displays a positively skewed distribution where most alliances have relatively few APs, while only few have substantially higher numbers. This patter indicates deviation from normality. The observation is confirmed with Shapiro-Wilk test results (W=0.701, with p-value <0.002) indicating statistically significant deviation from a normal distribution taking into account highly significant p-value result. Since p-value for at least one indicator is <0.05, it means that the data do not follow normal distribution in at least one dataset, therefore, Kendall's τ -b correlation coefficient was used. The results of the τ -b Kendall correlation is –0.084 with p-value=0.771. It suggests that there is no statistically significant monotonic relationship between the number of member universities and number of associated partners within thematic alliances. The near 0 Kendall correlation coefficient indicates a very weak negative association and p-value well above 0.05 proved that this relationship was not statistically significant.

Thematic Alliances (Relation Between the Number of Students and the Number of Associated Partners)

As a next step for thematic alliances, an analysis of a relation between the size of alliances (this time based on the number of students) and the number of APs was performed using scatter plot visualization. The details are presented in Fig. 42.

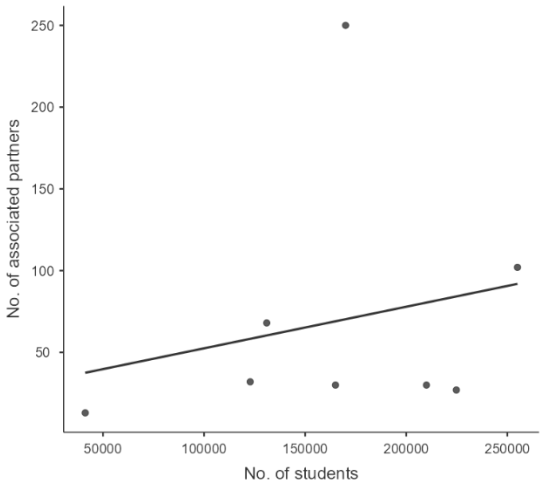

Fig. 42. Relationship between the size of the alliance (measured by the number of students) and the number of associated partners in thematic alliances
(source: author's own elaboration using Jamovi, 2024)

When analyzing the graph above one can notice that there seems to be a weak positive trend upward, indicating that there is a weak correlation between the size of thematic alliances (based on the number of students) and the number of associated partners. The trend is indicated with the trend line placed in the Fig. 42. Even though such trend is noticeable, some thematic alliances with high number of APs still have moderate number of students, which suggests that other factors should also be taken into account here. All in all, while there is a weak positive trend which indicates that more students could align with the higher numbers of associated partners, the variability implies that the number of associated partners cannot be the only indicator taken into account when correlating it to the size of an alliance (based on the number of students). Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for the number of students – Fig. 43.

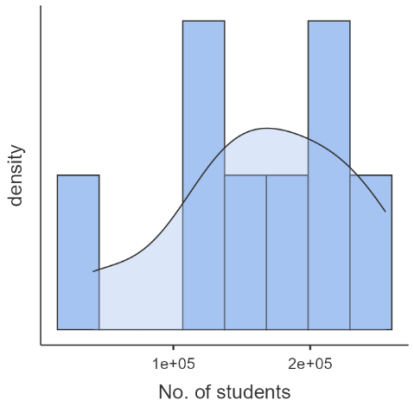

Fig. 43. Distribution of the number of students in thematic alliances
(source: author's own elaboration using Jamovi, 2024)

Fig. 43 presents histogram with the distribution of the number of students among thematic alliances. The graph displays quite symmetrical and bell-shaped distribution The visual presentation is confirmed with the Shapiro-Wilk test (W=0.965 and p-value = 0.860), which proves that the data do not significantly deviate from normality. Taking into account that p-value is well above the threshold of 0.05 and W value is close to 1, the data could be considered as coming from the normal distribution. The histogram for the distribution of the number of associated partners in thematic alliances is presented in Fig. 41 above and it confirms a statistically significant deviation from a normal distribution (W=0.6701, with p-value <0.002). Since p-value for at least one indicator is <0.05, it means that the data do not follow normal distribution in at least one dataset, therefore, Kendall's τ -b correlation coefficient was used.

The results of the τ -b Kendall correlation is –0.182 with p-value=0.533. It suggests that there is no statistically significant monotonic relationship between the number of students and the number of APs when it comes to thematic alliances. Although the scatter plot (Fig. 42) shows slightly upward line which would indicate weak correlation, the statistical analysis do not confirm that trend, indicating that the relationship is not strong enough to reach statistical significance. This may suggest a tendency for alliances with more students to have higher number of associated partners, however, the variability in the data indicates that other factors influence this relationship and that the student number alone cannot be a reliable predictor.

Typological Alliances (Relation Between the Number of Member Universities and the Number of Associated Partners)

For typological alliances an analysis of a relation between the size of alliances (based on the number of member universities) and the number of APs was initially performed using scatter plot visualization. The details are presented in Fig. 44.

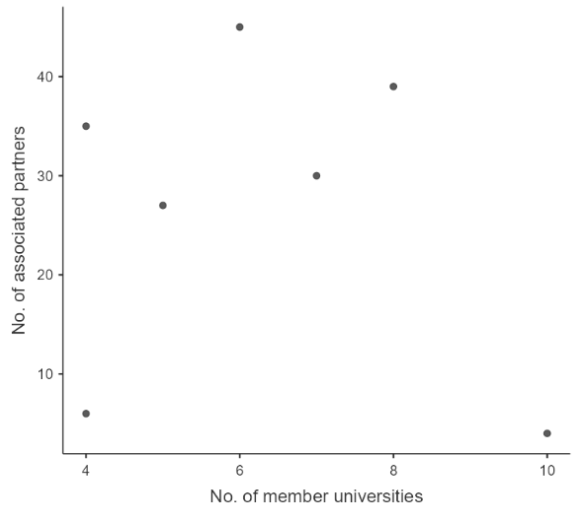

Fig. 44. Relationship between the size of the alliance (measured by the number of member universities) and the number of associated partners in typological alliances (source: author's own elaboration using Jamovi, 2024)

In typological alliances, there is no clear linear relationship, which would indicate that alliances with a larger number of member universities often have more associated partners. Some alliances that have a similar number of member universities, have different numbers when it comes to the number of associated partners. This suggests that while the size of the alliance could influence the extensiveness of associated partners network, other factors most likely play

a role here. Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for each variable (number of member universities – Fig. 45 and number of associated partners – Fig. 46, respectively).

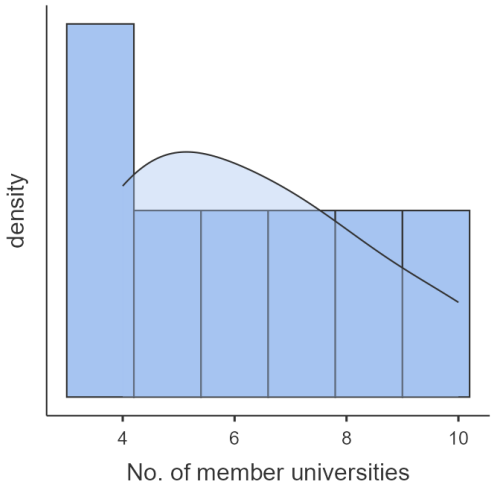

Fig. 45. Distribution of the number of member universities in typological alliances (source: author's own elaboration using Jamovi, 2024)

Fig. 45 presents histogram with kernel density estimate which shows the distribution of the number of member universities in typological alliances. The graph displays approximately symmetrical bell-shaped distribution, which suggests that data have a normal distribution. This observation is consistent with the result of the Shapiro-Wilk test (W=0.931, with p-value=0.555) which indicates that there is no statistically significant deviation from normality.

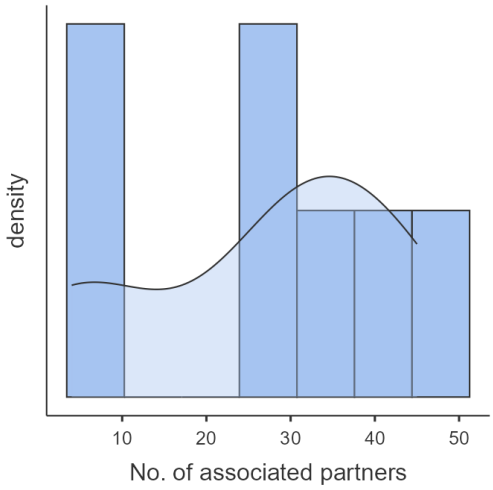

Fig. 46. Distribution of the number of associated partners in typological alliances (source: author's own elaboration using Jamovi, 2024)

Fig. 46 presents the distribution related to the number of associated partners in typological alliances. The histogram displays a mildly skewed distribution with some slight tendency for asymmetry, however, no extreme multiple peaks are visible. Despite this slight deviation from asymmetry, the Shapiro-Wilk test results (W=0.891, with p-value=0.280) indicates that there is no statistically significant deviation from normal distribution and the dataset could be considered as normally distributed.

Since p-value for both variables was ≥ 0.05, it means that the data follow normal distribution in both dataset, therefore, in this particular case Pearson correlation coefficient was used.

The results of the Pearson correlation is r= –0.181 with p-value=0.698. It suggests that there is no statistically significant linear relationship between the number of member universities and the number of associated partners for typological alliances. Taking into account the high p-value, the results do not support the existence of reliable correlation between these two variables. This is in line with the scatter plot observation which proved that other factors very likely influence the number of APs.

Typological Alliances (Relation Between the Number of Students and the Number of Associated Partners)

As a next step for typological alliances, an analysis of a relation between the size of alliances (this time based on the number of students) and the number of associated partners (AP) was performed using scatter plot visualization. The details are presented in Fig. 47.

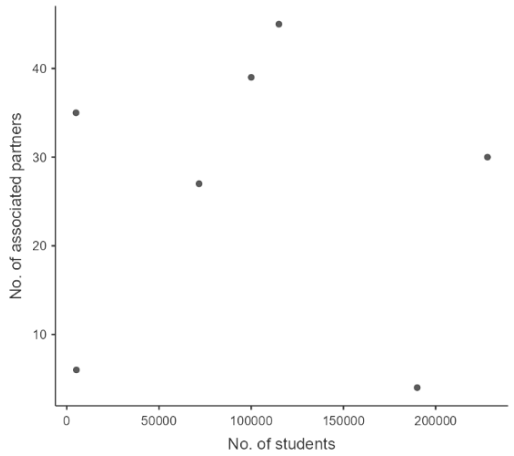

Fig. 47. Relationship between the size of the alliance (measured by the number of students) and the number of associated partners in typological alliances (source: author's own elaboration using Jamovi, 2024)

The data show that there isn't a clear and consistent linear trend indicating that alliances with more students have proportionally higher or lower number of associated partners. On the graph there seems to be no upward or downward pattern. That means that other factors than size of an alliance (based on number of students) most probably play a dominant role in determining the number of associated partners in typological alliances. Following scatter plot analysis, the histogram with kernel density estimate (KDE) was prepared for the number of students dataset – see Fig. 48 below.

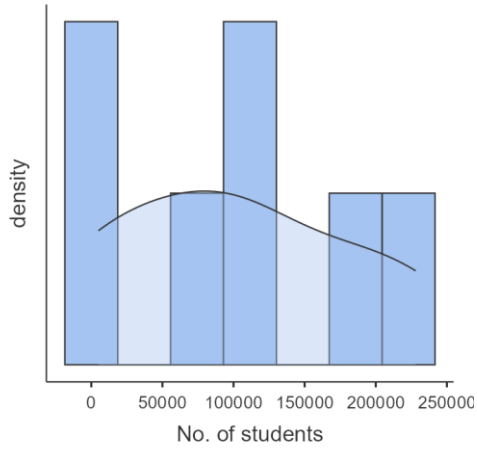

Fig. 48. Distribution of the number of students in thematic alliances
(source: author's own elaboration using Jamovi, 2024)

Fig. 48 presents histogram with the distribution of the number of students among typological alliances. The distribution presented on the graph is not clearly symmetrical and shows some peaks. However, the Shapiro-Wilk test result (W=0.930 and p-value = 0.547) indicates that the visual irregularity presented on the graph is not statistically significant and that this data do not significantly deviate from the normal distribution. As the p-value exceeds 0.05 threshold and the W value is close to 1, the assumption of normality can be considered satisfied. The histogram for the distribution of the number of associated partners in typological alliances was presented in Fig. 46 above and it indicates that there is no statistically significant deviation from normality, therefore, the dataset could be considered as normally distributed.

Since p-value for both variables is ≥ 0.05, it means that the data follow normal distribution in both dataset, therefore, in this case Pearson correlation coefficient was used as well.

The results of the Pearson correlation is r=–0.022 with p-value=0.963. This result implies that there is no statistically significant linear relationship between the number of students and the number of associated partners when it comes to typological alliances. The Pearson correlation

coefficient is close to 0, which suggests no association between the two variables. This supports the earlier observation with scatter plot (Fig. 47) which shows no clear pattern. Therefore, other factors are more likely to influence the number of APs in typological alliances.

Conclusions

Step 1 – All Alliances

- Generally, there is no statistically significant relationship between the size of alliances (whether measured by number of member universities or student population) and the number of associated partners
- A weak positive trend between the number of students and number of APs was observed visually in scatter plot, however, not supported with statistical significance, which suggests that other factors most likely influence partnerships within alliances.

Step 2 – Analysis of Thematic and Typological Alliances

a) Similarities

- In both thematic and typological alliances, there seems to be no statistically significant correlation between the number of associated partners and the size of alliance (measured by the number of member universities)
- For both alliances other factors most probably play a significant role when it comes to the number of APs and its correlation with alliance size

b) Differences

- In thematic alliances there is a weak positive trend between the size of the alliance (measured by the number of students) and the number of associated partners, however this trend is not statistically significant
- In typological alliances there is no clear upward or downward trend observed in any comparison between the number of APs and the size of the alliances, whether measured by student population or number of member universities.

Final comments

It seems that the size of an alliance (whether measured by number of member universities or number of students) is not a decisive factor correlated with the number of associated partners. There seems to be slight tendency for increase in the number of Associated Partners in larger alliances measured by student population (when compared all 15 alliances and thematic alliances), however not statistically significant. Whereas typological alliances demonstrate no relationship between the size of alliances and associated partnerships. Overall, the data suggest that the number of APs is influenced by other aspects of the alliances, such as: strategic goals, institutional priorities or external engagement objectives.

5.2. Empirical Study Findings

Introduction

The main findings of the in-depth interviews with EUI's alliances coordinators provided insights into the following main areas related to European university alliances:

- Governance models of alliances (including structures, student involvement and model limitations)
- Associated partners (including selection process and their roles)
- Previous cooperation
- Alliance creation
- Research collaboration
- Chosen model
- Added value of European Universities Initiative
- Expected outcomes and achievements
- Future of alliances
- Limitations of European Universities Initiative

These insights provided information on ambitious goals and significant challenges that European university alliances face, as they try to work on towards further collaboration and deeper integration across the whole Europe.

Out of 18 selected European university alliances, in-depth interviews were performed among 16 Alliances, which constitutes 89% of the chosen group. This ensured a comprehensive understanding of strategies, perspectives and experiences among the majority of the selected European universities alliances.

When it comes to the proportion of thematic and typological alliances it was exactly even. The details are presented in Fig. 49.

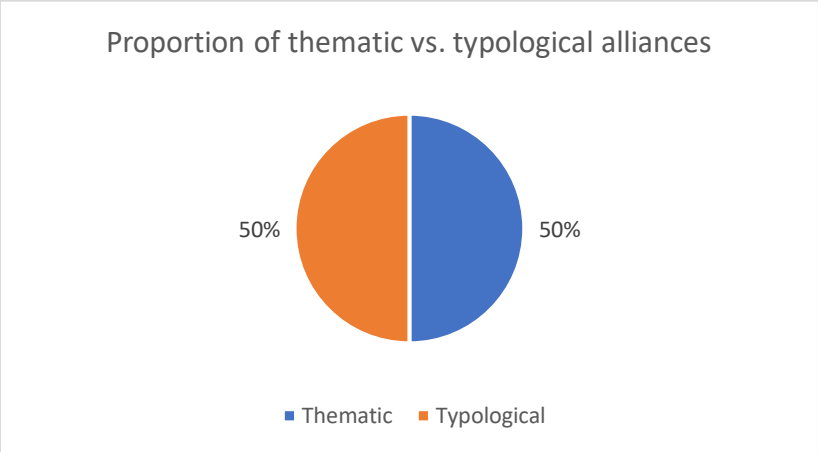

Fig. 49. Proportion of thematic and typological alliances in in-depth interviews (source: author's own elaboration)

The proportion was balanced with 50% of thematic alliances (8) and 50% of typological Alliances (8) that were interviewed by the author. This ensured a proportional and symmetric representation for both models of alliances in interviews.

Furthermore, among interviewed alliances there are some that were selected by the European Commission in the year 2019 and some that were selected in the year 2020. Fig. 50 outlines the distribution of alliances according to the selection year.

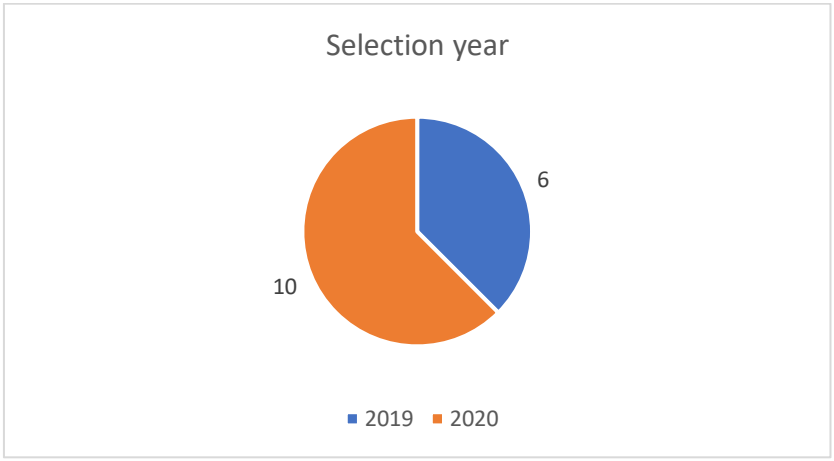

Fig. 50. Distribution of European university alliances by selection year in in-depth interviews (source: author's own elaboration)

The distribution highlights the participation of both cohorts – 2019 and 2020 in in-depth interviews. The more represented group was the group of alliances selected in 2020 (62%), whereas alliances selected in 2019 constituted 38%. However, there was a good mixture of those alliances from cohort of 2019, which were the ones selected as first and from cohort of 2020, which followed a year after. This mix enabled an analysis which presented different perspectives taking into account also the maturity of the alliances.

Each section of the analysis contains leading questions from the in-depth interviews' with EUI alliances coordinators, analysis of answers from all alliances, analysis of answers from thematic alliances and from typological alliances. Additionally, the views of coordinators were illustrated with exact quotes from the interviews presented in a frames. These quotes reflect on the findings presented by the author in each section.

Each section is concluded with a 2-step summary:

Step 1: Comparative analysis of all alliances (the number of the analyzed alliances was 16 and it relats to the number of interviewed coordinators)

Step 2: Internal and comparative analysis of both models:

a) Thematic alliances
b) Typological alliances

In the first step a comparative analysis of all selected alliances was performed. This phase focused on general identification of key patterns in order to establish understanding of the overall landscape. The aim was to reveal trends and show specific structural and area-specific variations. The first step set the stage for a further, more detailed internal analysis in the following phase.

In the second step the analysis was performed by internally examining answers from leaders of each of the two selected models. These conclusions were first presented in an overview of both models. Then similarities and differences between the two models were outlined. The differences were presented in a tabular form. This analysis was applied separately to each model. It allowed for a tailored exploration which demonstrated unique characteristics of each model. Such approach ensured that the findings are both, comprehensive on one side, and tailored on the other side, providing insights into similarities and differences between thematic and typological models of alliances. Final comments were provided after each analytical section.

5.2.1. Governance Models of Alliances

5.2.1.1. Governance Structures

Leading questions: What is the governance model of your alliance? How is governance organized? What are the main governance bodies?

All Alliances

Alliances were organized in a wide variety of governance structures, which ranged from governance models with strong executive boards to decentralized models, where there was a significant autonomy for each partner university.

Therefore, some alliances stated that:

> *"We have a multi-level governance structure with a strong central executive committee and a chain of working groups"* [EU 7].

And the others would claim that:

> *"Our decentralized governance structure gives significant autonomy to each partner, which allows flexibility in decision-making process"* [EU 16].

Regardless of the diversity in terms of governance models, some governance bodies were common in most of the alliances, such as Steering Committees, Executive Boards and different types of Councils (e.g. Academic, Research). These governance bodies were crucial in providing not only operational efficiency, but also strategic advice.

In the vast majority of alliances, Rectors/Presidents played a central role in the governance model, being part of executive level boards or councils where they met and discussed on strategic matters:

> *"Rectors' Assembly meets every 6 months and it is responsible for strategic oversight"* [EU 7].
> *"Our governance structure is designed in a way to allow rectors and presidents of the universities to be directly involved in key decisions"* [EU 11].

Many alliances created specific bodies in order to manage coordination between partner universities and to integrate different activities among all institutions. These included thematic committees or councils that are focused on some specific areas of cooperation, such as research or education:

"From the governing bodies, we have, just as I mentioned, a governing board and operational committees, which include thematic groups focused on research and academic integration" [EU 4].
"Our governance model is structured to facilitate collaboration with coordination council and thematic working groups, ensuring even further integration of our institutions" [EU 8].

Operational or management teams/boards/offices were responsible for a day-to-day operational management of the alliances. They ensured that strategic decisions that were made by executive and higher-level governance bodies were effectively implemented:

"The governance structure is designed to have a strategic level and an operational level through its central management office" [EU 11].
"So we have the project management board, where we're talking about who manages all activities" [EU 9].

Thematic Alliances

Most thematic alliances had a central governing body, often referred to as Governing Board or similar. This was a board which was responsible for making high-level decisions and provided strategic direction for the alliance:

"So we have at the governing board rectors or really sufficiently mandated delegates" [EU 4].

Thematic alliances stressed the importance of inclusivity and collaboration among member universities. Decision-making involved representatives from each member:

"The Governing Board is the highest decision-making body within our governance structure. The board consists of rectors or presidents of the member universities, ensuring that leadership of each institution is involved in the strategic decision-making process" [EU 11].

A steering, management or executive committee was the operational backbone of the alliances. These committees were responsible for implementing strategies:

"The Management Committee is the main operational body, creating links between decisions and actions. It is in charge of the overall coordination for the implementation of the project, operational decision-making and budget compliance" [EU 13].

Practically all thematic alliances used work packages to address specific thematic or operational aspects. Work packages leaders were well integrated into governing structures:

"Each work package leader reports to the Steering Committee, which then reports to the Governing Board" [EU 15].

Thematic alliances often included in their governance structures a senior leader, such as Secretary General or Executive Director who managed activities across the whole alliance:

"As Executive Director, my role is the central coordination. I'm the director of the management team of the alliance and I'm of course the link to the governing board" [EU 4].
"When you're trying to get 5 very individual universities together into something more integrated, we were missing that common identity. And so that's what I've been working on up until now as Secretary General" [EU 6].

Advisory Boards were often part of governance of thematic alliances. They provided strategic advice to governing bodies, such as Steering Committees or Governing Boards. Advisory Boards often included industry partners, external experts and representatives from NGOs:

"The Management Committee works closely with the Advisory Council, which provides strategic advice and recommendations on thematic priorities for the alliance" [EU 13].
"We also have an advisory committee that sort of works with the governing board and provides that external source of opinions and ideas for the strategic direction of the alliance" [EU 6].

Many thematic alliances invited to their Advisory Councils stakeholders from sectors that matched with their thematic priorities (e.g. sustainability, coastal management or health care).

Typological Alliances

Typological alliances mostly created hierarchical governance models with different layers, such as Governing Boards, Steering Committees and different kinds of operational units:

"Our Steering Committee consists primarily of our Vice-Presidents of International Affairs. Then we have a Board of Directors, which is made-up of our 7 presidents of the universities, including the two presidents of the student forum". [EU 2]

However, there was a typological alliance that pursued a completely different approach, which highlighted the importance of inclusivity and diverse perspectives in a decision-making processes. In such governance models broad representation is ensured including multiple internal stakeholders groups, such as: Rectors, Vice-Rectors, administrative staff, academic staff and students:

"So there is one main strategic body that is the University Council and for the two parts is formed by all the internal stakeholders of the university. This means the five Rectors, the five Vice-Rectors for international relation, five administrative staff representative, 5 academic staff representative and five students. So they are all sit at the same table plus the coordinator and this means that they have in principle the same voice and the same voting power" [EU 3].

Work packages were incorporated into governance structures of the typological alliances. Work packages were often distributed among different partners to allow an inclusive governance model. Work packages were then divided into smaller tasks' teams:

"We have appointed work package leaders and since we have 8 work packages, so we have one work package per university. We have mostly 5-6 tasks for each work package" [EU 8].

Regular meetings of different governing bodies were key aspects that ensured smooth coordination and decision-making processes:

"So our governing board meets currently three to four times a year" [EU 6].
"Our Governing Board is composed by all the rectors and presidents of our partners and meets every half a year to make the main decisions of strategic directions of the alliance, the steering committee meets every month" [EU 14].

One of the typological alliances decided to change significantly the initially adopted scheme of the frequency of the meetings of their Rectors' Board:

"This is a challenge to keep the Rectors on track and keep the information flow; due to this challenge, the Rectors decided to meet every 6-8 weeks (in the beginning there were only 2 meetings per year), they decided to increase their involvement" [EU 1].

The decision to increase the frequency of meetings of the rectors indicated a strategic shift towards enhanced engagement of the rectors and underlined the importance of this initiative from the perspective of all partners involved, particularly from the perspective of senior management.

Conclusions

Step 1 - All Alliances

The governance structures among all 16 alliances demonstrated a set of models that range from centralized, more executive models to more decentralized structures.

- Vast majority of alliances included Executive/Governing Boards (that ensured strategic oversight), Steering Committees (that provided operation efficiency) and various councils (e.g. Academic or Research) in their governance structures
- Strategic decisions were taken by the Rectors/Presidents or equivalent senior representative that played a crucial role, being part of central strategic boards
- As for the day-to-day operational management it was handled by different operation teams, management offices or project boards
- Work packages and/or thematic groups were often used in order to synchronize efforts among different areas, such as research or education
- Majority of alliances incorporated diverse stakeholders into their governance structures, though the extent varies
- Many alliances included students, administrative staff and academics in their governance

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

- EU4: Research and Academic council were part of the governance, together with Executive Board involved in decision-making processes

- EU6: Governance included Governing Board and Executive Committee which was responsible for strategic decisions

- EU7: Strategic oversight with Rectors' Assembly and Board of Directors, the Steering Committee was responsible for operational management

- EU10: Standard governance structure as in any European project with Board of Governors which was responsible for decision-making processes

- EU11: Centralized governance structure with Governing Board and Executive Committee which took strategic decisions

- EU12: Governance with Rectors and Executive Body as the strategic boards of the governance

- EU13: Governance model with Management Committee as the main operational body which worked closely with the Advisory Council

- EU15: This model included Governance Boards with support from Academic Council and Quality Assurance Committee

Typological Alliances

- EU1: A hierarchical governance model with central bodies such as Governing Board and Executive Committee where external stakeholders were represented by Advisory Board

- EU2: Apart from General Assembly and Board of Directors, this governance model included Strategy Committee that gave advice to strategic boards

- EU3: Decentralized governance structure with one strategic body that incorporated different stakeholders

- EU5: Governance with Steering Committee as the top-decision making body, Administrative and Finance Management Boards at the operational level

- EU8: Strong, hierarchical governance structure focused on dispersed leadership

- EU9: Governance with management Board and Academic Board, which was supported by Consultancy Board

- EU14: Multi-layer governance structure which ensured strong collaboration among member institutions

- EU16: Governance centralized with Strategy Board that had equal representation of all member institutions.

a) Similarities

- Both thematic and typological alliances included hierarchical models with Governing Boards, Steering Committees and Operational Teams with strategic and operational management role
- Work packages were present in both types with specific focused areas
- Both types of alliances relied on Rectors/Presidents or senior leaders who made high-level decisions
- Both types tried to balance strategic oversight with operational management performed on everyday basis

- Operational leaders (e.g. Project Managers, Secretary Generals) played crucial role in transferring strategic decisions into operational activities
- Both types of alliances put a strong emphasis on collaboration among member institutions in order to achieve common objectives

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Governance focus areas	Thematic priorities in the area of research and innovation, that matched with alliance goals and mission	Structural inclusivity that also incorporated views from different stakeholders
External stakeholders	Tended to incorporate external stakeholders like industry partners and NGOs in strategic guidance	More focused on internal members and inclusivity and less on external advisory bodies
Decision-making approach	Tended to be more centralized and top-down	Tended to be more collaborative and inclusive

Final comments

The governance structures among all the 16 alliances demonstrated a shared commitment to strategic positioning, organizational efficiency and stakeholder collaboration. The governance models of thematic and typological alliances reflected slightly different philosophies, each adapted to their objectives and missions. Thematic alliances tended to emphasize focused, centralized governance model, whereas typological alliances tended to prioritize more collaborative, inclusive decision-making processes in order to accommodate wider variety of stakeholders. These differences underlined the adaptability of European university alliances in addressing different challenges and goals.

5.2.1.2. Students' Involvement in Governance

Leading questions: What is the involvement of students in governance? Do you have a separate student governance body?

All Alliances

The vast majority of alliances included student representatives in their governing bodies. Some alliances involved their students in Governing Boards or General Assemblies. For instance, EU1, EU 4, EU 6 and EU 10 alliances had students actively participating in decision-making process by being active participants in Governing Board meetings:

> *"In the governing board, students are represented and participate in all significant decisions"* [EU 6].
> *"In project management board 2 students represent the student voice in management meetings"* [EU 10].

There were also these alliances that created specific student boards in their governance models in order to enhance student participation:

> *"Student board has 1 colleague from each university responsible for exchange with students"* [EU 5].
> *"We have autonomous Student Assembly, they set up their own rules, work on voluntary basis"* [EU 13].

On the other hand, alliances like EU 9 and EU 3, involved students in their decision-making processes without a separate formal body which was dedicated to students:

> *"We have not a separate student council, for example, but we have student representation in our main governance bodies"* [EU 3].

Furthermore, alliances such as: EU 6, EU 13, EU 14, EU 16, provided their students even more autonomy and a lot of influence on their governance, making sure students' voice is heard:

> *"Students are equal members of the strategy board, our governance structure puts students firmly at the center of decision-making and implementation"* [EU 16].
> *"We have a separate and organized, self-organized student forum organized by the students. We also have a new role called the student liaison officer which is really a person at each institution taking care of the student initiatives and engagement in each institution and brings that together on the alliance level"* [EU 14].

Thematic Alliances

Thematic alliances had different approaches to incorporating students involvement into their governance structures. On one hand, students were often included in Governing Boards, Executive Committees or General Assemblies:

> *"In the governing board, we have the members of the representatives of each institution. But we also have two student representatives. And the rules around their involvement is technically speaking decisions aren't supposed to be made without the approval of the students who are involved in the governing board, who speak on behalf of the entire international student board and who are rotate out every year"* [EU 6].

On the other hand, they could also be involved in governance at the level of operational management and work packages, apart from forming their own student body:

> *"In project management board we have 2 students representatives (with 1 vote) and also students' representation in all WPs. Student self-organize in student council"* [EU 10].

In some cases student representatives were involved vertically across governance structures, not only forming their own student body, but also being present in Rectors' Assemblies, as well as in Steering Committees. This approach highlighted their role and meaning of students' voice in these alliances:

> *"A student board is made-up of members from each of the different university partners. A chief student officer and two other members of an executive team of student board are invited to the steering committee meetings, Furthermore, chief student officer is also a member of Rectors' Assembly with a voting role. There's a student voice and participation and a decision-making voice in everything that we do"* [EU 7].

Still, there were also views which assumed that student involvement is not working well, and furthermore, that students should not be involved in decision-making process, at least not at this stage:

> *"But this is not working well as students are end-users of what we are developing, our customers, you do not have your customers work on your products, they are our end-users and should not be involved in decision-making process at this stage"* [EU 10].

Typological Alliances

All typological alliances highlighted the importance of students voice in governance. Many of them established formal boards for students:

> *"Student board is formed by 1 colleague from each university responsible for exchange with students, students' Instagram account"* [EU 5].

However, there was also an approach to choose not to create a separate body and rather include students in other already existing executive committees, which reflected integration rather than autonomy:

> *"We have not a separate student council for example, because we would like really student to be integrated in the discussion. They are part of University council, but we are thinking how to structure the student participation"* [EU 3].

Still, there were voices stating that there is a need for improvement related to students' involvement:

> *"We have a student board but it's not working very well"* [EU 8].

The actual role of students and their influence on alliances' governance differed. Some alliances empowered students significantly, while with others their role was more symbolic.

Conclusions

Step 1 - All Alliances

Students' involvement in alliances governance structure was a key component in a majority of alliances, which proved that including students' perspective is important in decision-making processes among alliances. The methods of involvement of students varied in different alliances from formal roles and positions to more informal or integrated roles in the existing governing

boards and committees. Hence, some alliances signalized challenges related to making their student bodies work effectively.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Students were included in governing boards or committees (e.g. EU 6 or EU 10) and their approval was often required in decision-making processes, which emphasizes their influence on the governance. Some alliances created autonomous student councils or assemblies, which enabled self-organization (e.g. EU 10, EU 7), while other allowed students to participate across governance levels (e.g. EU 7). Still, some alliances viewed students more as end-users than decision-makers (e.g. EU 10).

Typological Alliances

Students boards were created in many alliances, being represented by each member university (e.g. EU 5), however, in some cases students were included in existing governance structures (e.g. EU 3). Some alliances struggled to operationalize student involvement in an effective way, which eventually led to only very symbolic student participation (e.g. EU 8).

a) Similarities

- Both types of alliances recognized the importance of student representation in governance
- Significant role of students were underlined by their inclusion in high-level decision-making bodies in alliances governance structures
- Both models faced some operational issues, as some alliances reported ineffective involvement of students

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Student governance structures	More often established separate student bodies for self-governance	Tended to integrated students more into already existing structures

Levels of representation	Emphasized more vertical representation of students across different governance levels	Tended to focus more on fewer levels and more integration into overall governance
Student autonomy	Highlighted student autonomy more	Emphasize more collaborative integration

Final comments

Both types of alliances emphasized student involvement in their governance structures, which was an inclusive approach. Thematic alliances tended to encourage more student autonomy by creating separate structures for students and granted them decision-making powers among different governance structure, while typological alliances emphasized collaboration more by including student voices within existing frameworks. However, in both models, one could notice, on the one hand, operational challenges and, on the other, a commitment to ensuring that student roles were not merely symbolic but, rather substantial. By combining both approaches, student autonomy and collaborative integration, alliances could develop governance models which were inclusive and effective, ensuring that students would play a significant role in shaping their future.

5.2.1.3. Limitations of the Chosen Governance Model

Leading question: Are there any barriers/limitations of the chosen governance model?

All Alliances

For some alliances the balance between complexity of the chosen governance models and efficiency of how they operate in practice was a critical concern:

> *"I think the structure makes sense the way we put it, but the implementation is a challenge"* [EU 2].

The key issue was the adaptability of the chosen model into the changing needs. Too complex governance structures could jeopardize quick and efficient decision-making processes as well as smooth running of operational activities. Even though alliances were complex and very diverse organizations:

> *"Big differences between each institution create challenges in governance"* [EU 5].

For many of them there was a desire for a governance system that is both efficient and agile:

"It is working in the best way possible, it is very complex and time-consuming, so we're thinking of changing the model for the next perspective and simplifying decision-making process, also because we are growing to 10 partners in the next phase" [EU 13].

A challenge, that some of the alliances stressed, was related to the engagement and commitment from all members. This particularly concerned the highest level of governance. Without strong commitment and engagement of all members at all governance levels, there might be problems in taking and implementing decisions effectively. The problem of engagement was also connected to changing composition of different boards in the governance structures:

"We will have a problem of commitment at the highest political level with the changing composition of the governing board. So I I'm a little bit not alarmed, but alerted by the fact that most of our actors will change in the next years" [EU 4].
"So whenever you have a change in personnel, it's not easy to catch up for this university. So this is like of course always tricky for each university if such decisive positions change" [EU 14].

On the other hand, some alliances perceived uneven engagement at highest governance levels as natural and logical process:

"And of course the leadership commitment of our Rectors in the governing platform is good but uneven and that is, I would say it's also logical. It depends also on personal interest of each university leader" [EU 14].

The diversity of alliances in terms of geography, cultures, internal structures as well as different communication practices among member universities, made effective communication across alliances, in the context of governance structures, often very challenging:

"It is not always easy to ensure the flow of information between the different boards and so that the Rectors are informed the way they need to be to take decisions" [EU 1].

Alliances created in 2019 had already some lessons learnt from the experiences they had in the initial 3-year phase of their consortium creation. One of them decided to develop:

"A rotating presidency scheme of the alliance according to which all rectors of the partner universities will assume the presidency of the alliance during 6 months each" [EU 11].

This was the model that many alliances followed after pilot phase of the European Universities Initiative. This clearly marked the transition from project phase governance into a fully-fledged consortium governance structure in the future, as:

> *"The projects now are our testing ground, but in 10-20 thirty years there will be a very complex organization hopefully to organize and manage"* [EU 16].

Thematic Alliances

Thematic alliances often found their governance models to be too complex which might influence decision-making processes and operational capacity. Simplification notion was a recurring goal as alliances grew not only in size, but also in complexity:

> *"A threat to the future of the alliance is if we don't manage to create a structure that doesn't depend on an individual"* [EU 6].
> *"During the first stage we encountered some barriers or limitations, so in the second proposal some decisions have been made, such as: a rotating presidency scheme of the alliance according to which all rectors of the partner universities except coordinator will assume the presidency of the alliance during 6 months each throughout the implementation period"* [EU 11].

Ensuring consistent engagement on internal level and maintaining institutional commitment was a challenging task:

> *"Governance model works fine, more problems on internal level, difficult to get professors on board."* [EU 15]
> *"And as it is the first three years at least, a very personal commitment, a very personal ambition, this needs to be institutionalized."* [EU 4]

Another barrier indicated by alliances was the already discussed student involvement. Some thematic alliances faced challenges in involving students in their decision-making processes:

> *"The student implication is a limitation"* [EU 4].

Apart from notions related to students involvement, some also mentioned bureaucratic hurdles as a limitation:

> *"Students' involvement, more voices into ideas and curiosity and less voices that represent bureaucracy"* [EU 10].

Typological Alliances

Typological Alliances tended to favor more optimized governance models, still there was a need for additional layers or platforms that would address some identified operational needs:

> *"We feel the need for better integration between the operational teams and decision-making bodies, we are lacking a layer, the technical layer I would say"* [EU 8].
> *"I would say that it would make sense maybe to add another platform that caters specifically to PhD's or to scientific staff, so they would have their own space where they can exchange"* [EU 2].

Maintaining commitment among different governance levels was a significant concern of typological alliances, especially related to dealing with changing institutional priorities:

> *"And of course the leadership commitment of our Rectors in the governing platform is good but uneven and that is, I would say also logical. It depends also on personal interest of each university leader"* [EU 14].

Effective communication seemed to be a recurring obstacle among different governance layers and institutions:

> *"It is not always easy to ensure the flow of information between the different boards and so that the Rectors are informed the way they need to be to take decisions"* [EU 1].

Conclusions

Step 1 - All Alliances

There were several limitations which alliances indicated in their governance models. Many alliances struggled to optimize management of their governance structures and ensure operational agility and effective decision-making processes at the same time. Furthermore, uneven commitment from partner institutions at different levels of governance could disrupt implementation of decisions and continuity. Challenges were also observed in information flow among culturally and geographically diverse institutions. In the longer term, alliances should also focus on accommodating growth and sustainability of their alliances in the future.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances focused on enhancing autonomy and inclusivity in their governance models. They created dedicated bodies and roles in order to involve diverse stakeholders. However, these alliances often faced challenges related to managing structural complexity (e.g. EU 7), engaging different stakeholders (e.g. EU 13) and achieving collaboration on different levels (e.g. EU 15).

Typological Alliances

Typological alliances emphasized the importance of embedding governance structures into the existing frameworks at institutional levels in order to promote integration and collaboration. Their main challenges included maintaining clear communication among different governance levels (e.g. EU 1 or EU 8), securing constant commitment of stakeholders (e.g. EU 14) and addressing the needs for more flexible platforms in order to enhance engagement (e.g. EU 2 or EU 3).

a) Similarities

- Both models experienced challenges with too complex governance structures
- Uneven commitment and difficulties in maintaining continuity of leadership were observed
- Challenges were reported with communication within governance structures, which could affect decision-making processes and collaboration among partners

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Governance challenges	Faced challenges related to complexity of their governance models	Focused more on integration but suffered from some missing layers or platforms that currently limit operational efficiency
Adaptability and expansion	Struggled with adapting their governance models to planned expansions	Emphasized the need for evolving process in order to support long-term integration

Final comments

All in all, the governance limitations faced by thematic and typological alliances reflected the complexity of keeping the balance between autonomy, inclusivity and operational efficiency. Thematic alliances often struggled with managing highly complex structures of their governance and students integration, while typological alliances were challenged with effective communication and seamless integration. Alliances aimed at providing strategies that would allow for more flexibility and better stakeholders engagement in their governance structures, making their way to creating a more sustainable governance frameworks in the future.

5.2.2. Associated Partners

Leading questions: How many associated partners do you have? How did you select your partners for this alliance? Which criteria were taken into account when selecting partners? What are the roles of your associated partners in your alliance?

5.2.2.1. Selection of Associated Partners

All Alliances

Some alliances stressed the importance of selection the associated partners based on their coherence with alliance strategic goals and academic focus area. This allowed that such partnerships could pursue common objectives in an effective way and develop each institution's growth in the future:

> *"The reason why we selected these partners and approached them or were approached by them is that they reflect some of the key values of our alliance that are inclusivity, openness, cooperation with our local ecosystems and the intention to build a European university that can really be a better bridge and be closer to society"* [EU 16].

There were alliances that tended to blend academic institutions with partners from industry or business sectors. This approach was aimed at fostering innovation through industry collaboration, as well as enhancing practical implementation of their educational and research activities:

> *"Partners coming out of all of these different groups - business, NGOs, municipalities, regional associations, so we bring together different actors"* [EU 1].

Another aspect that was taken into account was geographical diversity when it comes to selection of associated partners:

> *"But in principle we chose partners looking for a balance, a geographical balance"* [EU 3].

It allowed to create the consortia that had their partners represented in various European regions:

> *"We want regional partners so that we can be working with local authorities"* [EU 6].

Vast majority of partnerships with APs were created based on existing relationships of individual member universities with different stakeholders:

> *"All in all, every partner chose their usual stakeholders and partners that they work with"* [EU 8].
> *"We limited it a bit, two to three per partner because otherwise it would have become too big"* [EU 1].

These kind of previous successful collaborations with variety of partners were highly valued by many alliances and constituted the ground for trusted and smooth cooperation for the future:

> *"Most, if not all associated partners in our case were selected by means of our partner institution already having existing relationships with them and then when they were working on developing the grant proposal, always keeping in mind which one of our partners could make sense here could be helpful here and so on. So I would say choosing the associated partners came through recommendations made by all partner institutions. They brought them in, they proposed them, they proposed how they could get involved and then I think it was generally approved"* [EU 2].

There were also a few alliances that listed none associated partners in the initial application process, however, later on they started to cooperate with different stakeholders as their associated partners:

> *"It was somehow really done on purpose in the beginning because when we first wrote the proposal, we had a lot of discussions about associated partners and it became clear that there would be so many and it would be rather an evolutionary process depending on the actual topics that we develop. We just said okay, let's not add any and just write that we are working on that, but later on we started to cooperate with different associated partners"* [EU 14].

On the other hand, some alliances listed too many associated partners in the initial phase and in reality they did not cooperate with some of them at all:

"Too many were selected at the beginning, now we have to re-organize the APs, narrow down the list to those who can really impact the alliance" [EU 10].

Thematic Alliances

Thematic alliances partnered with stakeholders which matched with their themes and strategic objectives. They focused more on collaboration with local actors to achieve their goals, such as for instance:

"Local territory and city institutions and companies related to research topics that are of high importance to the alliance" [EU 13].
"Most of them are related to research area, some industrial partners public institutions and local councils – to have an anchor in the local society" [EU 11].

Many thematic alliances aimed to mix academic institutions with industry and business partners in order to enhance innovation and enrich educational activities:

"There were a mixture between academic and business and public" [EU 4].

Some thematic alliances, initially overwhelmed by the number of associated partners, later decided to limit their cooperations in order to focus on the most valuable partners:

"But we reduced a little bit the business organizations. We have now 18 and these are concentrated on these actors, cities, municipalities, regions and ports, because we wanted also to have a strategic partnership with them to work actively and have something for them and create something together that can influence the socioeconomic environment" [EU 4].

Typological Alliances

Typological alliances focused more on diverse partnerships:

"So we bring together different actors, these kind of associated partners, external partners we have in this group" [EU 1].

Another important aspect was selecting APs based on pre-existing collaborations:

"All in all, every partner chose their usual stakeholders and partners that they work with" [EU 8].
"Most, if not all associated partners in our case were selected by means of our partner institution already having existing relationships with them" [EU 2].

Still, in a few cases, within typological alliances, member partners, at first, came up with too many associated partners and later on the number was limited:

> *"We limited it a bit, two to three per partner because otherwise it would have become too big"* [EU 1].

Some typological alliances started with minimal or no associated partners and expanded the partnerships as their needs and focus areas progressed:

> *"We said okay, let's not add any and just write that we are working on that, but later on we started to cooperate with different associated partners"* [EU 14].

In case of some typological alliances, previously chosen partners were either limited in number or substituted by others:

> *"So some of them just didn't follow the project anymore and others appeared in the meantime"* [EU 9].

Conclusions

Step 1 – All Alliances

The selection of associated partners among all 16 alliances was based on focus on alignment with strategic goals and providing operational and academic synergy. Selecting partners which reflected core values of alliances, such as inclusivity, openness and collaboration with local partners was an important criteria. Partnerships often involved a mixture of academic institutions and different industry stakeholders, that allowed to enhance innovation and enable practical application in research and education. Another aspect was geographical diversity that allowed alliances to achieve balanced representation among European regions and effectively engage in local environment. The majority of APs were selected based on pre-existing relationships of alliance member universities, which provided much needed trust and laid foundation for future joint cooperation. However, some alliances decided to start without any associated partners and only later on added some new stakeholders, others limited the number of their initially chosen partners in order to focus on the most impactful collaborations.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

When it comes to thematic alliances, the selection of associated partners was primarily focused on targeting alliances' specific strategic objectives. Local partnerships with municipalities, regional associations and local companies, were prioritized. Partnerships often included a mixture of academic and non-academic stakeholders, that enhanced practical implementation of different projects and also innovation. In time, some thematic alliances narrowed down number of their partners in order to focus on the stakeholders that could provide the most strategic value to their alliances and contribute mostly to socio-economic environment.

Typological Alliances

Typological alliances, on the other hand, concentrated on flexibility and diversity when it comes to the selection of their APs. These alliances brought together different stakeholders, such as academic, business or public sector partners. Selection of partners was often influenced by pre-existing cooperation of member universities, which guaranteed reliable relationships and a much better integration into different activities of the alliances. With some typological alliances, there were no or a minimal number of partners at the beginning. However, the partnerships were gradually expanded once the needs of the alliance were better identified. Sometimes, the partners were substituted by others or limited in number compared to the initial selection.

a) **Similarities**

- Both thematic and typological alliances selected associated partners that match with their strategic objectives and goals
- Both types of alliances included a mixture of APs, such as public entities, academic institutions and business organizations
- For many alliances partnerships were based on pre-existing relationships that created a trustful environment
- In time, both types of alliances, verified their list of APs in order to focus on the most relevant partners

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Initial partner selection	Focused on partners that match with their specific themes	Much broader diversity of partners
Local partnership	Strong emphasis on local stakeholders	Broader range of external partners, focus on local partners differed

Final comments

The selection of associated partners among alliances was a strategic process that aimed to meet alliances' priorities and goals. While typological alliances focused more on diversity and flexibility when it comes to their partnerships, thematic alliances emphasized addressing of specific research areas and regional engagement. Both types of alliances concentrated on pre-existing relationships that built trust from the very beginning. Adaptability to changing needs was also a key factor. These kind of collaborations provided the alliances with tools to reach their goals and contributed to innovation and socio-economic development.

5.2.2.2. Roles of Associated Partners

All Alliances

There were a lot of areas where associated partners could contribute to within European university alliances. Alliances emphasized the importance of collaboration with societal actors, including different businesses, municipalities and non-profit organizations:

> *"It's really about embracing civil society organizations when it comes to developing new activities; people from civil society organizations, municipalities, and they identify challenges in their regions and try to, in a cocreational way, develop solutions to tackle those challenges"* [EU 2].

In the majority of alliances, associated partners were involved in educational activities, such as curriculum development:

> *"They would be involved in not all activities but in part of the activities… Some in education activities"* [EU 9].
>
> *"So their role would be like mostly to be involved in the project activities in terms of education and research"* [EU 14].

"They are actively contributing to the design of the curriculum and the content of the courses" [EU 4].

Innovation and entrepreneurship were another areas where associated partners could contribute to. Common initiatives which were undertaken together with APs boosted entrepreneurship and local economic development:

"They are mainly included in our activities of the open innovation community, which is meant to create events for boosting entrepreneurship, innovation, etc." [EU 14].
"We're in the process of developing a joint ecosystem that includes for one support for entrepreneurs, keeping in mind the sustainability aspect and that's where we involve different companies" [EU 2].

Associated partners were also involved in governance of the alliances and provided strategic advice to the alliances:

"They would be involved in not all activities but in part of the activities. Some are involved in this consultancy board" [EU 9].
"They are invited in the governing board discussions not every time, but every three or four times they are there. They deliver a report annually about our activities, they read our progress reports and they react to them" [EU 4].

Thematic Alliances

Thematic alliances prioritized partnerships that were matched with specific themes or domains. They concentrated on enhancing regional development, societal challenges, innovations, as well as on integrating academic and other actors in order to address different challenges and competencies. Associated partners, such as local or regional actors, strengthened ties between academia and local community:

"Our industrial partners are already working with our researchers to develop new technology" [EU 6].
"They function as a link with civil society" [EU 11].

Important aspect was cooperation with associated partners that represented specific domains and focus of the alliance:

"And for companies, it's strategic alliances like companies that also have a synergy with our content domain and can also help us for instance, with secondments, apprenticeships and or indeed involvement in education" [EU 10].

"We have to make that link between the knowledge that we're generating and the knowledge that we're transferring to students and making them, you know, encouraging that transfer into the associative partners, they're the ones who are interested at least visibly in [our domain]" [EU 7].

Associated partners also helped to design curricula in order to ensure alignment with industry needs and regional development:

"We create new programs with their input, study and analysis are performed among APs" [EU 15].
"They are actively contributing to the design of the curriculum and the content of the courses, creating programs to enhance competencies" [EU 4].

Scientific cooperation was another area where APs could support thematic alliances:

"They support scientific cooperation and share best practices" [EU 13].
"Our industrial partners are already working with our researchers to develop new technology" [EU 6].

Typological Alliances

These alliances tended to prioritize the integration of diverse partners across different regions and disciplines in order to target local challenges and increase regional engagement:

"We'll bring together researchers from all our partners and we asked different associated partners, external partners to participate not in the research but you know to give a talk, to meet the people to exchange" [EU 1].
"We put together knowledge creation teams that are set up with members of our universities, nonprofit organizations, people from civil society organizations, municipalities, and they identify challenges in their regions and try to, in a cocreational way, develop solutions to tackle those challenges" [EU 2].
"Every time we have an event, we ask them to come on a very specific topic when we are talking about local anchorage" [EU 8].

Typological alliances involved partners that foster innovation environment and support start-ups and boost entrepreneurship:

"They are mainly included in our activities of the open innovation community, create events for boosting entrepreneurship, innovation" [EU 14].
"We are in negotiation with them to work around incubators, acceleration to help startups to emerge, students startups to emerge" [EU 8].

Associated Partners were also involved in governance roles or advisory board in typological alliances:

"Collaborating in conferences, projects and serve as advisors in advisory board" [EU 5].
"They would be involved in not all activities but in part of the activities... some in consultancy board" [EU 9].

Conclusions

Step 1 - All Alliances

When it comes to all 16 alliances, their associated partners played different roles that range from governance participation, through involvement in educational activities to supporting innovation and entrepreneurship actions. They were also involved in providing solutions to different societal challenges through involvement with local and regional stakeholders and enhancing local sustainability and economic development. Another important aspect was involvement in different educational actions through co-designing of study curricula in order for them to respond to industry needs. Representative of associated partners were often invited to participate in governance bodies or different advisory boards, in order to include their perspective in alliance governance.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Associated partners of thematic alliances were selected based on their adjustment with strategic goals and particular thematic areas of the alliances. Their roles included enhancing scientific cooperation, fostering regional development and helping to solve societal challenges. They also served as a bridge between academic environment and civil society. Associated partners in thematic alliances also contributed to designing of the curricula and making sure that study programs met regional and industry needs. They also supported different kinds of research initiatives and shared their best practices.

Typological Alliances

Typological alliances invited a wide variety of associated partners to their networks in order to address regional and local challenges. Through these partnerships alliances tried to enhance innovation, support start-ups and entrepreneurship by creating incubators, acceleration

programs and organize different kind of events. Associated partners were also involved in governance bodies in advisory roles, where they could offer strategic advice and plan common projects and initiatives.

a) Similarities

- Associated partners in both types of alliances were involved in design of study curricula and alignment with regional and industry needs
- They supported innovation and entrepreneurship activities
- They were involved in governance roles, mainly as advisors
- Cooperation with local and regional stakeholders in order to address societal challenges was common for partnerships in both types of alliances

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Focus	Partnerships that match with specific themes and goals	More broader, diverse partnerships
Innovation & technology	Focused on scientific cooperation and development of technology	More emphasis on start-ups, incubators and entrepreneurship

Final comments

Associated partners contributed to the success of European university alliances. In both types of alliances, they created bridges between academic institutions and local and regional environments enhancing regional development. Not only they contributed to co-designing of study curricula, but they were also involved in governance and advisory roles within alliances. Taking all of it into account, APs contributed to addressing societal challenges and impacting regional environments and beyond.

5.2.3. Previous Cooperation

Leading questions: What was your previous cooperation with other partners like (prior to creating this alliance)? How long before the creation of your alliance did you cooperate with your alliance partners?

All Alliances

There was a lot of diversity when it comes to pre-existing relationships as well as the length of relationships before the alliances were created. For the majority of partner institutions there were some collaborations before, but only between some partners:

> *"It is based on a formal collaboration but only for some of us"* [EU 1].
> *"From what I know, the partners, the creation of the alliance was fairly natural because these were all partnerships that kind of existed. What didn't exist was the multilateral part of it"* [EU 6].

The same diversity could be observed when analyzing length of cooperation between partner institutions within alliances:

> *"There were some partners with whom we had no relationship, but in other cases the cooperation with other universities was carried out several years in advance"* [EU 11].
> *"Some – long time cooperation, others - 5 or 10 years"* [EU 15].

Thematic Alliances

For thematic alliances, the cooperation between some partners focused on specific areas related to educational activities or regional development:

> *"The relationship with the rest of the universities was developed some time ago through collaboration agreements, research and other previous alliances - in terms of teaching, research and economic sector"* [EU 11].

Such smaller cooperations constituted a good ground to invite new partners that could benefit from already ongoing cooperation between some partners:

> *"Many of our universities cooperated already in the field of research and education through existing networks…. and it made sense to consolidate that corporation and then expand it with new partners as well"* [EU 12].

For the majority of thematic alliances the length of prior cooperation was only for a few years and mostly within collaborations among some partners.

Typological Alliances

In case of typological alliances previous cooperation between members was in some cases structured and formalized before the alliance creation:

> *"I know that a lot of building of this alliance was rooted in existing strategic partnerships"* [EU 2].

"7 out of 13 universities associated within [another] consortium decided to create the alliance" [EU 14].

For some typological alliances, the pre-alliance cooperation was mostly based on bilateral collaborations and only later more partners were added:

"Concentrated on content and shorter projects, mostly bilateral cooperation" [EU 5].
"Mainly bilateral. Each one of the full partners connected with their usual partners and see where they could fit and be of more value to the alliance" [EU 9].

When it comes to the length of the cooperation, it varied between the different partners, for some it was up to 5 years, for the others 20-30 years.

Conclusions

Step 1 – All Alliances

Among all alliances, there was lot of diversity when it comes to the extent and nature of previous cooperation. Many of the partnerships were previously bonded by bilateral and multilateral cooperation. The length of the pre-existing relations also varied and ranged from long-term collaborations (decades) to just a few years of cooperation before the alliance was created.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

In their previous cooperation, member universities that form thematic alliances, focused on areas such as research, education or regional engagement. Initially, the cooperation involved some partners and was expended to new members. Generally, the collaborations were short-term, limited in scope and rather informal.

Typological Alliances

Cooperation of partners among typological alliances was more structured and based on formalized, mostly bilateral agreements. Many alliances emerged from long-term networks which often cooperated together even for decades. Even though only some partners were

involved in these networks, they started to expand the collaborations with additional partners that fitted into their strategic goals and allowed for a geographical balance.

a) Similarities

- Both types of alliances were bonded by pre-existing collaboration as a foundation to their alliance
- Collaboration often started with bilateral agreements or small networks to evolve into multilateral cooperation within the newly created alliance
- The duration of cooperation varied widely

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Nature of relationship	Often short-term, more informal	Tended to be more structured and formalized
Duration of cooperation	Generally a few years	For some partners even decades

Final comments

There were different pathways that led the alliances to creating their networks. Members of thematic alliances collaborated in more informal, yet targeted way, whereas partners of typological alliances focused more on formalized and structured cooperations that lasted in some cases for many years. Regardless of these differences, both types of alliances underlined the importance of previously existing partnerships that enabled them to build strong and solid networks for the years to come.

5.2.4. Alliance Creation

Leading questions: What are the biggest obstacle/barriers in creating your alliance?

How did the creation of your alliance contribute to the reinforcement/enhancement of your current university activities?

All Alliances

Creating alliances came with some significant challenges, which were related to formation of governance structures, getting different administrative practices in line and overcoming some national barriers. Sometimes, even the most simple and obvious obstacles became big challenges, as listed by one alliance:

> *"Different semester times, different human resources, different university structures, different national legislation, different experiences on international level, different financial resources, differences in salaries between universities"* [EU 5].

Important aspect were also big expectations at the beginning:

> *"Perhaps the main difficulties in the creation of the alliance were the enormous expectations that existed when these European consortiums were conceived from their conception as an initial idea"* [EU 11].

It was also challenging to make the local academic environment aware of what the alliance is:

> *"People bottom up who then carry this idea and working for it and to make this link that was really a challenge and it still is actually because of course now we think everyone at the university should know what it is"* [EU 1]

Limitations related to different kind of resources and funding were also listed as one of the biggest obstacles:

> *"I will say human resources and money"* [EU 8].
> *"We are building something new, with often limited resources and bound by a very strict timeline"* [EU 12].

Regardless of these obstacles, the creation of alliances impacted participating institutions positively in many different ways. It enhanced collaboration and also contributed to simplifying internal processes. Furthermore, it increased local and international recognition:

> *"So international visibility is most important even in the first year or first month that was felt immediately since we are the small universities"* [EU 4].
> *"So it's really support for the internationalization of the university definitely"* [EU 3].

The creation of alliances also helped partner institutions to expand their project opportunities and research capacities:

"For us it really was a huge success I have to say. But the past two years were really a huge peak on growth in terms of projects and attraction" [EU 9].
"I will say for researcher, it's really great because you can have contact, they have a strong community. Every time they have an ID for a new project, they already have these eight partners around and it's very easy to build up a new project together" [EU 8].

Thematic Alliances

Thematic alliance faced different challenges when it comes to their creation, particularly related to formation of the alliance and diversity among participating institutions:

"It takes time – such integration" [EU 15].
"So most of what I know is from trickle down information, I know that it was hard to get that last partner" [EU 6].
"Diversity of institutions and the size of the universities" [EU 7].

Limitations related to financial resources were also listed as another obstacle:

"Not enough money and rigidity in terms of financial aspects" [EU 15].
"Funding – necessity to look for funding outside of the EC funding" [EU 13].
"We all anticipated how much it would cost beyond the money we were going to spend far more than we were going to get reimbursed for from the Commission" [EU 6].

Another important aspect were issues related to involvement and engagement of different groups at local universities:

"Engagement of the community – issue and a goal, involve administrative staff" [EU 13].
"Involvement of staff" [EU 15].

Despite these obstacles, the creation of an alliance contributed to the enhancement of the current activities at universities within thematic alliances in different ways. One of them was the visibility of the partners and related to it increase in admissions:

"In this complementary alliance, the visibility reached a much higher level" [EU 4].
"Recruitment on local level is enhanced as some want to join partner universities because the institutions are being involved in the alliance" [EU 10].

Another enhancement brought by thematic alliances was related to educational activities:

"Other aspect - I must say education, the educational programs focused. But this certainly has been enhanced through the alliance because through the creation of the alliance, because here the first activity was to create jointly these minor programs, this is what we did" [EU 4].
"The teachers really see a benefit to opening their courses to the alliance members and are enjoying the possibilities for creativity and innovation that they have because it's so encouraged within the alliance. They don't have to just stick to the usual subjects, they can really kind of explore new possibilities" [EU 6].
"Massive programs created locally within alliance leading areas" [EU 10].

Typological Alliances

Typological alliances faced many different barriers when creating their alliances, some of them were related to diversity of partners on very different levels:

"We are coming from 7 different countries, even though it's seven European countries, starting from all the different legal frameworks and regulations, then linked to the cultural differences, the different views of what a student should learn and should experience, to bring all these different things together, all the legal regulations that make it very difficult to set up some of these things" [EU 1].

National regulations also influenced the integration of partners at a legal level:

"Some national barriers, e.g. for Denmark university there are local legal constraints for them to create and be part of the legal status of the alliance" [EU 3].

Another alliance pointed out to limitation of time for the preparation of the alliance creation and planning its activities in the context of preparing the grant proposal:

"What I do know is they had way too little time to prepare, I think so from what I've heard, in terms of having to write or at least prepare yourselves, yeah, it seemed almost unimaginable how little time they had, in fact, to think about this, to think about what do we even want and then to get everyone together, to then actually write something. That was probably the largest barrier I would say" [EU 2].

Long-term commitment at different levels, not only internal, but also external, was indicated as one of the obstacles:

"So the main barrier is really still and it will be probably until the next four years that the long- term commitment that we get from our alliance, from the Commission, from the Member states" [EU 14].

Funding is listed by these alliances as one of the barriers, but also in the context of how the money should be spent:

> *"Funding: but you also have to decide what you need to that funding for and how do you attract it and how do you use it effectively towards the achievement of those priorities"* [EU 16].

Regardless of the obstacles and barriers related to the creation of the alliances, it also contributed to the enhancement of partner activities at the local level. Setting up priorities, enhancing visibility and also improving their importance at national level seemed to be one of the benefits for members of typological alliances:

> *"So I think it helped in sharpening some priorities, strengthening also their visibility nationally and locally, so empowering them also in the discussions or relevant topics with their national governments"* [EU 16].
> *"So it's really support for the internationalization of the university definitely"* [EU 2].

Some typological alliances emphasized the reinforcement of research activities:

> *"I will say for researchers, it's very easy to build a new project up together"* [EU 8].

The groups that benefited from alliance creation were both students and academics:

> *"And what we for example did is we launched a call for applications and asked students and professors to come together from all of our universities to create teams that propose a certain innovation that they wish to see implemented within our network"* [EU 2].

But also administration was listed among the ones that benefited from the alliance formation:

> *"In administration - this international experience, this exposure to other universities"* [EU 1].

Conclusions

Step 1 - All Alliances

Alliance creation was related to a lot of challenges concerning governance structure creation, aligning different administrative regulations and trying to overcome other barriers (e.g. not enough human and financial resources). The limitations concerning human and financial resources deficit as well as high initial expectations resulted in many obstacles. Despite all these challenges, the creation of alliances influenced member universities in a very positive way that

improved the collaboration between universities, increased international recognition and visibility, enhanced common project opportunities and fostered research opportunities.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances faced challenges related to institutional diversity, initial engagement of partners and financial constraints when creating alliances. However, this creation resulted in increased visibility of all partners, improvements in local admissions and educational programs enhancement. The current activities of the alliances were improved in the area of education through more creativity and innovation and allowed for the development of more unique and diverse educational programs.

Typological Alliances

Typological alliances at the time of alliance creation faced a lot of barriers, mostly related to legal and regulatory differences between partners. Other challenges were related to little time that was given for the preparation of the application for EUI grant and need for a long-term commitment of all partners. Nonetheless, the creation of the alliances resulted in an increased visibility for partner universities at local and national levels and contributed to enhanced research collaboration. The creation provided benefits to different groups at the universities, such as: students, academic staff and administrators, through increased international exposure and diverse project opportunities.

a) **Similarities**

- Both types of alliances were faced with issues related to resources limitations including financial constraints
- International visibility and recognition of partner universities was improved
- The creation brought different project opportunities an enhanced research collaboration
- The need for institutional and administrative practices to be aligned were identified
- Local engagement of academics and administrative staff was a common challenge

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Primary challenges	Institutional diversity constraints	Legal and regulatory differences
Impact of visibility	Increased visibility leads to higher admissions	Enhanced visibility influenced national policy level discussions

Final comments

The creation of alliances, both thematic and typological, resulted in transformative change related to enhancing collaborations among different member universities. The alliances and their members faced similar challenges, related to limited resources (human and financial) and administrative consistency issues. In a long-term context there was a necessity to address financial sustainability, simplification of regulatory hurdles and enhancement when it comes to local engagement at institutional levels, that would be key issues moving forward the concept of alliances in the future.

5.2.5. Research Initiatives[1]

Leading questions: Can you indicate leading research areas within your alliance? Is this alliance joint research a priority compared to other research initiatives undertaken beyond the alliance?

All Alliances

As far as research areas in alliances are concerned, there was a lot of diversity among alliances. Many alliances focused on addressing different societal challenges, while others concentrated on interdisciplinarity or their thematic focus:

> *"Business, economic and social sciences - that's our profile…our aim is to address societal challenges such as digitalization, demographic change, and migration.".*

Other alliances specialized in their thematic areas, such as neuroscience or medical technology:

> *"Education and research agenda: domains – neuroscience, neurotechnology, AI, processing of neuro signals, neuro prosthetics, brain stimulation... ".*

[1] In this section the analysis of answers was conducted without referencing individual alliances, including anonymized identifiers, in order to ensure that the patterns and conclusions are not linked to specific alliances

"Our research is really well developed in medical research and medical technology…We have research in epidemiology and nanotechnology more than in social sciences, for example".

As far as prioritizing alliance research thematic focus over institutional research areas, some alliances confirmed strong emphasis on alliance research themes:

"Yes, I would say so. Smart urban coastal sustainability is our research, our main research area.".

Other alliances were still in the process of such alignment and believed it would be too soon for this kind of prioritization in the research area:

"The European university initiative is still at the very beginning of its developmental phase...It requires time to really gain momentum or create momentum within each university".

Thematic Alliances

Thematic alliances tended to prioritize research areas related to regional or societal contexts. At least two thematic alliances focused on coastal theme research and considered this topic as a core:

"I think everything every partner has one or several research areas that can be subsumed under smart urban coastal sustainability and this is a core".
"Due to our coastal context, we have many areas of research led in this area. Marine areas as a core and then we plan to expand it to other areas".

Another alliance focused on sustainability and well-being:

"Well-being, link with SDGs, e.g., good health, urbanity, environment, SDG 11 sustainable cities, teacher education".

Other thematic alliances found it imperative to prioritize alliance research when compared to local research and emphasized the importance of collaborative goals and shared vision of the alliance:

"Local should follow global; every partner must be focused on the alliance-centered areas/domains also locally, sharing visions".

However, sometimes it came with challenges, as not all partners were well known to each other, taking into consideration the foundation nature and lack of maturity of the alliance:

"This is an Erasmus + project that goes beyond research and also some of the partners that make up the alliance are unknown to each other".

Typological Alliances

For typological alliances leading research areas were broader thematic aspects that addressed different societal and most importantly technical challenges. This was due to the fact that majority of typological alliances were technology-related.

"I mean what we have, what we have pinpointed are for example, 3 pilot topics that are, I would say that become the DNA of almost all of our activities. So it's climate action, it's AI and digitalization and smart and sustainable cities and communities".
"AI and sustainable energy, industry 4.0 and entrepreneurship as an overarching topic".

Others focused their research on artistic or cultural aspects:

"Project focused on artistic research (material research related to climate change, demographics)".
"For us is the artistic research, which is really not understood. And it was really one of the key areas that we were engaging for arts".

In terms of prioritization of alliance research over local research, it seemed that it was a matter of a balanced approach:

"It's that we are pushing those topics but we are not hindering if any other collaboration in any other fields might occur".

Other typological alliance emphasized interaction between alliance research and institutional, local research initiatives:

"So in that sense, for one university maybe one topic happens to be a priority and explicit institutional priority. But for the entire alliance there is some kind of initiative that is being developed in research or in education or in both in one of these fields and can be also the other way around"

Conclusions

Step 1 - All Alliances

There was a lot of diversity when it comes to research priorities for the alliances that range from societal challenges, through technical areas to cultural themes. Popular research topics were: sustainability, digitalization or well-being, some concentrated on more specific areas, such as:

neuroscience or medicine-related research. Some of the alliances prioritized alliance-related research agendas, while others were still working on their common research agendas.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances' research agenda focused on societal issues related to well-being, urban development or coastal sustainability. These alliances tended to emphasize common and more centralized approach to research focused on joint goals. However, some alliance reported not enough extent of familiarity among partners to aim for common research agenda yet.

Typological Alliances

Typological alliances focused on broader thematic goals, such as technological innovation or interdisciplinary approaches. The most popular research topics were: artificial intelligence, artistic research and smart cities. These alliances tended to look for a balance between alliance-related research priorities and institutional priorities, enabling partners to pursue both local research initiatives and also alliance-related ones.

a) Similarities

- Societal challenges and collaborative approaches were addressed by both types of alliances
- Both types of alliances valued interdisciplinarity
- Both recognized the need to find balance between local research priorities and alliance-level research agenda

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Research focus	Societal research areas, such as: coastal sustainability, urban well-being etc.	Technical and cultural research aspects, such as: AI, digitalization, artistic research

Research collaboration approach	Tended to focus more on collaborative goals and common vision	Trying to find balance between institutional research agenda and alliance research themes

Final comments

Research initiatives among European university alliances tended to address societal challenges and focus on innovative solutions. Thematic alliances concentrated more on research addressing societal and region-specific needs, while typological alliances addressed technical and cultural research aspects (related to their typological approach). In time when alliances become more and more mature, they could also increase a better balance between collaborative research goals and institutional research priorities.

5.2.6. Selected Model

Leading questions: Do you find common a concept approach in creating your alliance a limitation or an asset? Would you chose a different approach today? If so, what would you do differently?

All Alliances

Alliances that created thematic consortia or are united within universities of same categories, perceived this common concept in a variety of ways. Some found it very beneficial, others recognized strengths and challenges and there was also a group that remained cautious or even critical towards this common concept approach. Several alliances perceived their common concept as a very valuable approach for growth and collaboration:

> *"So I think it's a good concept and it was a good way or a good idea to set it up like this"* [EU 1].
> *"I mean absolutely an asset because it's absolutely open as that it's like the one thing is like how do you see yourself, what is your identity"* [EU 14].
> *"OK, so I think it was a good choice"* [EU 8].

There are some alliances that shared both positive approach and some challenges related to this concept:

> *"So some partners are very happy with that. Other partners see the limitations of the subject and let's see how it develops"* [EU 4].

Some alliances expressed caution related to this approach and pointed out some limitations:

"Right now it, I think it would only be a limitation if we decide to act on that, specifically on that, limitation in terms of focus. But in our case, we do put emphasis on a more comprehensive approach" [EU 2].
"I would say both, limitation – humanities is a problem, at the same time this university is unique" [EU 15].

Thematic Alliances

Generally, thematic alliances perceived common concept as a very beneficial approach:

"I think it was a huge benefit in the end" [EU 6].

And find it as a necessary strategy for their alliances that matched their goals and objectives:

"It was appreciated in the evaluation process, we stand out, it was easier to explain our goals and what we have in common" [EU 11].

The feeling of uniqueness and standing out from other alliances was also underlined by thematic alliances:

"Something unique, maybe seen as limitation when choosing new partners, but it was a distinctive feature for our alliance" [EU 13].

For majority there seemed to be not too many limitations with the common concept:

"I haven't really come across many limitations. I think it's very useful to have something that binds you. So I would say it's an asset and it's also something that allows you to stand out from other alliances" [EU 12].

At the same time, some thematic alliances acknowledged both strengths of such approach and challenges that comes with it:

"Some partners are very happy with that. Other partners see the limitations of the subject" [EU 4].

There were finally those thematic alliances that perceived a common concept approach as the only possible direction for the alliances:

"Only way forward – to have common concept uniting the alliance" [EU 10].

Typological Alliances

Typological alliance expressed more diverse stand when it comes to common concept (same university types) approach, with some underlining its value and others presenting more cautious perspectives. Several alliances strongly supported this approach:

> *"I mean absolutely an asset"* [EU 14].
> *"I think it was a good choice"* [EU 8].
> *"I really think there was a good and smart choice for us to focus on this area and a needed one"* [EU 9].

Some alliances perceived it as a benefit and the way forward for the future of their alliance:

> *"And so this focus on really be always adapting changing and making things with a critical perspective is very important and all the partner agree on these and it will be our focus also for the continuation"* [EU 3].

Some typological alliances expressed mixed feelings about the common concept approach:

> *"Can be both: to concentrate on curriculum topics was negative, creating a network of workshop was positive for debates on innovative teaching models"* [EU 5].

There were also those alliances that, even though they started with a common concept approach, they do not want to limit themselves into one specific typological focus:

> *"Right now it, I think it would only be a limitation if we decide to act on that, specifically on that, limitation in terms of focus. But in our case, we do put emphasis on a more comprehensive approach"* [EU 2].

Conclusions

Step 1 - All Alliances

The alliances demonstrated quite similar perspectives on common concept approach when it comes to their development and future plans. Most alliances viewed it as a very valuable framework of their operations within the consortium, only some acknowledged not only benefits, but also challenges associated with it, particularly related to the concept of extension of such alliances. A minority of alliances recognized some potential limitations which the common concept might bring.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Generally thematic alliances tended to perceive the common concept as a highly beneficial and favorable approach to achieving their strategic objectives. It was also seen as a unique feature that allowed these alliances to stand out among others. Some alliances recognized challenges related to expansion, which may be limiting in terms of pool of partners to be considered when choosing new members. However, all in all, they emphasized the importance of the thematic approach and unity it brings to their partners.

Typological Alliances

Typological alliances represent more diverse views. While a lot of alliances supported the typological approach, others tended to perceive also challenges related to it. Minority of these alliances even opted for a more comprehensive approach that goes beyond the typological concept boundaries. This group of alliances mostly demonstrated very enthusiastic approach to common concept, but some alliances remained open to new opportunities and possible new directions beyond that concept.

a) Similarities

- Both types of alliances perceived common concept as a way to enhance collaboration between partners
- Vast majority valued this setting as it allowed them to stand out from other alliances
- Expanding partnerships might be challenging as the common concept could be perceived as a limitation
- It was a way to unify diverse institutions around common goals

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Perception of common concept	Mostly beneficial	Mixed – some saw it as a benefit, others as potentially limiting

Focus on uniqueness	Thematic identity as a standing out concept	Tended to be more adaptable, some wanted to go beyond typological focus

Final comments

Generally, the alliances perceived common concept approach (either thematic or typological focus) as greatly valuable. Thematic alliances recognized this approach as central to their uniqueness and operational success. Whereas, typological alliances presented a more broader perception of the common concept that reflected the bigger complexity of unified focus. Possible recommendation for future included finding a balance between thematic or typological approach and the flexibility which is necessary for future development and growth.

5.2.7. Added Value

Leading question: What is the added value of your alliance creation and cooperation between partners?

All Alliances

Alliances indicated a wide variety of benefits and added value that resulted from their participation in EUI and their emergence. Some of these benefits included: increased visibility, complementarity and innovation enhancement. Some alliances emphasized mostly increased visibility:

> *"First of all it's of course about being part, participating and be more visible also on the European level"* [EU 1].

Others emphasized trust and agility, which allowed partners to respond to challenges in a more effective way:

> *"It builds trust amongst different universities and it allows them to respond in a quicker, more agile way"* [EU 2].

Collaboration among partners and complementarity aspects were important from the perspective of some alliances:

> *"I think really the added value is being able to see complementarities and to use complementarities"* [EU 4].

Another important aspect was the possibility to develop and grow together:

> *"So I think without this initiative, we wouldn't be evolving as quickly as we are"* [EU 6].
> *"The added value will be extremely strengthening alliance on education, so there's mobility for staff, students, researchers"* [EU 12].

In the similar line, another alliance emphasized the importance of seamless mobility among partners:

> *"So for me it's that you can feel at home in every campus and coming and going as you wish"* [EU 8].

All these alliances underscored the transformative power of collaborations within European Universities Initiative.

Thematic Alliances

Thematic alliances underlined the added value of their alliances in many different aspects and areas. One of the alliances emphasized good synergies when it comes to collaboration among partners:

> *"Good synergy between partners, channel of communication and collaboration established thanks to alliance"* [EU 10].

The partnerships between the members that did not know each other before were created and partnerships between those who collaborated earlier were enhanced:

> *"Among those of us who did not know each other, it has been an opportunity to establish relationships between previously non-existent universities. For those with whom there was already a relationship, these relationships have been greatly enhanced"* [EU 11].

These synergies in collaboration brought complementarity in terms access to different resources:

> *"So that's really a gain in the attractivity at the partner universities and the access to research, the easy access to research infrastructures that are not available at each partner"* [EU 4].

Also the added value and synergies included students and administrative staff:

> *"An alliance should have an added value both to the student and to the institution, we want to strengthen that cooperation in terms of operations and the administrative side of the universities"* [EU 7].

An interesting sum up of the added value of the alliance by one of the thematic alliances was:

"Work on a dream – European university, future European degree" [EU 13].

Typological Alliances

There were a lot of areas of cooperation within alliances where typological consortia identified added value. First of all, the aspect of increased visibility in terms of internationalization was brought up:

"It improves our internationalization as a whole, as individual university, but of course, for the whole alliance, I think for each partner" [EU 1].

Other alliances highlighted the aspect of resilience and agility which was facilitated when universities work together:

"We're looking at making universities more resilient, more agile and to become more resilient and to become more agile, we need to work as teams, as teams of universities" [EU 2].
"There's a very good harmonization between the partners, which is very good" [EU 9].

Increased opportunities for students (including mobility and mentoring system) were also perceived as an added value:

"So I think this is the biggest added value to really have a more interesting offer for students in each of the institutions" [EU 14].
"The increase of mobility and opportunity for the students because this students are our main stakeholder, we are working for them" [EU 3].
"It's all these synergy for student mobility" [EU 8].
"There is a mentoring or a coaching system that is really guiding students across the entire alliance" [EU 16].

Finally, another typological alliance pointed out also the advantages for the teachers:

"Quality of teaching (revised and broader): ongoing exchange on teaching content" [EU 5].

Conclusions

Step 1 - All Alliances

Consortia that participated in the European Universities Initiative highlighted many different aspects of added value which originated from being involved in this initiative. Some key

benefits would include increased recognition and visibility at the European level, enhanced trust when there is a need to respond to challenges together as an alliances. Another benefit included collaboration that is strengthened by complementarity, as well as shared development and growth. Some alliances stressed the importance of seamless mobility between different member universities, both for staff and students, which enabled the academic community to feel at home at different campuses that belonged to the alliance. Overall, the impact of the alliances demonstrated transformative potential of cooperation of universities within alliances that focused on enhancing innovation, collaboration and stronger integration of higher education institutions.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances highlighted the added value of academic and operational cooperation of higher education institutions within consortia. These alliances emphasized effective communication, increased synergies and the opportunity that EUI brings for new partnerships and possibilities to deepen the existing ones. They provided enhanced access and possibility of sharing different resources by member universities, extended opportunities for research activities, as well as benefits that were provided to staff and students. The key benefits included the realization of the concept of "European university" and working together towards the European diploma.

Typological Alliances

Typological alliances highlighted the added value of participation in EUI in the aspect of increased international visibility and enhanced resilience that resulted from this collaboration. The alliances enabled to create unified teams, harmonizing structures and developed common strategies. Some key benefits included advantages for students in the area of increased mobility opportunities, mentoring programs and more diversified academic offer. Another group that benefited from the creation of the alliance were the faculty members that experienced exchanges of teaching methodologies and course content that influenced overall quality of teaching.

a) Similarities

- Increased international recognition at a European level
- Establishing stronger cooperation among members within alliances
- Common access to different resources, such as research infrastructure of academic content
- Increase and seamless mobility of students and staff

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Impact of collaboration	New and enhanced academic relationship formation	Increased inter-university harmonization
Long-term vision	Aiming at establishing European university model	Enhancing teaching quality and learning experiences of students

Final comments

The added value of alliance creation and cooperation with partners among the alliance was highlighted by enhanced collaboration, increased trust among partners and fostered innovation. Other aspects related to the added value were increased international visibility of the alliance members, operational and academic synergies, as well as increased and seamless mobility of staff and students. Alliances underlined the possibility of contributing to the creation of a more effective and associated European higher education system framework that led to establishing really integrated and innovative European university of the future.

5.2.8. Expected Outcomes and Achievements

Leading questions: What are your biggest achievements so far within the alliance? What are the expected outcomes after 3-year pilot phase of this project?

All Alliances

Fostering institutional collaboration and developing governance models have been the biggest achievements so far for the alliances. They pointed out the following specific achievements:

"This internal community: staff community, the researchers, the teachers, the professors to see the value of the initiative" [EU 4].
"That we've built a collective mindset and created a cohesive governance structure, which I think will allow our alliance to continue to grow" [EU 6].
"And then also developing an enhanced education strategy amongst 7 universities, even getting them to align on certain things in itself, I think it's already an achievement" [EU 2].

Other big achievements included enhanced student and staff mobility:

"Innovation in terms of mobility schemes" [EU 13].
"Intensive mobility (all kinds: physical, blended, virtual) " [EU 5].

Many alliances reported also establishing frameworks for joint degrees and interdisciplinary projects as other great achievements:

"Soon we will start with two joint programs where we actually really set up something new, new programs on bachelor and Master's level, we've learned a lot from each other, we got to know each other better" [EU 1].
"So for now we have funded and supported a constellation of small projects and this allowed for the creation of relation between the professors, the academic community" [EU 3].

When it comes to expected outcomes after 3-year pilot phase, they often built on current achievements in terms of deeper integration and future sustainability. One of the key priorities was to institutionalize governance structures, making the collaborations between partner universities long-term and sustainable:

"I think our final outcome is having an alliance that continue to exists for the next generation that we want" [EU 6].
"After three years of the project, the main objectives achieved have been the improvement of relations between the partners, making use of a useful and effective government structure" [EU 11].

Another important expectation from the 3-year pilot phase was the impact on student-related activities and student and staff mobility:

"I would say is to have more student mobility. To have a lot of all our curricula, common curricula opened and functioning also. And to open new curricula" [EU 8].
"The academic offer, joint programs, the hub, the possibility of the academic staff and students to have a platform where they can exchange experiences and really work together on that" [EU 9].
"Shared massive programs with commitment to a certain volume of exchange" [EU 10].

Enhanced research community building would be another important outcome of the pilot phase:

> *"Bring academics together in research, established platforms for researchers to come together"* [EU 7].
> *"This research communities that we have identified, the topics, the themes our researchers are interested in and that should also be the basis for our teaching and learning, we have identified researchers that are willing and interested in to collaborate and now we can build on this"* [EU 1].

Thematic Alliances

Thematic alliances considered launching innovative programs that matched with their thematic focus, as one of the biggest achievements:

> *"It's really all six funding partners are participating in this joint master program"* [EU 4].
> *"I think we are very proud of being able to complete the two joint degrees that was I think from many universities the biggest headache to get that done within our respective regulatory frameworks, university frameworks and I think there we are very proud that we managed to do that, not just one but two with each partners"* [EU 12].

Furthermore, thematic alliances included formalization of research as well as academic and student cooperation as one of the biggest achievements so far:

> *"So the joint research institutes are now created and I think they will be a basic feature of our research area in the future"* [EU 4].
> *"We have the engagement of our students and academic communities at the university"* [EU 7].
> *"Networking in different fields – such as networking in teaching and education, language centers, European citizenship"* [EU 13].

As far as expected outcomes after pilot phase were concerned, thematic alliances indicated increased recognition and visibility locally and internationally:

> *"And I think the outcome is that we have shown that's something valuable for every partner institutions, for your institutional environment; staff will recognize this and this is the outcome that is the most important one. We are here to stay and it's visible to external and internal community stakeholder and also students"* [EU 4].
> *"I think our final outcome is having an alliance that continue to exists for the next generation that we want"* [EU 6].

Another expected outcome was creating common programs and joint initiatives for researchers and students:

"By the end of the three years, we will be offering two masses programs across the alliance, we want to be a platform by which additional programs, whatever level they happen to be at, are offered as well, bring academics together in research, established platforms for researchers to come together" [EU 7].
"Creating the basis for European university, virtual campus, physical research hubs, teacher learning centers, consultative offices for students' orientation and European curricula – the flexible path for their curricula" [EU 13].

Thematic alliances stressed also the importance of enhanced mobility as one of the expected outcomes after pilot phase:

"The increase in mobility of staff and students among the allies" [EU 11].
"Large majority of students in mobility" [EU 13].

Finally, thematic alliances expected that their alliance governance structures be more integrated in order to become more sustainable:

"We don't want this to be a project or something temporary. So what we need to achieve over the next few years is a structure that will last, where the procedures are strong enough to outlast turnover, where our reputation is strong enough" [EU 6].
"After three years of the project, the main objectives achieved have been the improvement of relations between the partners, making use of a useful and effective government structure" [EU 11].

Typological Alliances

Typological alliances stressed the importance of making university cooperation more systematic and efficient as one of the biggest achievements so far:

"I wouldn't have foreseen in the beginning that this would create so much enthusiasm, commitment, engagement would become so big and broad within our institutions in such a short time" [EU 14].
"And then also developing an enhanced education strategy amongst 7 universities, even getting them to align on certain things in itself, I think it's already achievement" [EU 2].
"So I will say put eight culture on the table and talk together" [EU 8].

Among the biggest achievements, enhanced joint educational offer to students and increased student mobility were listed:

"We could right from the start open up courses to students or enlarge their portfolio of what they could do" [EU 1].

"So in this winter semester we will have our first cohort starting these courses and being able to choose different courses from different universities and being able to move around" [EU 2].
"I think it's the continuous proposals and offers for joint academic degrees. So we had a long history between our alliance on joint masters. We are almost ready for a joint bachelor, which is a huge endeavor I would say" [EU 9].
"Having been able to already launch activities for the students, having had the possibility to start testing our approach in education, having educational activities that are really including all partners" [EU 16].

As far as expected outcomes after a pilot phase were concerned, typological alliances looked forward to expand their governance continuity and administrative efficiency:

"So I think really the three years are the formative phase and the 4 + 2 years are the years where everything starts working" [EU 2].
"For the long-term sustainability we have really create link from an administrative point of view between all the services of the university" [EU 3].
"I hope and believe the decision of the legal status by the end of this pilot phase" [EU 9].
"You have to work to introduce in the universities a different way of thinking and go well beyond the way you're used to work back in one institution" [EU 16].

Additionally, typological alliances aimed at enhancing their mobility programs:

"But in reality, I would say is to have more student mobility" [EU 8].
"So that we really ease collaborating between our institutions and the student exchange, student mobility, virtual mobility, etc. " [EU 14].

Conclusions

Step 1 - All Alliances

The alliances made progress in enhancing institutionalization processes among their consortia, developing their governance models and strengthening their academic communities among students, teachers, researchers and administrative staff. These components were crucial for securing sustainable growth and development of the alliances. Other key accomplishments included enhanced student and staff mobility schemes, providing joint degrees and engaging in common interdisciplinary projects. Looking forward into the future, the alliances aimed at institutionalizing their governance structures, developing joint programs, enhancing mobility

for their students and staff and building stronger academic communities. These objectives would allow the alliances to remain sustainable beyond the 3-year pilot phase.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances focused on creating innovative study programs that matched with their thematic areas. Key achievements included successful implementation of joint degrees, enhancing academic and research cooperation and student collaboration. Another important factors were increased institutional visibility and local and international recognition, as well as the creation of sustainable governance models. Expected outcomes would include the development of joint study programs, setting up virtual campuses and research hubs, as well as fostering student and also staff mobility schemes in order to make the collaboration more sustainable in the future.

Typological Alliances

Among the priorities of typological alliances, there was an aim to make the university cooperation more systemic and sustainable. The main achievements included development of joint academic offer for students that would allow to build common educational strategies among partner universities. Another important achievement was increased student mobility. In the longer term, typological alliances anticipated stabilization of their governance structures, legal recognition and alignment of administrative procedures at partner universities. Expected outcomes after 3- year pilot phase included increase in student and staff mobility rates, as well as integration of academic structures among member universities.

a) **Similarities**

- Enhancing collaboration among partner universities was common for both types of alliances
- Sustainability of the governance structure was among key priorities
- Enhanced students and staff mobility were important factor to success
- Development of joint study programs and common academic offer was a shared achievement

- Strengthening research cooperation and enhancing institutional networks were common goals

b) Differences

ASPECT	THEMATIC ALLIANCES	TYPOLOGICAL ALLIANCES
Focus	Create innovative study programs that align with their thematic areas	Systematic collaboration and administrative alignment
Research	Create joint research institutes	Strengthen interdisciplinary academic activities

Final comments

Both types of alliances made a huge progress in enhancing joint collaboration among their partner universities. The potential for sustainable cooperation in the future was demonstrated by their achievements in creating common governance structures, joint mobility schemes and joint academic offer for their students. The next phase, after a 3-year pilot project, would be crucial to provide sustainability for the alliances in the future and to deepen academic collaborations and enhancing innovation among European university alliances.

5.2.9. Future of Alliances

Leading questions: What are the biggest threats to your alliance? How do you foresee the future of your alliance in 2030?

All Alliances

European university alliances faced many critical threats. The most pressing ones were those related to long-term sustainability, challenges in governance, as well as local and external regulatory constraints. Maintaining financial sustainability was a threat that many alliances feared:

> *"I think the biggest threat would be less support from the European Commission or maybe a discontinuation of funding instruments"* [EU 2].
> *"Not enough funding"* [EU 7].
> *"No money, no continuation in the future, no EU funding"* [EU 12].

Another big threat that alliances mentioned was the complexity of collaboration between partners and related to this internal and external regulatory constraints:

"When trying to bring it to the ground, that really to see how are we going to implement and then realize you know what barriers there exist" [EU 1].

"Perhaps the biggest problems that we find are the different regulations that exist in each of the countries of the partner Universities, which sometimes makes it difficult to coordinate personnel, student and joint program policies" [EU 11].

Different priorities and uneven commitment of partners were also high on the list of threats provided by the alliances:

"Starting from a common definition and an understanding, motivating people, bringing them in, you know, convincing them from that, so to bring in people to motivate and keep them motivated, it's now another challenge" [EU 1].

"Asymmetric involvement of our partners, all should follow the alliance with the similar dynamics" [EU 11].

"Big/small universities – not easy to collaborate – we do not have the same dynamics, sharing background, may misunderstand each other, all different, all very motivated but sometimes there are different views" [EU 15].

Looking forward to 2030, European university alliances saw their consortia as integrated structures with shared governance framework, joint degrees with seamless mobility for students embedded into the study programs. Many alliances indicated that they would operate within more integrated consortia:

"It will be one university with eight campuses" [EU 8].

"In the future, we hope to have a consortium with full legal personality" [EU 11].

"So we'll have a strong partnership with our 10 universities with a much better embedded structure" [EU 12].

Some alliances stressed the importance of joint campus and joint research infrastructure as important drivers of future common development as alliances:

"We really have this this joint campus and that we have a strong research network as a foundation of it that would be the aim" [EU 1].

"So at that point the virtual campus will be up, the research program will be well embedded in all of the research in all of the universities" [EU 12].

"We will in 2030 have a real joint research area where we will have our joint research infrastructures even purchased complementary" [EU 4].

Thematic Alliances

Thematic alliances indicated long-term continuity of the alliances in case of key personnel changes as one of the biggest threats:

"That's what would make life very difficult, our own fragility, because I think we're still, you know, we're still young and we still depend on individuals to keep our alliance going and we somehow have to overcome that boundary and get to a point where we can stand alone and individuals don't matter as much" [EU 6].

"So where do we find this strong core again and how have we achieved until 2025 this institutional stability that is needed for carrying on the project and the development of the university, this threat is this commitment, the adherence" [EU 4].

Funding sustainability at the European and local level was another big threat that thematic alliances pointed out:

"Funding cuts, especially with inflation in the current geopolitical landscape, political instability" [EU 6].

"So many of us are quite dependent on the EU funding they get and it is not always transparent what you'll be getting, for how long, etc. No money, no continuation in the future, no EU funding" [EU 12].

Leadership changes are listed as another threat for the thematic alliances:

"Turnover in rectors' leadership, but legal entity is a way to counteract it" [EU 13].

"The governance change at the universities is a threat and not consider it as strategic project and not link it to the strategy of your local university" [EU 11].

By the year 2030, thematic alliances believed they would have a legal framework which would allow them to operate more efficiently:

"We will have a legal framework that costumes to the national and the European level" [EU 4].

"We will have a legal standing" [EU 6].

"The alliance will already exist - legal entity will exist" [EU 15].

Thematic alliances also believed that mobility embedded into the study programs was an important aspect for the future of alliances:

"We should see in some sense an organic but the benefits of intra alliance mobility and see how that plays out for students and for the institutions as well" [EU 7].
"The mobility of students and staff is a much simpler reality than it is today" [EU 11].
"Mobilities for staff and students embedded into regular work and study program" [EU 13].

Joint research infrastructure and joint research initiatives were also in the far front of future outcomes for thematic alliances:

"We will in 2030 have a real joint research area where we will have our joint research infrastructures even purchased complementary" [EU 4].
"Research is going from one place to the other, ideally Horizon proposals being written together and then executed" [EU 12].

Typological Alliances

Typological alliances listed financial sustainability as one of the biggest threats for their consortia:

"I think there needs to be a long-term scheme that provides basic funding for European universities, so that a little bit of the pressure is gone, so that we can actually focus in a mindful way about continuing continuously developing our European universities" [EU 2].
"Unsecure financial resources" [EU 5].
"The Commission backs with the financing" [EU 14].

Another threats pointed out by typological alliances were related to strategic sustainability that is constrained by different obstacles and barriers:

"So that what we have that it's not dependent on the university leaders on the single person, but that the university leadership in a sense is completely committed in a long term sense - sustainability" [EU 14].
"When trying to bring it to the ground that really to see how are we going to implement and then realize, you know, what barriers there exist and that it starting from a common definition and an understanding" [EU 1].

The 2030 future of typological alliances would be focused on joint academic offer for students with common European degree:

"I think if we can help to foster exchange amongst our than 10 universities that educational offers have been co-developed amongst our universities that students, but also staff can move around and really benefit from the infrastructure of all universities and in the best possible way customize their professional experience, then that's amazing" [EU 2].
"But the idea is we need to have one diploma" [EU 8].

Another important aspect of the future outcomes would be seamless mobility schemes embedded into joint programs:

"A student who joins is really able to have this, with seamless mobility, you know, they have a much wider range of opportunities and that we are able to come up with a comprehensive offer so that our students really can benefit and we are able to give them the best education possible" [EU 1].

Conclusions

Step 1 – All Alliances

European university alliances listed many threats which include financial sustainability, challenges related to governance structures and regulatory issues. As funding is a predominant concern, alliances emphasize that without the financial support from the EU, their future seemed uncertain. Furthermore, uneven engagement and collaboration complexities between partners, different national regulations and distinct institutional priorities created barriers to integration. Looking towards the year 2030, alliances stressed a need for more unified consortia with enhanced governance structures, joint degrees and seamless mobility schemes. Some also envisioned joint campuses and joint research infrastructures for their alliances.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

The biggest threats for thematic alliances were related to changes in leadership, institutional vulnerability and funding cuts. Since the alliances were still in the early stages of development and relied on the commitment of individuals, it makes them susceptible to local personnel turnover. When it comes to the future, in the year 2030, many thematic alliances believed that there would be legal frameworks established within their alliances and this would result in better operational efficiency and stability. Other future developments would include joint research infrastructure and embedded mobility programs for students.

Typological Alliances

Typological alliances expressed concerns about financial sustainability and strategic continuity. The need for long-term EU funding schemes was emphasized by typological alliances. Other barriers that pose challenges included diverse commitment of leaders and difficulties related to operational implementation. By the year 2030, typological alliances would aim for common European degrees and joint academic offer. Staff and students should not only benefit from shared resources and infrastructure, but also from seamless mobilities.

a) Similarities

- Funding sustainability was a common threat for thematic and typological alliances
- Changes in leadership was a common concern
- Different regulatory barriers
- Both types of alliances anticipated joint degrees, common infrastructure
- Need for embedded student and staff mobility was a shared issue
- Joint research initiatives were aimed at both types of alliances

b) Differences

While thematic and typological alliances had some minor variations when it comes to threats they expressed and future they envisioned, these differences were not really fundamental. Their overall goals, threats and concerns were largely aligned.

Final comments

The future of European university alliances highly depends on overcoming financial, regulatory and governance challenges. Both thematic and typological alliances stressed the importance of creating a long-term financial sustainability schemes for alliances, as well as legal recognition and enhanced collaboration frameworks. By the year 2030, they would envision integrated academic offers which would end with the European degree, seamless mobility embedded into study programs and enhanced research partnerships with the alliance partners. The key to long-term success would be to strengthen alliances with long-lasting governance models with institutional stability.

5.2.10. Limitations of the European Universities Initiative

Leading question: What are the main limitations of EUI initiative?

All Alliances

The European Universities Initiative (EUI) aims to create stronger and more integrated institutions in Europe. However, the alliances that participate in this initiative indicated several key limitations associated with it. Financial uncertainty and funding constraints related to it were one of the major limitations expressed by alliances within European Universities Initiative:

> *"Of course the financial aspects is a limitation, you cannot expect people to plan and work for the future if you only give them four years of money"* [EU 1].
> *"Not enough funding from the EC is a limitation, more funding needed"* [EU 11].
> *"Of course money is a limiting factor"* [EU 14].

Another limitation was the lack of legal framework that facilities collaboration among national systems:

> *"And therefore I think the most important thing will be the legal status of the legal framework for European universities"* [EU 4].
> *"Legal aspects, among other things, in the area of curricula, personnel and institutional constitution"* [EU 5].

The alliances believed that there was a need for the engagement of members states in the initiative, not only in relation to funding, but also in the context of overcoming the local regulatory barriers:

> *"So they should work a lot on the with the member states. Because for me, in the long term, the only way will be that the member states will automatically fund the European university in particular"* [EU 3].
> *"But of course the biggest limitations general are always the different regulations of the member states when it comes to implementing these kind of things"* [EU 14].
> *"We need the commitment of the member states and this will be something that has to be incentivized in the next years"* [EU 4].

It seemed also that the alliances were placed in a difficult spot where the expectations from the European Commission side were set really high:

> *"The expectations were raised so much and so high, European universities are now thought to solve any problem that exists in Europe in the European education area"* [EU 1].
> *"Another limitation may be the great expectations created that are not yet fully manifested"* [EU 11].

Thematic Alliances

Local and national constraints were listed as limitations for the initiative from the perspective of thematic alliances:

> *"Measures replacements in local universities, legal constraints on national levels, national constraints"* [EU 13].
> *"So national level should have also a role to play in this initiative, a very clear one. And therefore I think the most important thing will be the legal status of the legal framework for European universities"* [EU 4].

The slow pace of institutional changes and bureaucracy were another limitations that thematic alliances brought up:

> *"Change is slow at the universities"* [EU 7].
> *"Bureaucracy. The fact that we're all existing in a state of unknown"* [EU 6].

Typological Alliances

Typological alliances listed lack of funding sustainability as a major limitation of EUI:

> *"Of course the financial aspect is a limitation"* [EU 1].
> *"Yeah, I think that really the biggest challenge is to ensure that the European Commission remains supportive of European universities"* [EU 2].
> *"The limitation in this offer is that the Commission is giving us money for sure it's nothing here with each partner receives so little for such ambiguous project"* [EU 8].

Another limitations provided by typological alliances are related to national regulatory constraints:

> *"Right, I see some limitations in terms of accreditation and validation of programs. So having the national legal government involved in this working together with us not opposite or in the different direction as the alliances"* [EU 9].
> *"But of course the biggest limitations general are always the different regulations of the member states when it comes to implementing these kind of things"* [EU 14].

Conclusions

Step 1 – All Alliances

The European Universities Initiative (EUI) aims at strengthening cooperation and integration processes among European higher education institutions. However, the alliances that participate in this initiative listed some limitations of it. Many alliances believed that the current proposed funding scheme for alliances was too short and was not able to support long-lasting objectives and goals of alliances, therefore they indicated lack of funding sustainability as the biggest limitation. The lack of unified legal framework for collaborations among universities was another limitation that influenced educational activities, accreditation issues and institutional governance. Furthermore, alliances indicated that there is definitely a need for greater involvement of member states into the initiative.

Step 2 – Analysis of Thematic and Typological Alliances - Overview

Thematic Alliances

Thematic alliances listed local and national constraints as one of the main limitation of European Universities Initiative. Many of them believed that legal and regulatory limitations at national level make it very difficult to cooperate with other countries effectively on many different levels. Furthermore, heavy bureaucratic load and slow pace of changes that characterize higher education institutions, limited the ability to progress in a timely way. These limitations make it difficult for thematic alliances to fully exploit the potential of European Universities Initiative.

Typological Alliances

Typological alliances identified funding uncertainty as the most important limitation. Many of them believed that the funding mechanism introduced by the European Commission did not correspond to the long-term objectives of the initiative. Another major limitation was related to national regulatory constraints, especially when it comes to accreditation of joint programs. The deeper integration between partner universities is threatened by inability to align educational and also legal frameworks across countries.

a) Similarities

- Both types of alliances indicated lack of financial sustainability as major limitation
- National regulatory constraints were another major obstacle
- Active involvement of national governments in the initiative was also indicated

b) Differences

The limitations faced by thematic and typological alliances were largely similar.

Final comments

The European Universities Initiative (EUI) is a greatly promising concept to deepen institutional collaborations between higher education institutions in Europe. However, its current implementation has some structural limitations. The most addressed one is related to financial constraints associated with long-term financial strategy of the EC in funding alliances. Other limitations concerned national legal constraints and differences in legal frameworks among member states. The alliances indicated also regulatory barriers on different levels and bureaucratic constraints. In order for EUI to become more efficient, there is a need for a long-term financial strategy, greater involvement of member states and creation of common European policies.

5.3. Identification of Strategic Models of European University Alliances

The next part of the thesis presents empirical findings in at-a-glance format that originated from analysis of alliance-related databases as well as from in-depth, semi-structured interviews conducted with leaders of European university alliances. Based on the combined dataset, three overarching models of alliances were identified: thematic model, typological model and transversal model and their key characteristics were presented in Tab. 8 below. The findings identify both, similarities and differences in how alliances define priorities, structure their governance, collaborate with associated partners and address regulatory and structural challenges. Transversal model was created based on integrated elements which combine thematic and typological strengths, as well as general and universal characteristics of both types of alliances (based on analyzed key similarities between thematic and typological models).

Tab. 10. Key characteristics of thematic, typological, and transversal models of alliances (source: author's own elaboration)

	Model 1: Thematic	Model 2: Typological	Model 3: Transversal
1. Geographical Balance Analysis	Specific representation trends (e.g. France the strongest)	Specific representation trends (e.g. Germany the strongest)	Highest participation of Germany and France
2. Numerical Data Analysis	High average student/staff numbers, included broader and more extensive networks with higher number of APs	Lower average student/staff numbers, included niche partnerships (e.g. film & media, arts)	Wide variety of sizes of alliances (broad and niche models)
3. Associated Partners Analysis	Specialized partners matched with some thematic fields (e.g. hospitals, municipal partners)	Partners aligned with institutional type (e.g., technology companies, museums, film institutes)	Most represented APs were related to business, research, and public sector cooperations
4. Relation between Alliance Size and Associated Partners	Only very weak positive correlation (student population vs. number of partners), but not statistically significant	No clear correlation	No definitive correlation overall; other factors are to be taken into account, such as existing partnerships, strategic goals or missions
5. Governance Structures	Centralized, theme-driven in relation to research and innovation that align with goals and missions of alliances, external stakeholders included	Focused on structural inclusivity of internal members, more collaborative, less focused on external advisory bodies	Hierarchical governance that include Governing Boards, Steering Committees and operational teams, operational leaders play crucial roles in transferring strategic decisions into concrete actions
6. Students' Involvement in Governance	Autonomous student bodies were more often present, higher vertical representation, with more autonomy of students	More integrated student participation within existing structures, more collaborative integration	Recognition of important role of students in governance, but facing operational challenges related to their involvement
7. Limitations of Governance Model	Complexity challenges and expansion issues related to governance	Communication/integration challenges related to operational efficiency within existing structures	Too complex governance structures, uneven commitment, continuity of leadership and communication across governance bodies issues
8. Selection of Associated Partners	Local/regional partners that match with thematic priorities	Diversity of partnerships, focused on external and local partners	Strategic alignment, importance of pre-existing relationships, a mixture of APs, further verification of partners needed in order to focus on most relevant ones
9. Roles of Associated Partners	Alignment with specific themes and areas, focused on scientific collaboration and technological development	Broader and diverse partnerships, often focused on entrepreneurship, incubators or start-ups	Co-designing of study curricula, alignment with regional and industry needs, governance advisory roles
10. Previous Cooperation	Short-term, more informal partnerships with thematic objectives	More formal, structured, mostly long-term pre-existing relationships	Bilateral or small network cooperation before alliance formation with varied duration

11. Alliance Creation	Challenges related to institutional diversity, increased local visibility that links to higher admissions	Challenges related to legal/regulatory alignment, national-level visibility increased	Financial/resource constraints, improved international visibility and partner recognition, need for administrative alignment, challenges related to local engagement of staff
12. Research initiatives	Societal areas: coastal sustainability, well-being, health, focused on collaborative goals and common vision	Technical areas such as: AI and digitalization and cultural research, finding balance between institutional research agenda and alliance research themes	Emphasis on addressing societal challenges, value interdisciplinarity
13. Chosen model (thematic/typological)	Strong identification with thematic model, some concerns over expansion limits	Mixed views – some identified potential limitations and others found it beneficial, search for broader flexibility in terms of focus	Generally common concept seen as valuable, potential constraints related to expansion, way to unify diverse institutions around common goals
14. Added value	Realization of European university concept in a new format of cooperation, thematic synergies	Enhanced teaching quality and learning experiences of students, harmonized inter-university strategies	Increased international recognition, increased and seamless mobility opportunities, common access to different resources
15. Expected outcomes and achievements	Innovative study programs, thematic research hubs, virtual campuses	Systemic collaboration, common educational offer and strategies, interdisciplinary activities, administrative alignment	Joint degrees, enhanced mobility schemes, sustainable governance structures, strengthening research cooperation
16. Future of Alliances	Institutional vulnerability concerns, embedded mobility programs	Concerns over strategic continuity, financial sustainability, European degrees and joint academic offer	Financial sustainability issues, regulatory challenges, joint research initiatives and infrastructure, concerns over leadership turnover
17. Limitations of European Universities Initiative	Regulatory/local barriers, bureaucratic constraints, slow-paced changes	Funding uncertainties, accreditation challenges, national regulatory barriers	Financial sustainability issues, need for unified legal European framework, active involvement of national governments expected

5.4. Methodological Transformation: From Alliance Models to Business Model Canvases

Following the identification process of three overarching models of European university alliances (thematic, typological and transversal), the next step resulted in transforming these characterized configurations into structured models using the Business Model Canvas (BMC) framework. The idea behind this transformation was to conceptualize each alliance model, not

only as an organizational structure, but also as a strategic entity which includes value proposition, stakeholder relationship, required resources and its financial aspects.

The input data for this process originated from three sources:

1) Systematic literature review (SLR) data
2) Documents and databases analysis related to the structure of the alliances (alliances' websites and factsheets created by the European Commission)
3) Findings from in-depth interviews (IDI) with alliance leaders

Each canvas was prepared to reflect the strategic priorities, stakeholders identification and functional aspects specific to the respective model. This approach was in line with the broader aim of this thesis to build a bridge between institutional theory and practical management models that offer a framework which could be used to showcase strategic development by different stakeholders within European Higher Education Area (EHEA).

The Business Model Canvas is a strategic, systematic tool, developed by Osterwalder and Pigneur (2010). It presents and analyzes key components of an organization functioning. Application of BMC allowed each alliance operational dimension be presented using the following key blocks that address the below questions:

1) Key Partners (Who are the strategic collaborators?)
2) Key Activities (What are the core operations?)
3) Value Proposition (What unique value is provided?)
4) Customer Relationships (How do we engage stakeholders?)
5) Customer Segments (Who are the beneficiaries?)
6) Key Resources (What assets are essential?)
7) Channels (How is the value delivered?)
8) Cost Structure (What are the major costs?)
9) Revenue Streams (How does the alliance sustain itself?)

The three models presentation using Business Model Canvas can be found below in the following order:

1) Thematic Alliance Model (Fig. 51) – related to universities united by a shared academic or societal theme
2) Typological Alliance Model (Fig. 52) - uniting universities by institutional type e.g. technical, business or creative arts universities
3) Transversal Alliance Model (Fig. 53) - representing the most universal and common features of a European university alliance.

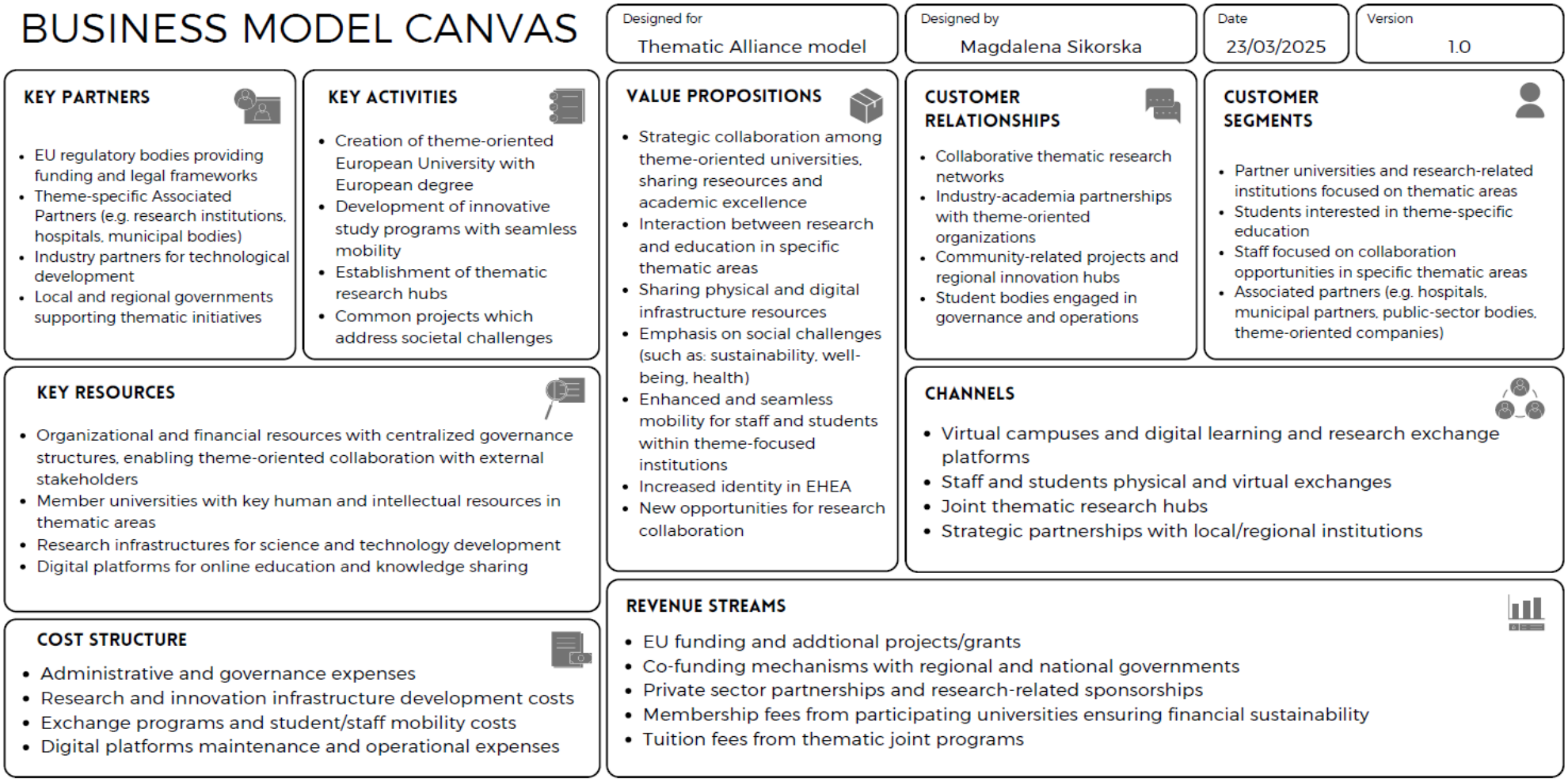

Fig. 51. Business Model Canvas of Thematic Alliance Model
(source: author's own elaboration)

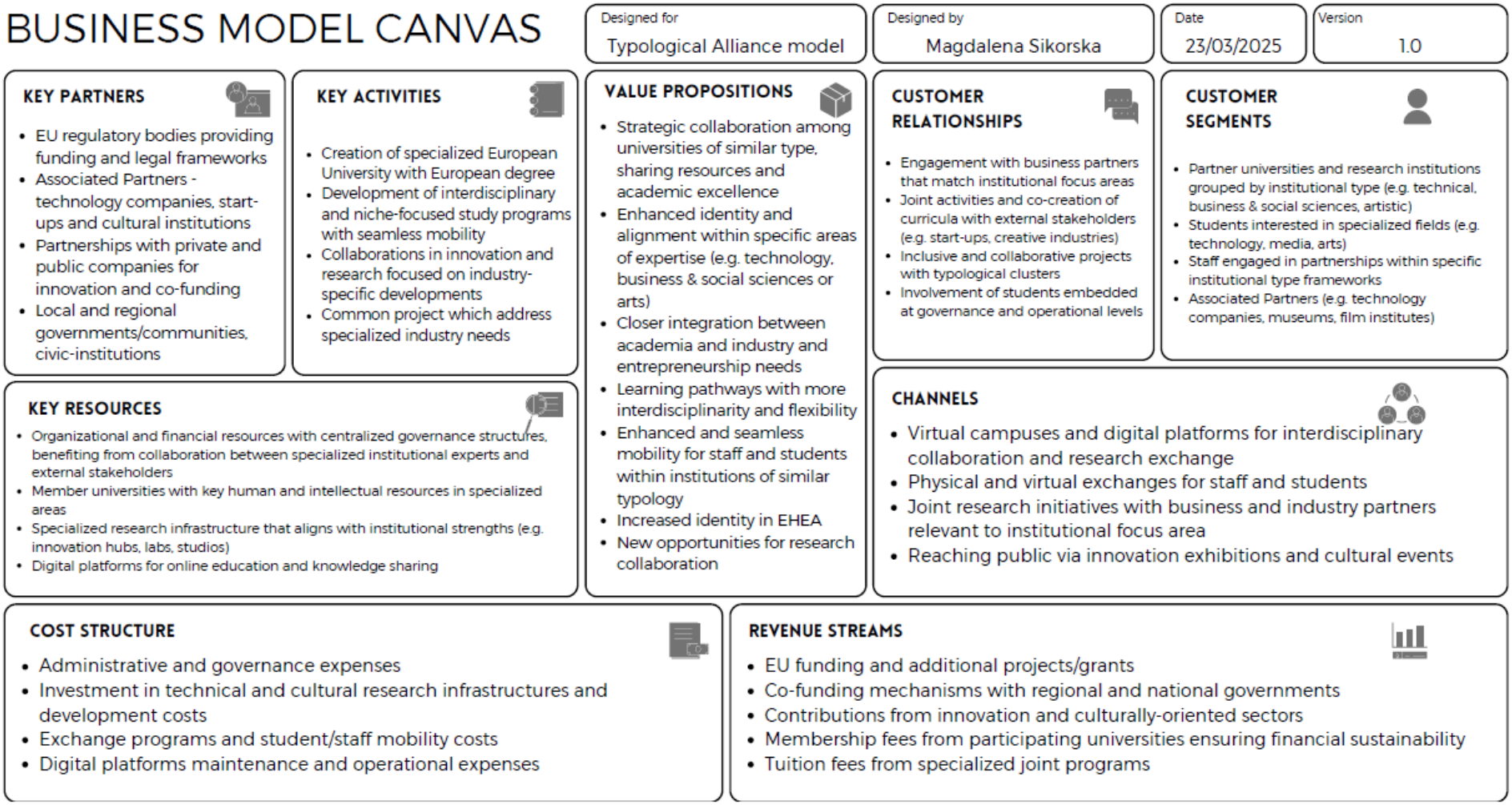

Fig. 52. Business Model Canvas of Typological Alliance Model
(source: author's own elaboration)

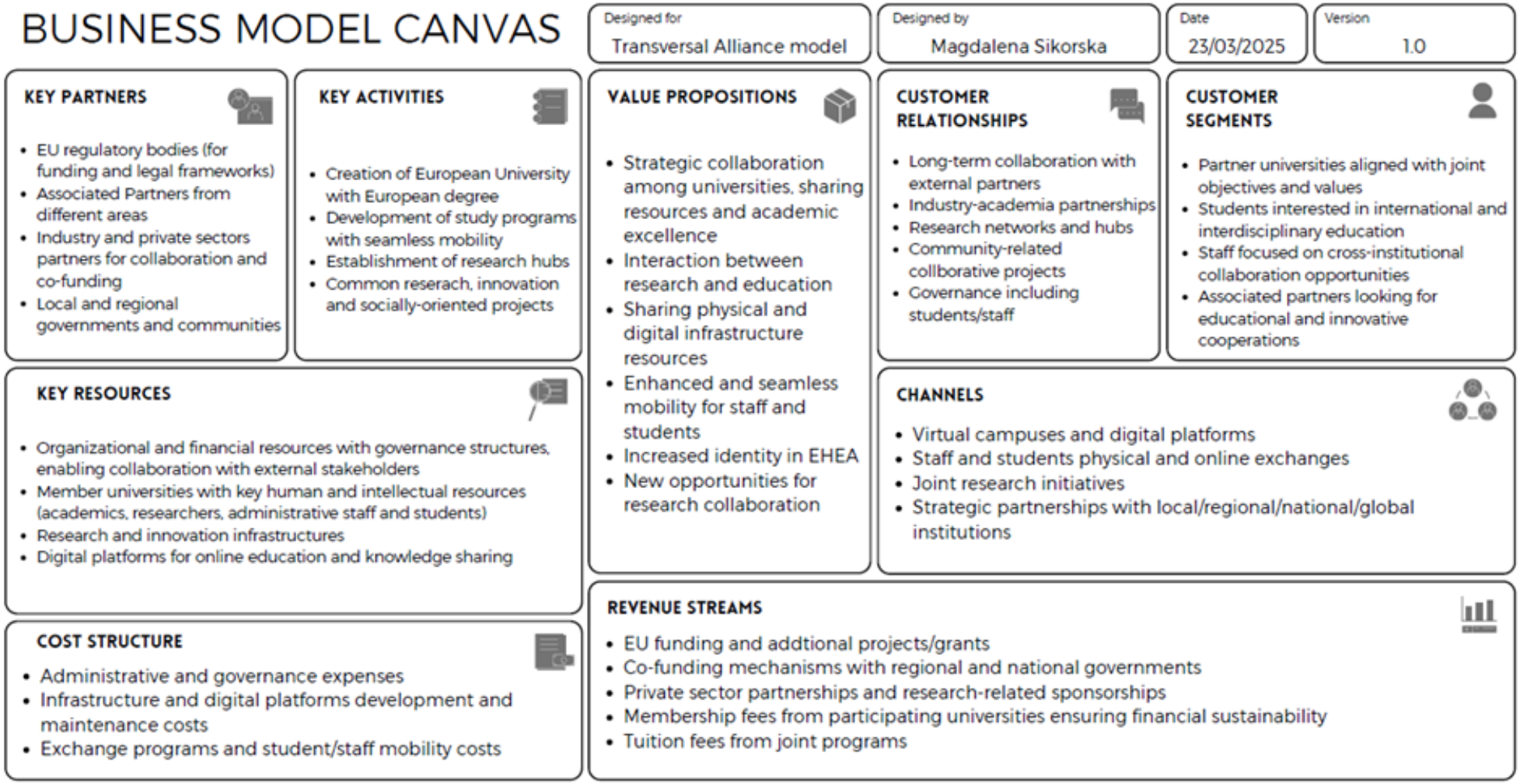

Fig. 53. Business Model Canvas of Transversal Alliance Model
(source: author's own elaboration)

5.5. Delphi Verification of Business Model Canvases

As a next step, the Business Model Canvases (BMC) of all three alliances models were submitted for evaluation by 16 experts using Delphi method. It is important to highlight that the experts were only provided with a condensed information about author's PhD research and a brief explanatory note related to the presented models' origin, therefore, their feedback was focused on independent assessment of the models alone, without the broader context of the whole research included in this thesis.

5.5.1. Quantitative Summary of the Experts' Feedback

To evaluate the three BMC models of the alliances (Thematic, Typological and Transversal), the experts responded to five closed (yes/no) questions related to clarity, accuracy, terminology, completeness and classification of each model:

1) Is the presented model clear for you? – YES/NO
2) Is the content accurate? YES/NO
3) Is the terminology used correctly? YES/NO
4) Are the descriptions precise and complete? YES/NO
5) Are the characteristics classified properly? YES/NO

In case an expert provided a negative response, and obligatory comment needed to be added. The last open question was related to proposed overall improvements where the experts had an opportunity to provide general comments to each model. The Fig. 54 presents expert responses related to BMC Thematic Alliance Model in the 5 examined areas.

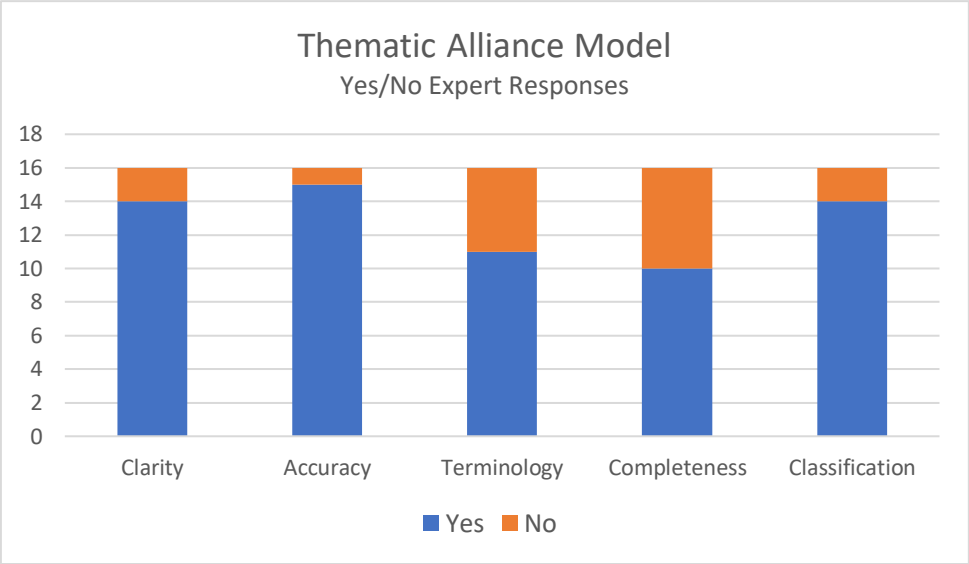

Fig. 54. Expert evaluation of BMC Thematic Alliance Model based on five verification criteria (source: author's own elaboration)

The expert assessment of the BMC Thematic Alliance Model was generally positive particularly with accuracy, clarity and classification areas that received mostly positive responses, with only 1-2 negative responses per area. The evaluation highlighted two areas which require improvement, these were terminology and completeness. Approximately, one-third of the experts expressed some concerns related to used terminology and completeness of data presented. The Fig. 55 presents expert responses related to BMC Typological Alliance Model in the 5 examined areas.

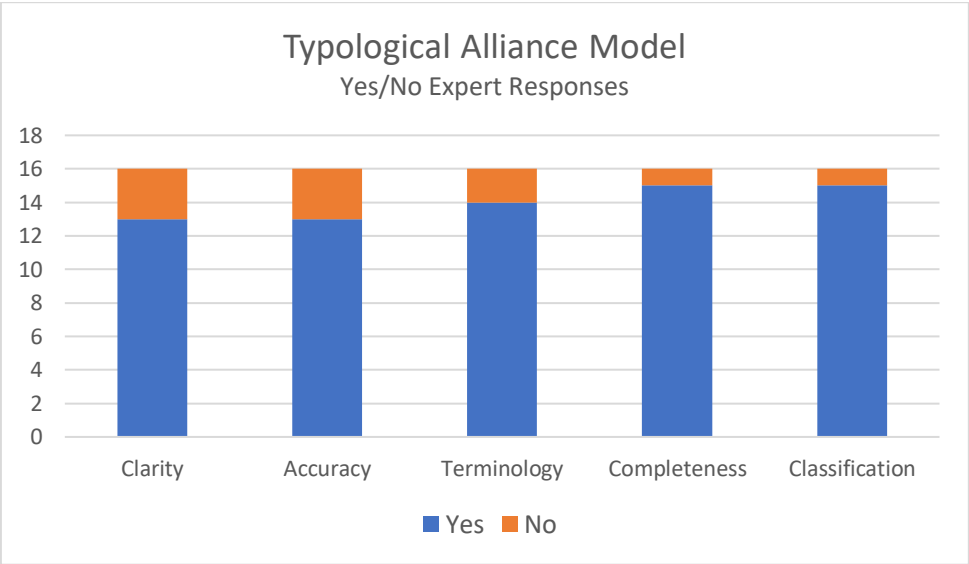

Fig. 55. Expert evaluation of BMC Typological Alliance Model based on five verification criteria (source: author's own elaboration)

The expert assessment of the BMC Typological Alliance Model was generally positive particularly with completeness and classification areas that received mostly positive responses, with only 1 negative response per area. Similarly, the use of terminology was assessed highly by the experts with only 2 remarks from the experts. Clarity and accuracy were two areas which required some refinement in relation to the presented model with 3 negative responses per area. The Fig. 56 presents expert responses related to the evaluation of BMC Transversal Alliance Model in the 5 examined areas.

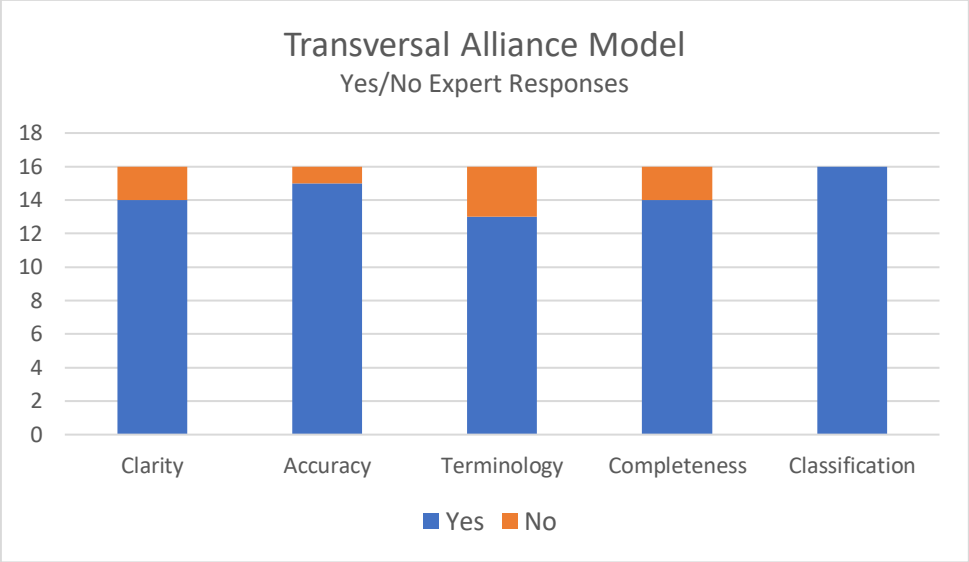

Fig. 56. Expert evaluation of BMC Transversal Alliance Model based on five verification criteria (source: author's own elaboration)

Among the three models, the BMC Transversal Alliance Model was the best-assessed model. The classification aspect of the model was confirmed as appropriate by all experts. The model was also highly assessed in the areas of accuracy, clarity and completeness with only 1-2 negative responses from the experts. The area with most critique was terminology, where three experts expressed some reservations.

5.5.2. Categorized Expert Feedback on the Models

In order to properly respond to the feedback provided by the experts to the models presented in the Business Model Canvas (BMC) framework, the experts' remarks were categorized into three types:

- Actionable
- Strategic
- Inspirational

Such typology was design to respond to the content of the feedback, but also to reflect on its potential impact on models' improvements.

a) Actionable remarks

These were practical, specific and possible to instantly implement suggestions. They usually referred to:

- Terms or language clarification in the canvas blocks
- Re-wording or simplifying repetitive content of blocks
- Proposals of adding some examples, bullets or small formatting improvements

Purpose: enhancements of clarity or presentation format of model elements with some changes in the concept.

b) Strategic remarks

These remarks concerned broader structural, theoretical or concept-based issues related to the models. They were related to:

- Distinctive features and verification of the models and their typology
- Possible overlaps or lack of displaying differences between models
- Methodological issues related to interpretation of data

Purpose: future enhancements and extensions of the models which often require more extensive changes of the models or further research.

c) Inspirational remarks

These remarks were mostly stimulating reflections on the presented models. They provided feedback in the following areas:

- Different or fresh perspectives related to the models
- Suggestions for future enhancements of the models
- Insights that can enrich the broader context of the research

Purpose: to provoke future discussions and explorations without instantly changing the existing models.

The tables below present the author's responses to the feedback provided by the experts.

THEMATIC ALLIANCE MODEL

Remarks on Question 1.1: Is the presented model clear to you?

No.	Expert remark	Category	Response/action taken
1	*"It is not clear whether the cost structure is to be related with the single university or with the European University network under consideration. Also some cross-funding practices may obscure the resultant image."*	Inspirational	Costs which refer to the alliance level and cross-funding mechanisms may vary between partners and should be considered as alliance-level financial arrangements
2	*"Not very clear in visual terms, it is difficult to make a clear comparison between the 3 models"*	Actionable	Key differences between 3 models were indicated with different colors in the new version of the model

Remarks on Question 1.2: Is the content accurate?

No.	Expert remark	Category	Response/action taken
1	*"A very (may be too) thin border with the typological model"*	Actionable /Strategic	The models were created based on SLR, IDIs and databases analysis – there were many common areas identified between the models, but key differences were indicated in the new version of the models using different colors

Remarks on Question 1.3: Is the terminology appropriate and used correctly?

No.	Expert remark	Category	Response/action taken
1	*"Overall yes, but I would consider (1) to use 'stakeholder' instead of 'partner; (2) use 'profile European University instead of 'theme-oriented European University". It is not wrong by any means by sounds little odd to me"*	Actionable	Ad 1) "Key partner" is official name of one of the BMC block, therefore, the author decided not to change that; Ad 2) new proposed term *"European university with a thematic profile"*
2	*"Some statement seem over general or planned but not realized. e.g. Interaction between research and education in specific thematic areas."*	Actionable	BMC framework is intended to provide general overview, also the intention was to outline strategic directions and indeed some of them are at the early stages of implementation. The bullet point was rephrased to: *"Joint research-education initiatives such as co-designed thematic courses or integrated research internships."*
3	*"The term "customer" doesn't sit comfortably with me in this context, even*	Actionable	"Customer segments" refer here to the key groups within an alliance including students,

	though it's part of the business model canvas framework. Also, the subheading "channels" is not clear. Channels for what? Communication? Coordination? Again I imagine this is related to the model used rather than a term you have chosen."		staff or associated partners; whereas "channels" address the question *"How is the value delivered?"* and they relate to communication and engagement
4	*"The model is quite clear but it occurs to me that the first bullet in the Value Proposition box could perhaps provide some examples in parentheses that help the reader of the model understand what is meant by "theme-oriented universities""*	Actionable	The earlier chapters of this thesis provide more insights into "theme-oriented universities" concept, however, to add clarity in the new model, the new proposed term was *"European University with a thematic profile (e.g. health, space, sea region)"*
5	*"In the 'value propositions' area the EHEA abbreviation could be clarified. In the first point in this area there is a typing error: "sharing reseources" instead of: "sharing resources"."*	Actionable	EHEA = European Higher Education Area – clarification added to the new version of the model; typing error corrected

Remarks on Question 1.4: Are the descriptions precise and complete?

No.	**Expert remark**	**Category**	**Response/action taken**
1	*"Yes, but the following sentence does sound trivial "Interaction between research and education in specific thematic areas". I would love to learn something new while this is old story really. I would consider to drop it for the sake of clarity of the model."*	Actionable	The bullet point rephrased to: *"Joint research-education initiatives such as co-designed thematic courses or integrated research internships"* in the new version of the model
2	*"I think they are sufficiently complete for a visual model of this type - a fuller definition would be too lengthy."*	Inspirational	No action needed
3	*"NPOs (local associations related to cultural heritage, mountain activities, handcraft, gastronomy...) are also important stakeholders as key partners for example: receiving students during training periods, workshops participation"*	Inspirational	NPOs were not indicated as main associated partners for thematic alliances in the analyzed databases nor in in-depth interviews with thematic alliances leaders
4	*"I think the descriptions are very precise and nicely articulated. I would simply suggest reflecting on the possibility of adding two items to two of the sections, as follows: Key Resources: Consider if there is space to add something about general*	Actionable	Added in "Key resources" block: *"Administrative and communication staff supporting alliance operations"*, added in "Channels" block: *"Communication tools*

	administrative and professional staff who provide support services more generally to the alliance but do not necessarily have links or expertise to the specific thematic area of Thematic Alliance. For example, communications teams that are supporting information dissemination about the existence and activities of the alliance. Channels: Consider if you want to add something about communications channels such as newsletters and webpages that are less explicitly "digital learning and research exchange platform" and more tools for the general promotion (internally and externally) of the existence of the alliance and the ways the alliance can benefit the university community as a whole."		*(newsletters, websites) for internal and external promotion"*
5	*"In my opinion 'value propositions' concentrate more on potential possibilities (collaboration/ interactions / sharing) than real outcomes. In particular, I miss here the reference to specific scientific outcomes, e.g.: 'Creating original and promising knowledge and gaining impactful scientific achievements in specific thematic areas'."*	Actionable	In the bullet point *"New opportunities for research collaboration"* block the following addition was made: *"e.g. generating impactful knowledge and achievements in key thematic areas"* in the new version of the model

Remarks on Question 1.5: Are the characteristics classified and grouped properly?

No.	Expert remark	Category	Response/action taken
1	*"EUA are not a business model"*	Inspirational	The author is aware that BMC originates from corporate strategy, however, in this thesis it is applied to structure of a European university as it clearly maps activities, resources, relationships and value in a visual and systemic manner. This does not imply that EUAs are profit-oriented enterprises.
2	*"In the 'value propositions' area "resources sharing" concept is repeated. In the first point there is "Strategic collaboration among theme-oriented universities, sharing resources and*	Actionable	The adjustments were made as proposed by the expert in the new version of the model where the bullet *"Sharing physical and digital*

	academic excellence". Also, in the third point there is "Sharing physical and digital infrastructure resources". The third point is substantively included in the first point. In my opinion, this is not a disqualifying weakness, but I draw attention to it for possible consideration."		*infrastructure resources"* was deleted

General comments to the Thematic Alliance Model:

No.	Expert remark	Category	Response/action taken
1	*"The title "Channels" is too short for me, it could be made longer to be more descriptive"*	Inspirational	The author chose to keep the original "Channels" title in order to stay consistent with BMC structure; in this context "Channels" refer to how the alliance engages and reaches its key audience with its value
2	*"It looks convincing"*	Inspirational	No action needed
3	*"On the key activities section, I think it would be important to mention institutional transformation of the partner universities and the creation of flexible learning pathways. These activities seem to be key to all alliances and they are at the core of the call."*	Actionable	The author found the remark on adding "institutional transformation of the partner universities" under "Key Activities" section as valid and the adjustments were made in the new version of the model, proposed incorporation of the second change was introduced by altering already existing bullet point to "*development of innovative and flexible learning pathways with seamless mobility"*
4	*"Interesting, seeming complete, but sometimes presents terms which are not clearly self-explaining."*	Inspirational	The author acknowledged that some terms may not be fully self-explanatory within BMC, however, all key concepts and terminology used are explained in the main body of this PhD thesis. This approach allows the canvas to stay concise while the broader context is provided in an earlier analysis
5	*Well-aligned with EU priorities and thematically strong. Suggests adding more detail on governance, impact metrics, and innovative learning design.*	Strategic	The current model reflects on key strategic strengths related to EU policies, while the author wants to keep the current version on the core structure and believes that the elements in question are further

			elaborated in the thesis, the proposed adjustments could be considered for future models and also for future research directions, in particular when it comes to measuring impact and indicators
6	*Model is clear, but the "thematic" concept seems somewhat homogeneous, so maybe giving a sense of what a thematic model is in all its variety could be useful*	Inspirational	BMC presents a simplified version of thematic structure for clarity, however the diversity of the thematic concept is presented in the accompanying analysis of this PhD thesis
7	*"Studying the model as presented was instructive. It allowed me to map my alliance onto the model. And to reflect how in some ways my alliance 'grew' into this model"*	Inspirational	No action needed
8	*"The model is constructed correctly in terms of methodology. It takes into account a number of criteria characteristic of this type of models. It is precise, prepared in a detailed manner."*	Inspirational	No action needed
9	"*General characteristics of this model are present"*	Inspirational	No action needed
10	*"What examples of industry partners for technological development were selected?"*	Actionable	BMC is designed as a generalized model, so specific names of industry partners are not mentioned, however, in the earlier analysis examples of industry partners involved in thematic alliances were mentioned
11	*"Overall, very nicely organized and helpful in presenting the picture of this type of alliance, but consider visually highlighting the Value Proposition box and its first bullet points to make models easier to distinguish."*	Actionable	Indeed, the "Value Proposition" is central to each model identity, therefore some subtle formatting to emphasize visually the most important and defining elements of each model were introduced by the author in the new version of the model
12	*"In my opinion the business model canvas for Thematic Alliance Model is generally well prepared. Referring to individual issues I suggested only a few, minor improvements."*	Inspirational	The earlier suggested improvements were already taken into account by the author

Summary of expert feedback on Thematic Alliance Model

There was a largely positive feedback of this model, particularly in respect to its structure, consistency with EU policies and clarity. Provided remarks were detailed and constructive.

- Actionable remarks focused on value proposition, channels and key activities blocks corrections, some redundancy in bullet points, lack of specific examples or some formatting issues. These resulted in some editing of canvas.
- Strategic feedback focused on distinguishing the Thematic Alliance Model from the others, too general nature of bullet points in the value proposition and lack of impact indicators and innovation measures. While not all changes are reflected in the model, these comments were taken into account for future improvements.
- Inspirational remarks were related to usability of the model. Some experts appreciated the visual side of the model, its coherence with European values and flexibility to address the model to their own alliance. Some stated that thematic diversity should be highlighted in a more clearer way and suggested some concept adjustments to be addressed in the thesis.

As a result of the feedback on the Thematic Alliance Model, a new revised version of the model was prepared, which is presented in Fig. 57. The parts of the model description presented in blue color represent the distinctive features of the Thematic Alliance Model.

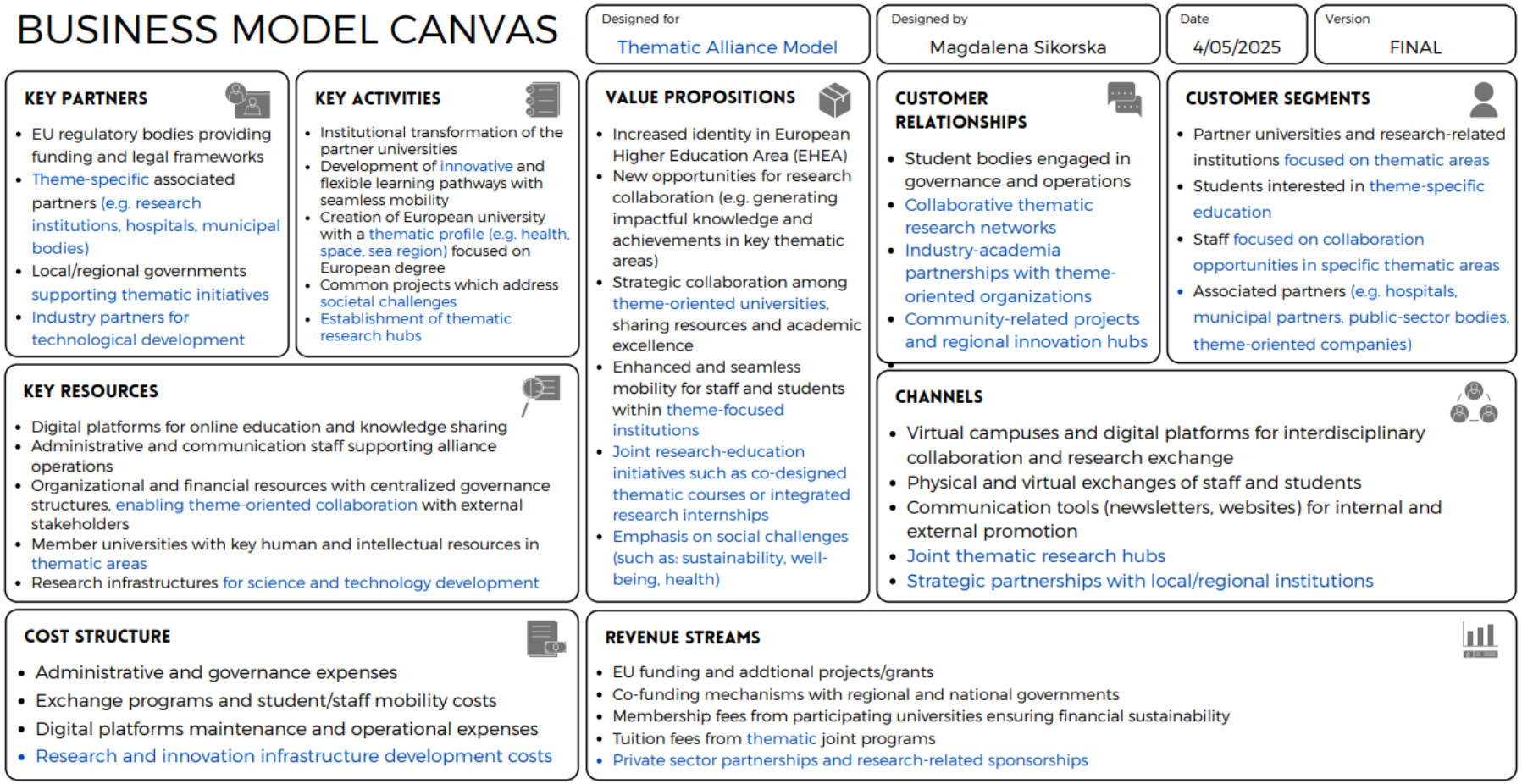

Fig. 57. Revised Business Model Canvas of the Thematic Alliance Model based on expert assessment (source: author's own elaboration)

TYPOLOGICAL ALLIANCE MODEL

Remarks on Question 2.1: Is the presented model clear to you?

No.	Expert remark	Category	Response/action taken
1	*"I think I would need a clearer picture of how you envision these different types and what factors made you decide which type each alliance belongs to in order to understand the differences in this model as opposed to the first one."*	Strategic	The rationale behind the classification of alliance types is provided in methodological chapter and conceptualized in details in analytical part of this thesis
2	*"Not very clear in visual terms, it is difficult to make a clear comparison between the 3 models"*	Actionable	Key differences between 3 models were indicated with different colors in the new version of the model
3	*"The model is quite clear, but it occurs to me that the first bullet in the Value Proposition box could perhaps provide some examples in parentheses that help the reader of the model understand what is meant by "universities of similar type""*	Actionable	In order to increase clarity, the examples of universities of similar type were added in brackets *"(e.g. technical, arts, business)"* in the new version of the model

Remarks on Question 2.2: Is the content accurate?

No.	Expert remark	Category	Response/action taken
1	*"I am not sure why cultural institutions are put forward as associated partners here and not under thematic alliance model also."*	Strategic	Cultural institutions can play, in some cases, also a meaningful role in thematic alliances, but they are placed primarily in typological alliances as some of them are directly associated with cultural and artistic institutions due to their profile. That is why cultural institutions were prevailing in typological alliances compared to thematic alliances
2	*"An example of the difficulty I'm having in understanding the models is the following. I presume my alliance is classified as a thematic alliance. According to the model for that type of alliance, that means one of the key activities is the creation of a theme-oriented European University with a European degree. This is correct, but I would also say that the key activity*	Strategic	Even though this study aimed to identify a finite number of EUI models, it also recognizes that some alliances may possess hybrid characteristics that do not pertain only to one model. The models were developed to highlight dominant features, such as strategic focus, governance modalities or partnership

	assigned to typological alliances is also true for my alliance: Creation of a specialized European University with a European degree."		structure rather than exclusive frameworks.
3	*"Tiny border between models"*	Strategic	While many overlaps are inevitable due to the shared foundations of European University Initiative, the author recognized the importance of demonstrating distinction in a more clearer way, therefore, in the new versions of the models, the key differences are marked in different colors

Remarks on Question 2.3: Is the terminology appropriate and used correctly?

No.	Expert remark	Category	Response/action taken
1	*"Expand EHEA, as in the previous model"*[2]	Actionable	EHEA = European Higher Education Area – clarification added to the new version of the model

Remarks on Question 2.4: Are the descriptions precise and complete?

No.	Expert remark	Category	Response/action taken
1	*"Under "Customer Relationships", I wonder why the final bullet on student involvement reads differently than the bullet on this topic in the Thematic Alliance model. Are the realities of student involvement in these two models somehow different?"*	Actionable	This comment was considered valid and the wording of this bullet was harmonized in the new version of both models

Remarks on Question 2.5: Are the characteristics classified and grouped properly?

No.	Expert remark	Category	Response/action taken
1	*"Well, not sure if I correctly understand "Strategic collaboration among universities of similar type". It could mean number of various issues such as size, profile, status or location. Not clear to me."*	Actionable	In order to increase clarity, the examples of universities of similar type were added in the new version of the model

[2] This remark appeared five times in the expert assessment, but was listed only once in order to avoid repetition

General comments to the Typological Alliance Model:

No.	Expert remark	Category	Response/action taken
1	*"A complete and clear model."*	Inspirational	No action needed
2	*"No major comments."*	Inspirational	No action needed
3	*"Strong and well-structured model. Suggests adding risk assessment, QA mechanisms, governance details, and innovation in teaching."*	Strategic	The current version of the model provided general information about core elements without detailing every operational aspect. Governance frameworks and approaches were discussed in depth in the thesis. Other areas, such as: risk assessment, QA mechanism and innovation in teaching, are indeed relevant and should be considered for future refines of canvas, particularly after being included in future research directions.
4	*"I found this one to work better than the thematic alliance model."*	Inspirational	No action needed
5	*"In general, the descriptions seem to have underlying assumptions about what a typological alliance is working on predominantly. The same may be true for thematic alliances descriptions. A further generalization might be needed."*	Strategic	It is the Transversal Alliance Model that was developed as a more flexible framework that illustrates the characteristics of alliances which intersect thematic and typological areas.
6	*"An instructive model. To see some overlaps and also some opportunities to reconsider activities."*	Inspirational	The model is to be both analytical and instructive. As far as overlapping is concerned, it supports the goal of using the canvas to, on the one hand identify areas on strategic consistency, but on the other, for further distinction. Reconsidering activities can be explored in the future enhancements of the model
7	*"The model is constructed correctly in terms of methodology. It takes into account a number of criteria characteristic of this type of models. It is precise, prepared in a detailed manner"*	Inspirational	No action needed
8	*"What forms of closer integration between academia and industry and entrepreneurship are included within Typological Alliance Model?"*	Actionable	Typological Alliance Model highlights integration between academia and industry, particularly in alliances of technology, business or arts

			universities. While the thesis provided detailed examples of this integration, the BMC presents it in a summative form, however, a brief clarification was added in the revised version of the canvas to make it more explicit in "Value Propositions" block: *"Closer integration between academia and industry through joint projects, innovation hubs, co-designed curricula, and entrepreneurship training"*
9	*"Overall, very nicely organized and helpful in presenting the picture of this type of alliance. Again, as indicated for the Thematic Alliance model, I think it would be helpful if you somehow made the Value Proposition box stand out (different color from the other boxes or something like that?), as well as the first couple of bullets within that box (perhaps bolded?), because those items seem to stand as the heart of the "definition" for the model and this would make it easier for readers to quickly distinguish between your three models."*	Actionable	Indeed, the "Value Proposition" is central to each model identity, therefore some subtle formatting to emphasize visually the most important and defining elements of each model, were introduced by the author in the new version of the model
10	*"In my opinion the business model canvas for Typological Alliance model is generally well prepared. Referring to individual issues I suggested only one, minor improvement for consideration."*	Inspirational	The earlier suggested improvement was already taken into account by the author

Summary of expert feedback on Typological Alliance Model

Typological Alliance Model was generally well assessed by the experts who found it clear, relevant and matching with the logic of alliances formed within institutions of the similar academic profiles (e.g. business, technology, arts).

- Actionable remarks were focused on clarifications around some used terms and ensuring consistency in some bullet points descriptions. Some visual enhancements were suggested including "Value propositions" block. Also updates related to wording, formatting and providing some examples were proposed.

- Strategic feedback was focused on clearer distinctiveness of the model from the others. Suggestions were made related to inclusion of aspects such as: risk assessment or quality assurance, but these were acknowledged by the author for future enhancements of the model and further research directions
- Inspirational comments emphasized the model practical value, clarity and precision. Some experts had more preference towards Typological Alliance Model.

As a result of the experts' feedback on the Typological Alliance Model, a new revised version of the model was prepared and it is presented in Fig. 58. The parts of the model description displayed in green color represent the distinctive features of the Typological Alliance Model.

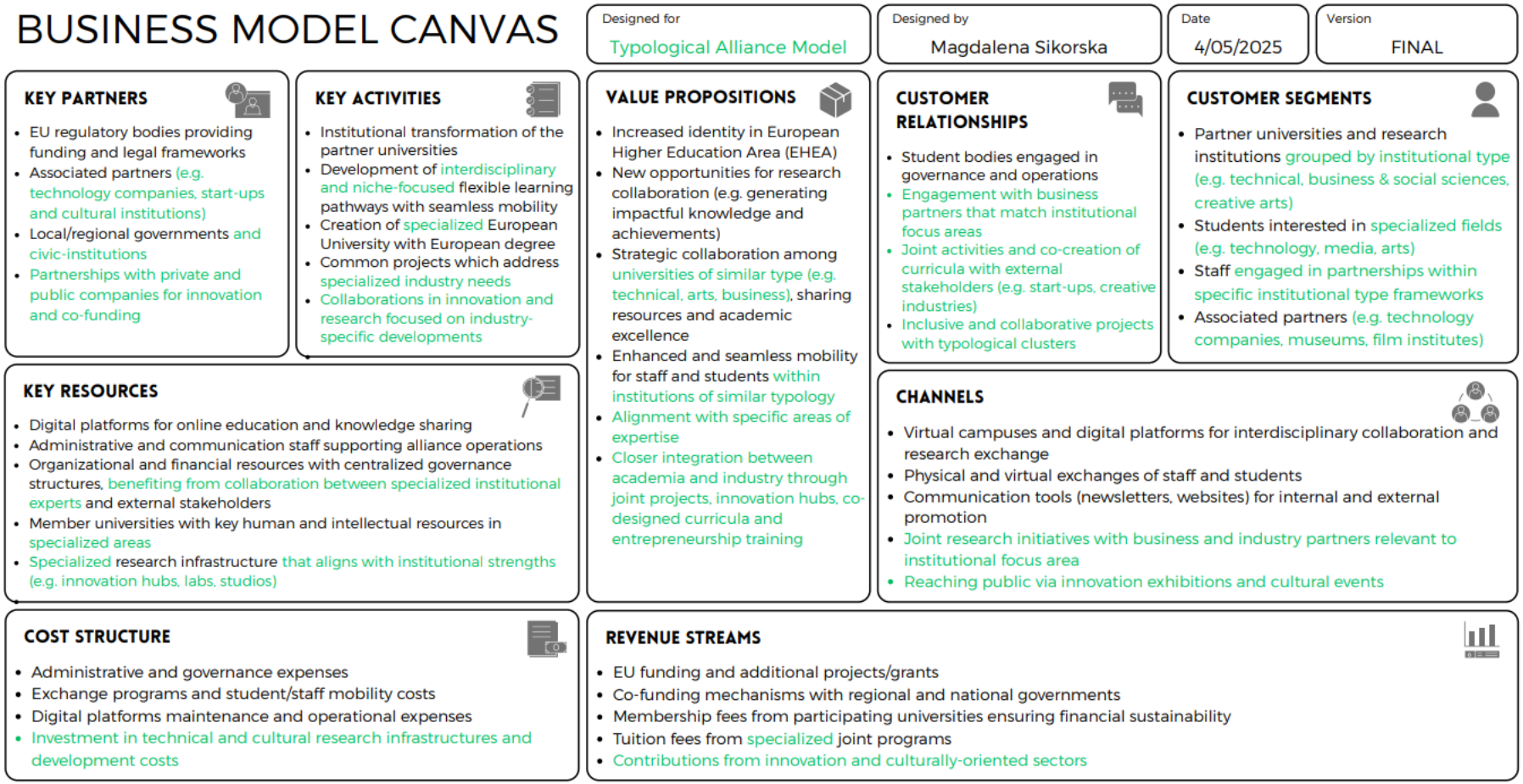

Fig. 58. Revised Business Model Canvas of the Typological Alliance Model based on expert assessment (source: author's own elaboration)

TRANSVERSAL ALLIANCE MODEL

Remarks on Question 3.1: Is the presented model clear to you?

No.	Expert remark	Category	Response/action taken
1	*"Does not really work with me because I find it difficult to envision one in real life"*	Strategic	The Transversal Alliance Model was design to display a generic, overarching alliance type that does not fall under thematic nor typological framework. This non-specificity is intentional as it aims to demonstrate the structure of alliances which operate across different missions, disciplines and profiles.
2	*"Not very clear in visual terms, it is difficult to make a clear comparison between the 3 models"*	Actionable	Key differences between 3 models were indicated with different colors in the new version of the model

Remarks on Question 3.2: Is the content accurate?

No.	Expert remark	Category	Response/action taken
1	"Maybe too generic model"	Strategic	The transversal model is intentionally broad and generic and reflects on alliances which do not fall into thematic or typological categories.

Remarks on Question 3.3: Is the terminology appropriate and used correctly?

No.	Expert remark	Category	Response/action taken
1	*"I think the focus when it comes to joint education is more on joint programmes rather than European Degrees. In some aspects, it can be hard to distinguish between the transversal and typological alliances"*	Actionable/ strategic	It seems that currently most alliances indeed focus on joint programs rather than fully realized European degrees, as legal framework is lacking. However, the overarching goal of EUI is to develop European degree in the future, therefore, that activity description in BMC would not be changed. As for distinction between the models, key differences between 3 models were indicated with colors in the new version of the model
2	*"Unfortunately, this model doesn't make clear to me what "transversal" really*	Strategic	The Transversal Model is intentionally broad and generic and reflects on alliances which

	means; it seems to point to a 'generic' European University alliance, one that somehow just doesn't happen to fall under the Thematic or Typology umbrella."		do not fall into thematic or typological categories. It aims to demonstrate the structure of alliances which operate across different missions, disciplines and profiles.

Remarks on Question 3.4: Are the descriptions precise and complete?

No.	Expert remark	Category	Response/action taken
1	*"In my opinion 'value propositions' concentrate more on potential possibilities (collaboration/ interactions/ sharing/opportunities) than real outcomes. In particular, I miss here the reference to specific scientific outcomes, with particular emphasis on interdisciplinary achievements, e.g.: 'Creating original and promising knowledge and gaining impactful scientific achievements in specific thematic and interdisciplinary areas'"*	Actionable	In bullet point *"New opportunities for research collaboration"* a more concise phrase: *"e.g. generating impactful knowledge and achievements"* was added in brackets in the new version of the model

Remarks on Question 3.5: Are the characteristics classified and grouped properly?

There were no remarks from experts in this area.

General comments to the Transversal Alliance Model:

No.	Expert remark	Category	Response/action taken
1	*"The most interesting and perspective model"*	Inspirational	No action needed
2	*"I mentioned earlier, find it hard to single it out from the other two"*	Strategic	The Transversal Model is generic and reflects on alliances which do not fall into thematic or typological categories. It aims to demonstrate the structure of alliances which operate across different missions, disciplines and profiles.
3	*"As explained before, I think the distinction between transversal and typological alliance can be a bit confusing - if possible, it could be interesting to differentiate further what makes an alliance typological"*	Strategic	In the thesis typological alliances were defined primarily by shared institutional profiles (e.g. technical, arts, business), whereas the concept around transversal alliances reflects broader diversity among

			partners and represents a generic model.
4	*"I do not submit additional remarks."*	Inspirational	No action needed
5	*"Flexible, strong and inclusive model, but could benefit from a clearer identity, operational mechanisms, and impact metrics and evaluation strategies."*	Strategic	The Transversal Model was intentionally designed to represent alliances that reflect institutional diversity, interdisciplinary approaches and adaptability. Its operational mechanisms, impact measurements and evaluation strategies could be included in the future research directions.
6	*"Again, I feel a bit like for the thematic alliance model, it does not take into account the possible diversity of these transversal alliances who are not quite as homogeneous in their form"*	Strategic	The Transversal Model is meant to provide a high-level framework rather than reflect on different internal variations of alliances which do not fall under thematic or typological categories.
7	*"What is the special feature of the transversal model if not the smallest common denominator of the other two? Should this model not be presented as the synthesis of all existing models setting out the basic features of any alliance? Instead of presenting it as a third type"*	Inspirational/ Strategic	Indeed, the Transversal Model is a theoretical synthesis that presents the foundational elements which are present among diverse European university alliances. It should be considered as a transversal framework which brings together common structures and practices creating a roadmap for alliances which do not fall into thematic or typological categories.
8	*"The model is constructed correctly in terms of methodology. It takes into account a number of criteria characteristic of this type of models. It is precise, prepared in a detailed manner"*	Inspirational	No action needed
9	*"General comments to all models: may be try another visual presentation with the connections between each model and clear specifications of each one... It could help for a more efficient analyze"*	Inspirational	The idea of mapping distinctions and connections between models is a valuable step towards presenting a clear vision of all 3 models and their interactions. It was included in the new version of the models where areas marked in different colors represent aspects typical for particular alliance model.
10	*"When is collaboration long-term (minimum 1 year, 2 years, 3 years, or 5 years)? What are the main opportunities for research collaboration?"*	Strategic	When it comes to European university alliances, a long-term collaboration would range between multi-year project-

			based strategic frameworks (e.g. 3-7 years) to indefinite commitments of the partners. Possible research collaborations within EUAs were presented in this thesis.
11	*"The three models: Thematic, Typological, and Transversal are poorly distinguishable. The content of the CANVAS thematic blocks in each model is similar. The assessment of each model individually is positive, but their specificity blurs when assessed together. I believe that this is the result of the criteria that were adopted at the "data analysis" stage and the questions included in the "surveys". I propose to reduce the descriptions (text) in the individual CANVAS blocks and highlight what distinguishes these models. However, since the cognitive goal is, among other things, to show similarities, I suggest entering the differences and then the similarities separately in the individual CANVAS blocks (or in the opposite order)."*	Actionable/ Inspirational	An important challenge of this research was to balance between similarities and differences of alliance models adapted by HEIs in Europe. The observed overlaps between models demonstrate the similarities between adapted solutions, however, the author agrees that more attention should be given to emphasize the distinctive features of the presented models, therefore, in the new versions of the models, the distinctions between them were highlighted in colors.
12	*"While this offers a really nice one-page picture of the fundamental components of a European university alliance, I think something needs to be done to more clearly articulate what this model means in comparison to the other two you've developed."*	Strategic	The aim of creating the Transversal Model was to represent alliances which do not fall into either the category of thematic nor typological alliances. Indeed, its role needs to be communicated more clearly which was presented in the follow-up discussion in this thesis.
13	*"In the 'value propositions' area "resources sharing" concept is repeated. In the first point there is "Strategic collaboration among universities, sharing resources and academic excellence". Also, in the third point there is "Sharing physical and digital infrastructure resources". The third point is substantively included in the first point. In my opinion, this is not a disqualifying weakness, but I draw attention to it for possible consideration"*	Actionable	The adjustments were made as proposed by the expert
14	*"If I have understood correctly, it is a more basic, less nuanced model of alliance."*	Strategic	The Transversal Model is presented in a more general form as it is meant to demonstrate the framework for alliances which do not fall under either thematic nor typological category

Summary of expert feedback on Transversal Alliance Model

The feedback related to the Transversal Alliance Model was the most diverse among the three models. While some experts appreciated model's flexibility and inclusive nature, others perceived it too vague or not clearly distinctive from the other two. Some remarks underlined that the model lacks clear identity, and one expert described it as "catch-all" framework for alliances which do not belong to the other categories.

- Actionable feedback focused on clarity around some of the terms and improving language precision. These remarks were incorporated into the canvas model and also were followed by some refinements in explanatory information provided in the thesis
- Strategic comments pointed out to the difficulty that some experts had in understanding the uniqueness of this model. A few experts proposed to frame it not as a third model, but as a framework which presents features common to different alliance types. This suggestion was in line with the author's original intention for that model to serve as a model for various institutional profiles and missions within alliances.
- Inspirational remarks highlighted the model's potential as a roadmap for open and inclusive cooperation among partner universities within various alliances.

In response to expert feedback, the name of the Transversal Alliance model was changed to **General Alliance model**. The new title better reflects on the model's features, such as: institutional diversity and wide range of strategic focus. The General Alliance model presented a flexible, comprehensive and integrative framework for alliances which provides flexibility and inclusive collaboration within different and diversified domains and areas.

Such adjustments clarified the purpose of the model and also aligned with this PhD research study cognitive and applicable goals. As a result of the expert feedback on the Transversal Alliance Model, a new revised version of the model with the new name - General Alliance Model, was prepared. See details in Fig. 59 below.

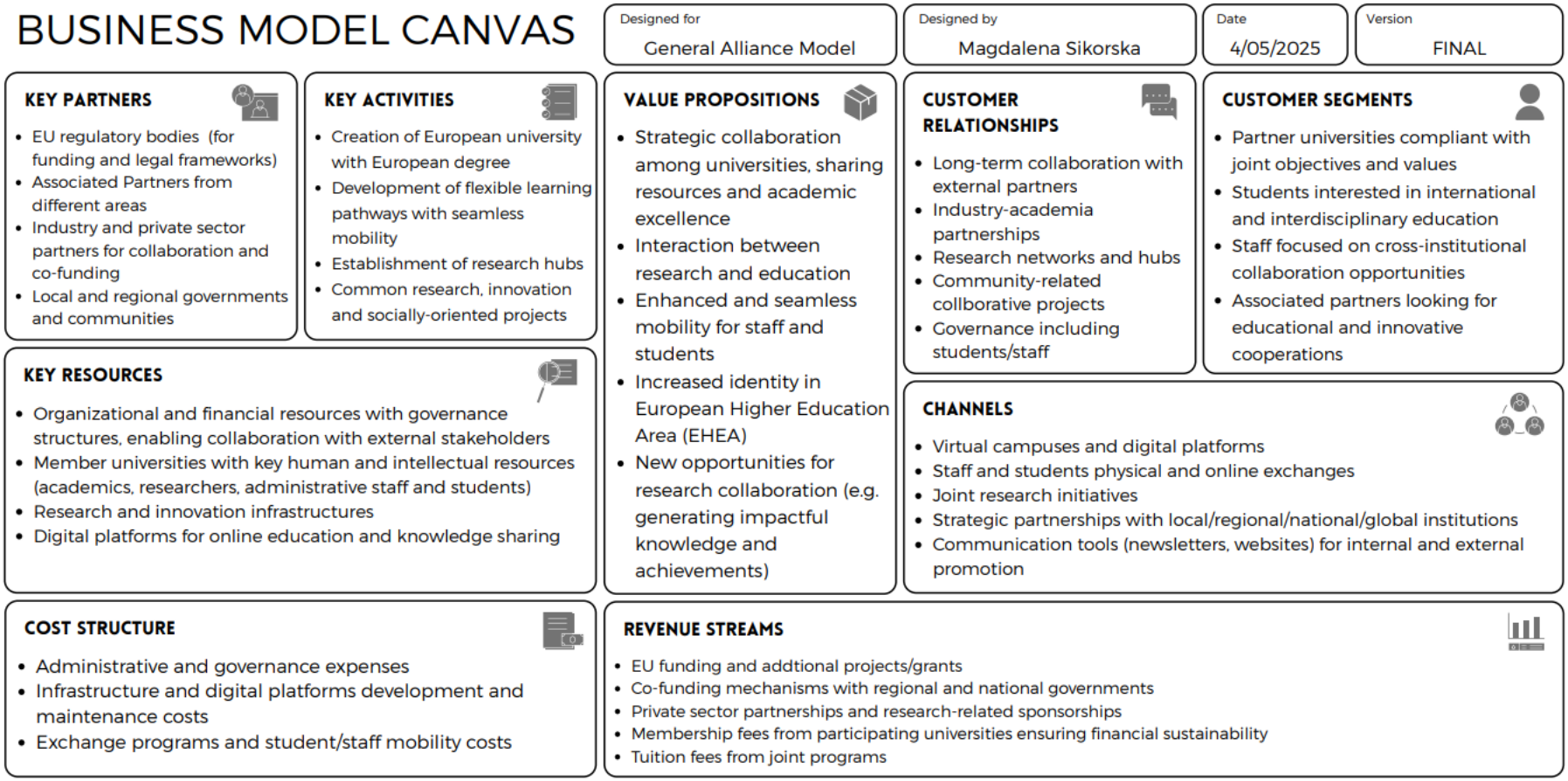

Fig. 59. Revised Business Model Canvas of the General Alliance Model based on expert assessment (source: author's own elaboration)

CONCLUSIONS

This dissertation investigated strategic mechanisms related to collaborative strategies among higher education institutions formed under the European Universities Initiative (EUI). Using triangulated research design which combined theoretical foundations, analysis of empirical data and expert verification, the study concluded with the following **key findings**.

The study confirmed that strategic alliances, as acknowledged in management theory, provide effective and relevant frameworks for understanding the consolidation efforts of HEIs within European Universities Initiative. The EUI alliances are parallel to business and corporate strategic partnerships, when it comes to the joint mission and goals, shared governance and coordinated operational mechanisms.

Adaptation of strategic management tools, such as: project planning and sharing resources were identified as key aspects of alliances functioning. Project planning was recognized as an important operational aspect that translates high-level strategic objectives into more concrete operational activities. Project methodologies applied to EUI alliances in the form of work packages, clear timelines, and pre-defined roles appeared to be helpful in the alliance formation and functionality, particularly in the pilot, early stages of alliance creation and operational phase. However, in order to provide long-term sustainability of the alliances other frameworks needs to be applied.

The growing importance of networking among HEIs was highlighted in the study. EUI alliances operate not as hierarchical structures, but as dynamic, interconnected networks of institutions with different levels of involvement and specialization. One of the most important findings of this study was the identification of three models of strategic collaboration within European Universities Initiative alliances:

- Thematic Alliance Model – focused on specific areas of education and research
- Typological Alliance Model – composed of institutions of similar type
- General (Transversal) Alliance model – characterized by broad strategic scope and institutional diversity

These diverse models reflecting different strategic priorities, governance structures and institutional approaches, demonstrated that there are many pathways for effective collaborations within EUI alliances. All three alliance models were transformed into a customized Business Model Canvases which allowed to visualize strategic scope, stakeholder

relationships, resources structure and value proposition in a structured way. These canvases serve as practical tools for alliance leaders and members to improve their strategic orientation and ensure similar orientation among all partners in the future.

The Delphi method applied in this study demonstrated strong agreement among selected experts (above 75% threshold) in terms of clarity, accuracy, terminology, completeness and classification aspects of the models with only some remarks for further models improvement. Experts' feedback confirmed models utility, not only as analytical tools, but also as guiding frameworks for alliance development and management. The study found some similarities, but also significant difference between governance models adopted by alliances. Some alliances preferred more centralized approaches, while others more distributed coordination systems.

The thesis directly addressed the research questions and the summary of the findings can be found in Tab. 11 below.

Tab. 11. Overview of research questions and related key findings
(source: author's own elaboration)

RESEARCH QUESTION	**KEY FINDINGS**
Q1 – Can a finite number of EUI models be identified to categorize the consortia?	✓ Yes. Three models were developed: Thematic, Typological and General (Transversal) Alliances Models
Q2 – Is it possible to differentiate features that indicate similarities within chosen models?	✓ Yes. Models share similar features in strategic focus, governance (multi-level), collaboration through work packages (project-based approach), stakeholder types, and joint education-research links
Q3 – Is there a relation between the size of EUI alliances and the number of associated partners (AP)?	✗ No. There is no definitive correlation which is statistically significant; other factors are to be considered, such as: existing partnerships, strategic goals or missions
Q4 – Can preferred governance models be identified within EUI?	✓ Yes. Governance tended to include hierarchical structures: strategic (Rectors/Presidents) and operational (Project Managers/Secretary Generals), as well as the usage of work packages

Furthermore, this research successfully addressed the core research problem of identification and development of collaborative strategic models to support the effective consolidation of higher education institutions within European Universities Initiative alliances. The cognitive

goals were fully met by providing comprehensive identification of EUI alliances and their geographical distribution in Europe, a comparative analysis of collaborative strategies within alliances and in-depth review of governance models of alliances. These finding of the thesis provided an understanding of the complex and diverse landscape of alliances and their operational modalities. When it comes to the application goal of the thesis, the creation of three strategic models of alliances – Thematic, Typological and Transversal (General) Models, contributed to the development of state-of-the model of internationalization strategies among HEIs in Europe. They were designed to strengthen European values, identity and international competitiveness of higher education institutions in Europe, as well as enhance the knowledge triangle and quality education. Therefore, this doctoral thesis fulfilled the aim of contributing valuable knowledge in the area of strategic management in the context of higher education in Europe.

While the core focus of this research was to develop and verify collaborative strategy models for higher education institutions in Europe within European Universities Initiative, the research process provided some practice-oriented insights. These insights, that originate from, both empirical evidence and practical experience of the author, formed the basis for the following **EU policy recommendations related to European Universities Initiative alliances**. These recommendations are intended to equip policy makers in advancing the effectiveness and sustainability of collaborations within European Universities Initiative:

- Support underrepresented regions to encourage their participation in EUI and reach geographical balance
- Limit further imposed extension of alliances to new members as it is related to challenges in governance
- Encourage engagement of alliances in local and regional partnerships e.g. through community-embedded research initiatives, creating regional innovation hubs
- Support deeper engagement of alliances with business, technological companies and innovative industries
- Develop legal framework for European degree and legal status of alliances
- Provide clear guidelines and best-practices models in order to integrate student representatives into alliances governance structures
- Establish EU platforms for exchange of best practices in different areas in order to support development of alliances

- Secure transition from short-term, project-based funding towards stable multi-year financing frameworks at EU and national levels to ensure long-term sustainability of alliances
- Encourage co-funding mechanisms involving member states, local authorities, and private stakeholders to diversify financial resources
- Develop a European legal and regulatory frameworks to standardize accreditation of joint programs and recognition of degrees which would also support and enhance seamless academic mobility
- Establish simplified administrative processes to enhance cross-institutional cooperation
- Promote active involvement and commitment from national governments to remove regulatory barriers, harmonizing policies at the EU and national levels
- Fund dedicated research infrastructures to be shared by alliances in order to enhance collaborative research and innovative approaches
- Promote dissemination activities and branding initiatives at EU-level, highlighting successful collaborations and showcasing best practices
- Establish clear indicators to track alliance performance, partner engagement, student participation, mobility rates, and research results

Over the last five years along the carried out research process the alliances evolved, therefore, based on this evolution, the author formulated the following **future research directions**. While this study investigates EUI alliances at early stage of their development, future research directions could explore how the three identified strategic models (Thematic, Typological and General) evolve over time. Longitudinal studies could evaluate how governance structures, associated partners involvement and strategic focus change over time when alliances shift from project-based management to deeper cross-border, inter-institutional cooperation and integration.

The Business Model Canvas demonstrated in this thesis offer a strategic visualization of different alliances types. These could be further tested with more case studies of other alliances. In particular General Alliance Model could be tested against the 23 alliances initially

categorized as “others” at the early stage of the comparative analysis, in order to investigate whether their characteristics correspond to this flexible and inclusive model.

The role of associated partners was shown as important, but APs have been inconsistently integrated among different alliances. Further studies could focus on benchmarking of stakeholders ecosystems within EUI alliances and examine how alliances can co-create added value with industry partners, regional actors, public and national authorities and other stakeholders at the regional, national and European levels.

Furthermore, based on the experts’ feedback on the developed models, the future research could include exploring innovative governance models of EUI alliances by examining decentralized coordination, co-shared leadership practices and mechanisms of cross-border and cross-institutional oversight. Future work could also explore how digital transformation strategies (e.g. join virtual campuses and digital platforms) are being shared and synchronized among partner universities across Europe.

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Annex 1. European Universities Initiatives Alliances Selected in 2019

ACRONYM	NAME OF ALLIANCE	ORGANISATIONS involved as full partner	COUNTRY
1EUROPE	UNA Europa	ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	IT
		FREIE UNIVERSITAET BERLIN	DE
		KATHOLIEKE UNIVERSITEIT LEUVEN	BE
		THE UNIVERSITY OF EDINBURGH	UK
		UNIVERSIDAD COMPLUTENSE DE MADRID	ES
		UNIVERSITE PARIS I PANTHEON-SORBONNE	FR
		UNIWERSYTET JAGIELLONSKI	PL
4EU+	The 4EU+ Alliance	KOBENHAVNS UNIVERSITET	DK
		RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG	DE
		SORBONNE UNIVERSITE	FR
		UNIVERSITA DEGLI STUDI DI MILANO	IT
		UNIVERZITA KARLOVA	CZ
		UNIWERSYTET WARSZAWSKI	PL
ARQUS	ARQUS European University Alliance	COMMUNAUTÉ D'UNIVERSITES ET ETABLISSEMENTS UNIVERSITE DE LYON	FR
		UNIVERSIDAD DE GRANADA	ES
		UNIVERSITA DEGLI STUDI DI PADOVA	IT
		UNIVERSITAET GRAZ	AT
		UNIVERSITAET LEIPZIG	DE
		UNIVERSITETET I BERGEN	NO
		VILNIAUS UNIVERSITETAS	LT
CHARMEU	CHARM European University (Challenge-driven, Accessible, Research-based, Mobile)	EOTVOS LORAND TUDOMANYEGYETEM	HU
		TRINITY COLLEGE DUBLIN	IE
		UNIVERSITAT DE BARCELONA	ES
		UNIVERSITE DE MONTPELLIER	FR
		UNIVERSITEIT UTRECHT	NL
CIVICA	CIVICA - The European University in social sciences	EUROPEAN UNIVERSITY INSTITUTE	IT
		HANDELSHOGSKOLAN I STOCKHOLM	SE
		HERTIE SCHOOL OF GOVERNANCE GEMMEINNUTZIGE GMBH	DE
		INSTITUT D'ETUDES POLITIQUES DE PARIS	FR
		KOZEP-EUROPAI EGYETEM	HU
		SCOALA NATIONALA DE STUDII POLITICE SI ADMINISTRATIVE	RO
		UNIVERSITA COMMERCIALE LUIGI BOCCONI	IT
CIVIS	CIVIS - a European civic university alliance	EBERHARD KARLS UNIVERSITAET TUEBINGEN	DE
		ETHNIKO KAI KAPODISTRIAKO PANEPISTIMIO ATHINON	EL
		STOCKHOLMS UNIVERSITET	SE
		UNIVERSIDAD AUTONOMA DE MADRID	ES
		UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
		UNIVERSITATEA DIN BUCURESTI	RO
		UNIVERSITE D'AIX MARSEILLE	FR
		UNIVERSITE LIBRE DE BRUXELLES	BE
CONEXUS	European University for Smart Urban Coastal Sustainability	AGRICULTURAL UNIVERSITY OF ATHENS	EL
		FUNDACION UNIVERSIDAD CATOLICA DE VALENCIA SAN VICENTE MARTIR	ES
		KLAIPEDOS UNIVERSITETAS	LT
		SVEUCILISTE U ZADRU	HR
		UNIVERSITATEA TEHNICA DE CONSTRUCTII BUCURESTI	RO

ECIUn	**ECIU University**	AALBORG UNIVERSITET	DK
		DUBLIN CITY UNIVERSITY	IE
		KAUNO TECHNOLOGIJOS UNIVERSITETAS	LT
		LINKOPINGS UNIVERSITET	SE
		TAMPEREEN KORKEAKOULUSAATIO SR	FI
		TECHNISCHE UNIVERSITAT HAMBURG	DE
		UNIVERSIDADE DE AVEIRO	PT
		UNIVERSITA DEGLI STUDI DI TRENTO	IT
		UNIVERSITAT AUTONOMA DE BARCELONA	ES
		UNIVERSITEIT TWENTE	NL
		UNIVERSITETET I STAVANGER	NO
EDUC	**European Digital UniverCity**	MASARYKOVA UNIVERZITA	CZ
		PECSI TUDOMANYEGYETEM	HU
		UNIVERSITA DEGLI STUDI DI CAGLIARI	IT
		UNIVERSITAET POTSDAM	DE
		UNIVERSITE DE RENNES I	FR
		UNIVERSITE PARIS NANTERRE	FR
EPICUR	**European Partnership for an Innovative Campus Unifying Regions**	ALBERT-LUDWIGS-UNIVERSITAET FREIBURG	DE
		ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
		KARLSRUHER INSTITUT FUER TECHNOLOGIE	DE
		UNIVERSITAET FUER BODENKULTUR WIEN	AT
		UNIVERSITE DE HAUTE ALSACE UHA	FR
		UNIVERSITE DE STRASBOURG	FR
		UNIVERSITEIT VAN AMSTERDAM	NL
		UNIWERSYTET IM. ADAMA MICKIEWICZA W POZNANIU	PL
EU4ART	**Alliance for common fine arts curriculum**	ACCADEMIA DI BELLE ARTI DI ROMA	IT
		HOCHSCHULE FÜR BILDENDE KÜNSTE DRESDEN	DE
		LATVIJAS MAKSLAS AKADEMIJA	LV
		MAGYAR KEPZOMUVESZETI EGYETEM	HU
EUGLOH	**European University Alliance for Global Health**	COMMUNAUTÉ D'UNIVERSITES ET ETABLISSEMENTS UNIVERSITE PARIS-SACLAY	FR
		LUDWIG-MAXIMILIANS-UNIVERSITAET MUENCHEN	DE
		LUNDS UNIVERSITET	SE
		SZEGEDI TUDOMANYEGYETEM	HU
		UNIVERSIDADE DO PORTO	PT
EUTOPIA	**European Universities Transforming to an Open, Inclusive Academy for 2050**	GOETEBORGS UNIVERSITET	SE
		THE UNIVERSITY OF WARWICK	UK
		UNIVERSIDAD POMPEU FABRA	ES
		UNIVERSITE DE CERGY-PONTOISE	FR
		UNIVERZA V LJUBLJANI	SI
		VRIJE UNIVERSITEIT BRUSSEL	BE
FORTHEM	**Fostering Outreach within European Regions, Transnational Higher Education and Mobility**	JOHANNES GUTENBERG-UNIVERSITAT MAINZ	DE
		JYVASKYLAN YLIOPISTO	FI
		LATVIJAS UNIVERSITATE	LV
		UNIVERSITA DEGLI STUDI DI PALERMO	IT
		UNIVERSITAT DE VALENCIA	ES
		UNIVERSITE DIJON BOURGOGNE	FR
		UNIWERSYTET OPOLSKI	PL
SEA-EU	**The European University of the Seas**	CHRISTIAN-ALBRECHTS-UNIVERSITAET ZU KIEL	DE
		SVEUCILISTE U SPLITU	HR
		UNIVERSIDAD DE CADIZ	ES
		UNIVERSITA TA MALTA	MT
		UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
		UNIWERSYTET GDANSKI	PL
UNITE!	**University Network for Innovation, Technology and Engineering**	AALTO KORKEAKOULUSAATIO SR	FI
		INSTITUT POLYTECHNIQUE DE GRENOBLE	FR
		KUNGLIGA TEKNISKA HOEGSKOLAN	SE
		POLITECNICO DI TORINO	IT
		TECHNISCHE UNIVERSITAT DARMSTADT	DE

YUFE	**Young Universities for the Future of Europe**	ITA-SUOMEN YLIOPISTO	FI
		UNIVERSIDAD CARLOS III DE MADRID	ES
		UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA	IT
		UNIVERSITAET BREMEN	DE
		UNIVERSITEIT ANTWERPEN	BE
		UNIVERSITEIT MAASTRICHT	NL
		UNIVERSITY OF CYPRUS	CY
		UNIVERSITY OF ESSEX	UK

Annex 2. European Universities Initiatives Alliances Selected in 2020

ACRONYM	NAME OF ALLIANCE	ORGANISATIONS involved as full partners	COUNTRY
ATHENA	Advanced Technology Higher Education Network Alliance	HELLENIC MEDITERRANEAN UNIVERSITY	EL
		NICCOLÒ CUSANO UNIVERSITY	IT
		POLYTECHNIC INSTITUTE OF PORTO	PT
		UNIVERSITY OF MARIBOR	SI
		UNIVERSITY OF ORLÉANS	FR
		UNIVERSITY OF SIEGEN	DE
		VILNIUS GEDIMINAS TECHNICAL UNIVERSITY	LT
Aurora Alliance	Aurora Alliance	COPENHAGEN BUSINESS SCHOOL	DK
		PALACKY UNIVERSITY OLOMOUC	CZ
		UNIVERSITY DUISBURG ESSEN	DE
		UNIVERSITY OF EAST ANGLIA	UK
		UNIVERSITY OF ICELAND	IS
		UNIVERSITY OF INNSBRUCK	AT
		UNIVERSITY OF NAPOLI FEDERICO II	IT
		UNIVERSITY ROVIRA AND VIRGILI	ES
		VU UNIVERSITY AMSTERDAM	NL
Circle U.	Circle U. European University	AARHUS UNIVERSITY	DK
		KING'S COLLEGE LONDON	UK
		UNIVERSITY OF BELGRADE	RS
		UNIVERSITY OF HUMBOLDT BERLIN	DE
		UNIVERSITY OF LOUVAIN	BE
		UNIVERSITY OF OSLO	NO
		UNIVERSITY OF PARIS	FR
E3UDRES2	Engaged and Entrepreneurial European University as Driver for European Smart and Sustainable Regions	POLYTECHNIC INSTITUTE OF SETÚBAL	PT
		POLYTEHNICA UNIVERSITY TIMISOARA	RO
		ST. PÖLTEN UNIVERSITY OF APPLIED SCIENCES	AT
		SZENT ISTVAN UNIVERSITY	HU
		UNIVERSITY COLLEGE LEUVEN LIMBURG	BE
		VIDZEME UNIVERSITY OF APPLIED SCIENCES	LV
EC2U	European Campus of City-Universities	ALEXANDRU IOAN CUZA UNIVERSITY OF IASI	RO
		FRIEDRICH SCHILLER UNIVERSITY OF JENA	DE
		UNIVERSITY OF COIMBRA	PT
		UNIVERSITY OF PAVIA	IT

		UNIVERSITY OF POITIERS	FR
		UNIVERSITY OF SALAMANCA	ES
		UNIVERSITY OF TURKU	FI
EELISA	**European Engineering Learning Innovation and Science Alliance**	BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS	HU
		FRIEDRICH-ALEXANDER UNIVERSITY ERLANGEN NÜRNBERG	DE
		HIGHER NORMAL SCHOOL	IT
		ISTANBUL TECHNICAL UNIVERSITY	TR
		NATIONAL SCHOOL OF CIVIL ENGINEERING	FR
		POLYTECHNIC UNIVERSITY OF BUCHAREST	RO
		PSL RESEARCH UNIVERSITY	FR
		SANT'ANNA SCHOOL OF ADVANCED STUDIES	IT
		TECHNICAL UNIVERSITY OF MADRID	ES
ENGAGE.EU	**The European University engaged in societal change**	LUISS UNIVERSITY	IT
		NHH NORWEGIAN SCHOOL OF ECONOMICS	NO
		TILBURG UNIVERSITY	NL
		UNIVERSITY OF MANNHEIM	DE
		UNIVERSITY OF NATIONAL AND WORLD ECONOMY	BG
		UNIVERSITY TOULOUSE 1 CAPITOLE	FR
		VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS	AT
ENHANCE	**European Universities of Technology Alliance**	CHALMERS UNIVERSITY OF TECHNOLOGY	SE
		NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY	NO
		POLYTECHNIC UNIVERSITY OF MILAN	IT
		POLYTECHNIC UNIVERSITY OF VALENCIA	ES
		RWTH AACHEN UNIVERSITY	DE
		TECHNICAL UNIVERSITY OF BERLIN	DE
		WARSAW UNIVERSITY OF TECHNOLOGY	PL
ENLIGHT	**European University Network to promote Equitable Quality of Life, Sustainability, and Global Engagement through Higher Education Transformation**	COMENIUS UNIVERSITY BRATISLAVA	SK
		GHENT UNIVERSITY	BE
		NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
		UNIVERSITY OF BORDEAUX	FR
		UNIVERSITY OF GÖTTINGEN	DE
		UNIVERSITY OF GRONINGEN	NL
		UNIVERSITY OF TARTU	EE
		UNIVERSITY OF THE BASQUE COUNTRY	ES
		UPPSALA UNIVERSITY	SE
ERUA	**European Reform University Alliance**	NEW BULGARIAN UNIVERSITY	BG

		ROSKILDE UNIVERSITY	DK
		UNIVERSITY OF KONSTANZ	DE
		UNIVERSITY OF PARIS 8	FR
		UNIVERSITY OF THE AEGEAN	EL
EUNICE	**EUNICE - European University for Customised Education**	BRANDENBURG UNIVERSITY OF TECHNOLOGY COTTBUS- SENFTENBERG	DE
		POLYTECHNIC UNIVERSITY OF HAUTS-DE-FRANCE	FR
		POZNAN UNIVERSITY OF TECHNOLOGY	PL
		UNIVERSITY OF MONS	BE
		UNIVERSITY OF CANTABRIA	ES
		UNIVERSITY OF CATANIA	IT
		UNIVERSITY OF VAASA	FI
EUniWell	**European University for Well-Being**	LEIDEN UNIVERSITY	NL
		LINNAEUS UNIVERSITY	SE
		SEMMELWEIS UNIVERSITY	HU
		UNIVERSITY OF BIRMINGHAM	UK
		UNIVERSITY OF COLOGNE	DE
		UNIVERSITY OF FLORENCE	IT
		UNIVERSITY OF NANTES	FR
EURECA-PRO	**The European University Alliance on Responsible Consumption and Production**	MITTWEIDA UNIVERSITY OF APPLIED SCIENCES	DE
		SILESIAN UNIVERSITY OF TECHNOLOGY	PL
		TECHNICAL UNIVERSITY FREIBERG	DE
		TECHNICAL UNIVERSITY OF CRETE	EL
		UNIVERSITY OF LEOBEN	AT
		UNIVERSITY OF LEON	ES
		UNIVERSITY OF PETROSANI	RO
EuroTeQ	**EuroTeQ Engineering University**	CZECH TECHNICAL UNIVERSITY IN PRAGUE	CZ
		ÉCOLE POLYTECHNIQUE	FR
		EINDHOVEN UNIVERSITY OF TECHNOLOGY	NL
		TALLINN UNIVERSITY OF TECHNOLOGY	EE
		TECHNICAL UNIVERSITY OF DENMARK	DK
		TECHNICAL UNIVERSITY OF MUNICH	DE
Eut	**European University of Technology**	CYPRUS UNIVERSITY OF TECHNOLOGY	CY
		DARMSTADT UNIVERSITY OF APPLIED SCIENCES	DE
		RIGA TECHNICAL UNIVERSITY	LV
		TECHNICAL UNIVERSITY OF CARTAGENA	ES
		TECHNICAL UNIVERSITY OF CLUJ-NAPOCA	RO
		TECHNICAL UNIVERSITY OF SOFIA	BG
		TECHNOLOGICAL UNIVERSITY DUBLIN	IE
		UNIVERSITY OF TECHNOLOGY OF TROYES	FR

FILMEU	**FILMEU - The European Universities Alliance for Film and Media Arts**	DÚN LAOGHAIRE INSTITUTE OF ART DESIGN AND TECHNOLOGY	IE
		LUCA SCHOOL OF ARTS	BE
		LUSÓFONA UNIVERSITY / COFAC	PT
		UNIVERSITY OF THEATRE AND FILM	HU
INVEST	**INnoVations of REgional Sustainability: European UniversiTy Alliance**	KARELIA UNIVERSITY OF APPLIED SCIENCES	FI
		SLOVAK UNIVERSITY OF AGRICULTURE IN NITRA	SK
		UNIVERSITY OF AGRIBUSINESS AND RURAL DEVELOPMENT PLOVDIV	BG
		UNIVERSITY OF THESSALY	EL
		VAN HALL LARENSTEIN UNIVERSITY OF APPLIED SCIENCES	NL
NeurotechEU	**European University of Brain and Technology**	BOGAZICI UNIVERSITY	TR
		IULIU HAȚIEGANU UNIVERSITY OF MEDICINE AND PHARMACY	RO
		KAROLINSKA INSTITUTET	SE
		MIGUEL HERNANDEZ UNIVERSITY OF ELCHE	ES
		RADBOUD UNIVERSITY	NL
		UNIVERSITY OF BONN	DE
		UNIVERSITY OF DEBRECEN	HU
		UNIVERSITY OF OXFORD	UK
RUN-EU	**Regional University Network – European University**	ATHLONE INSTITUTE OF TECHNOLOGY	IE
		FH VORARLBERG UNIVERSITY OF APPLIED SCIENCES	AT
		HÄME UNIVERSITY OF APPLIED SCIENCES	FI
		LIMERICK INSTITUTE OF TECHNOLOGY	IE
		NHL STENDEN UNIVERSITY OF APPLIED SCIENCES	NL
		POLYTECHNIC INSTITUTE OF LEIRIA	PT
		POLYTECHNIC OF CÁVADO AND AVE	PT
		SZÉCHENYI ISTVÁN UNIVERSITY	HU
T4E	**Transform4Europe – T4E: The European University for Knowledge Entrepreneurs**	ESTONIAN ACADEMY OF ARTS	EE
		SAARLAND UNIVERSITY	DE
		SOFIA UNIVERSITY ST. KLIMENT OHRIDSKI	BG
		UNIVERSITY OF ALICANTE	ES
		UNIVERSITY OF SILESIA IN KATOWICE	PL
		UNIVERSITY OF TRIESTE	IT
		VYTAUTAS MAGNUS UNIVERSITY	LT
ULYSSEUS	**Ulysseus: An open to the world, persons-centred and entrepreneurial European University for the citizenship of the future**	HAAGA-HELIA UNIVERSITY OF APPLIED SCIENCES	FI
		MANAGEMENT CENTER INNSBRUCK	AT
		TECHNICAL UNIVERSITY OF KOSICE	SK

		UNIVERSITY OF COTE D'AZUR	FR
		UNIVERSITY OF GENOA	IT
		UNIVERSITY OF SEVILLE	ES
UNIC	**The European University of Post-Industrial Cities**	ERASMUS UNIVERSITY ROTTERDAM	NL
		KOÇ UNIVERSITY	TR
		RUHR UNIVERSITY BOCHUM	DE
		UNIVERSITY COLLEGE CORK	IE
		UNIVERSITY OF DEUSTO	ES
		UNIVERSITY OF LIÈGE	BE
		UNIVERSITY OF OULU	FI
		UNIVERSITY OF ZAGREB	HR
UNITA	**UNITA - Universitas Montium**	UNIVERSITY BEIRA INTERIOR	PT
		UNIVERSITY OF PAU AND PAYS DE L'ADOUR	FR
		UNIVERSITY OF SAVOIE MONT BLANC	FR
		UNIVERSITY OF TURIN	IT
		UNIVERSITY OF ZARAGOZA	ES
		WEST UNIVERSITY OF TIMISOARA	RO
UNIVERSEH	**European Space University of Earth and Humanity**	AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY	PL
		HEINRICH HEINE UNIVERSITY DÜSSELDORF	DE
		LULEÅ UNIVERSITY OF TECHNOLOGY	SE
		UNIVERSITY OF LUXEMBOURG	LU
		UNIVERSITY OF TOULOUSE	FR

Annex 3. Foundational Data: European Universities Initiative Alliances - Call 2019

NO.	UNIVERSITY ACRONYM	UNIVERSITY NAME	LEADER	PARTNERS	MAIN CONCEPT	MODEL DESCRIPTION	ASSOCIATED PARTNERS INFO	H2020	UNIVERSITY WEBSITE	FACTSHEET
1	**1EUROPE**	UNA Europa	**KU Leuven (Belgium)**	Freie Universität Berlin (Germany), Alma mater Studiorum Università di Bologna (Italy), University of Edinburgh (UK), Uniwersytet Jagielloński w Krakowie (Poland), Universidad Complutense de Madrid (Spain), Université Paris 1 Panthéon-Sorbonne (France), University of Helsinki (Finland)	5 focus areas: cultural heritage, data science and AI, European studies, one health, sustainability	8 leading research universities, prior collaboration	38	UNA Resin: https://www.una-europa.eu/about/una.resin	https://www.una-europa.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-una-europa-updated.pdf
2	**4EU+**	4EU+ Alliance	**Heidelberg University (Germany)**	Sorbonne University (France), University of Copenhagen (Denmark), University of Milan (Italy), University of Warsaw (Poland), Charles University (Czechia)	3 challenges: boost meaningful mobility, increase inclusiveness and balance at European level, develop a common challenge-based framework for education; 4 flagship areas: health and demographic change in urban environments, transforming science and society by advancing computation, information and communication, biodiversity and sustainable development	comprehensive, research-intensive, public universities	23	TRAIN4EU+: https://4euplus.eu/4EU-31.html	https://4euplus.eu/4EU-1.html	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-4euplus.pdf
3	**ARQUS**	ARQUS European University Alliance	**University of Granada (Spain)**	University of Bergen (Norway), University of Graz (Austria), University of Leipzig (Germany), University of Lyon (France), University of Padua (Italy), Vilnius University (Lithuania)	Six main action lines: Widening Access, Inclusion and Diversity; Student-centred Frameworks for Quality Learning; Multilingual & Multicultural University; Entrepreneurial University and Regional Engagement; Research Support and Early Stage Researcher Development; Engaged European Citizens	7 longstanding comprehensive research universities who share extensive experience in joint projects and a common profile as internationalized institutions with deep regional engagement in medium-sized cities	0	ARQUS RI: https://www.arqus-alliance.eu/arqus-ri	https://arqus-alliance.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-arqus.pdf
4	**CHARM EU**	CHARM European University (Challenge-driven, Accessible, Rsearch-based, Mobile)	**University of Barcelona (Spain)**	Trinity College Dublin (Ireland), Utrecht University (The Netherlands), Eötvös Loránd University (Hungary), University of Montpellier (France)	At CHARM-EU we work together to design and create a new university model to become a world example of good practice to increase the quality, international competitiveness and attractiveness of the European Higher Education landscape.	CHARM-EU represents a Challenge-Driven, Accessible, Research-based and Mobile model for the co-creation of a European University aligned with the European Values, the European Green Deal and the sustainable development goals (SDGs).	12	TORCH: https://www.charm-eu.eu/torch	https://www.charm-eu.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-charmeu.pdf
5	**CIVICA**	The European University in social sciences	**Sciences Po (France)**	Bocconi University (Italy), Central European University (Austria and Hungary), European University Institute (Intergovernmental), Hertie School (Germany), National University of Political Studies and Public Administration (Romania), Stockholm School of Economics (Sweden), The London School of Economics and Political Science (United Kingdom)	4 key topics: Societies in Transition, Crises of Earth Democracy in the 21st Century, Europe Revisited, Data-Driven Technologies for the Social Sciences	The European University of Social Sciences unites leading European higher education institutions in the social sciences, humanities, business management and public policy	0	CIVICA research: https://www.civica.eu/civicaresearch/	https://www.civica.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-civica-updated.pdf
6	**CIVIS**	A European civic university alliance	**Aix-Marseille University (France)**	National Kapodistrian University of Athens (Greece), Université libre de Bruxelles (Belgium), Universitatea din Bucureşti (Romania), Universidad Autónoma de Madrid (Spain), Sapienza Università di Roma (Italy), Stockholms universitet (Sweden), Eberhard Karls Universität Tübingen (Germany) + 2	CIVIS is stimulated and structured on the foundation of the knowledge square: Education, Research, Innovation and Civic Engagement. The Mediterranean zone and Africa will be at the heart of our global strategy.	Rooted in their urban and regional landscape, our CIVIS member universities actively contribute to the social, cultural and economic dynamism of their ecosystem and promote European values such as inclusiveness, gender equality, non-discrimination and social equity. CIVIS will forge richer interactions and co-creation of knowledge and skills with citizens, schools, enterprises, social and cultural associations.	9	RIS4CIVIC: https://civis.eu/en/ris4civis	https://civis.eu/en	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-civis.pdf
7	**CONEXUS**	European University for Smart Urban Coastal Sustainability	**La Rochelle University (France)**	Agricultural University of Athens (Greece), Technical University of Civil Engineering of Bucharest (Romania), Klaipeda University (Lithuania), Catholic University of Valencia (Spain), University of Zadar (Croatia)	These partners are united around common values: sustainability, expertise, bravery and novelty.	EU-CONEXUS is focused on urban and semi-urban coastlines because they are increasingly densely populated and very important for inter alia, aquaculture and fisheries, energy and tourism. At the same time these coastlines are most vulnerable areas with regard to consequences of climate change	13	https://www.eu-conexus.eu/en/research/	https://www.eu-conexus.eu/en/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-euconexus.pdf

8	**ECIU**	ECIU University	**University of Twente (The Netherlandes)**	Aalborg University (Denmark), Dublin City University (Ireland), Hamburg University of Technology (Germany), Kaunas University of Technology (Lithuania), Linköping University (Sweden), Tampere University (Finland), Universitat Autònoma de Barcelona (Spain), University of Aveiro (Portugal), University of Stavanger (Norway), University of Trento (Italy), Institut National des Sciences Appliquées (France)	The ECIU University has developed a joint long-term research strategy on smart regions, building on the rapid development of digital infrastructures across Europe to address common research challenges related to SDG 11 (Sustainable Cities and Communities) topics.	Our collaboration is firmly based on expertise in innovative education, research, and knowledge exchange. We pride ourselves on being entrepreneurial, and on maintaining an innovative culture in our institutions, as well as providing a catalytic role for innovation in society. We are ECIU, the European Consortium of Innovative Universities, a network of 13 universities united since 1997 by a common profile of shared beliefs, interests, and mutual trust.	33	ECIU SMART-ER: https://www.eciu.org/smart-er-for-researchers#research-maps	https://www.eciu.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eciu-updated.pdf
9	**EDUC**	European Digital University	**University of Potsdam (Germany)**	University of Cagliari (Italy), Masaryk University (Czechia), University of Paris Nanterre (France), University of Pécs (Hungary), University of Rennes 1 (France)	Key action areas: establishment of structural foundations, innovative mobility, key skills and competences, sustainability and outreach, collaboration in research and innovation	The six partners of EDUC create a truly integrated European University with students, researchers and administrative staff who learn, impart and work at universities differing in size, age, native languages and focus. Using modern digital tools and face-to-face collaboration, we form a strong triangle of shared knowledge and academic values between Western, Central and Southern Europe, developing strong ties between local environments to tackle global challenges of the 21st century.	1		https://www.educalliance.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-educ.pdf
10	**EPICUR**	European University for an Innovative Campus Unifying Regions	**University of Strasbourg (France)**	Adam-Mickiewicz University of Poznań (Poland), Aristotle University of Thessaloniki (Greece), University of Natural, University of Amsterdam (The Netherlands)Resources and Life Sciences (Austria), Karlsruhe Institute of Technology (Germany), University of Haute-Alsace (France), University of Freiburg (Germany)	The project consists of six action programmes, each led by a university member of the alliance: Project management, steering the alliance (Strasbourg); Promote multilingualism and inclusive governance (Amsterdam); Implement innovative methods of learning and teaching for the European citizens of tomorrow (Freiburg); Open the way to an interuniversity campus, using a student and staff-centered approach (Aristotle U-Thessaloniki); Strengthen and connect regions through a European university: development within and between European regions (KIT); Dissemination and sharing of good practices, sustainable cooperation (Strasbourg)	Since November 2019, the teams in the 9 universities of the alliance are working together to test and experiment different approaches to make this vision a reality such as through multilingualism and safeguarding and strengthening European linguistic diversity, through student-centred learning and collaborative teaching formats inspired by a Liberal Arts and Science approach, through service-learning and research based internships closely connected to our regional eco-systems, and through imagining and facilitating new forms of mobility (physical, virtual, blended) available within an EPICUR inter-university campus.	0	EPICUR research: https://epicur.education/research/	https://epicur.edu.eu/pl/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-epicur.pdf
11	**EU4ART**	Alliance for common fine arts curriculum	**Dresden Academy of Fine Arts (Germany)**	Academy of Fine Arts of Rome (Italy), Art Academy of Latvia (Latvia), Hungarian University of Fine Arts (Hungary)	At the heart of EU4ART, four renowned European art academies are joining forces to address the most relevant research questions and pressing concerns arising from the education pathway that leads potential artists from school to university to professional life in the European Union. EU4ART Alliance has established a common structure to share art technique, specific knowledge and practical experience. EU4ART Alliance serves as a think-tank, supporting the development of policy and practice, and monitor the development of higher education institutions aimed at art in Europe.	The EU4ART European University, created by four higher art education institutions, aims to develop a common flexible curriculum in fine arts.	6	EU4ART_*differences* – Artistic Research in Europe: https://eu4art.eu/4research/	https://eu4art.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eu4art.pdf
12	**EUGLOH**	European University Alliance for Global Health	**Paris-Saclay University (France)**	Lund University (Sweden), University of Szeged (Hungary), University of Porto (Portugal), Ludwig Maximilian University of Munich (Germany)	Key goals: Interdisciplinary Global Health programmes across universities – striving towards a joint European degree; a vibrant, multicultural and inclusive inter-university campus; seamless mobility for students, staff and professionals – physical and virtual; strong links between higher education, research and local socio-economic ecosystems to prepare young people for the jobs of tomorrow; empowering future generations to find solutions for Global Health challenges.	The European University Alliance for Global Health (EUGLOH) brings together five universities from across Europe. Combining their outstanding expertise in Global Health, EUGLOH will build the European University of the future.	30	EUGLOHRIA https://www.eugloh.eu/research/euglohria	https://www.eugloh.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eugloh.pdf

13	**EUTOPIA**	European Universities Transforming to an Open, Inclusive Academy for 2050	**Universidad Pompeu Fabra (Spain)**	Vrije Universiteit Brussel (Belgium), Goeteborgs Universitet (Sweden), Université de Cergy-Pontoise (France), University of Warwick (United Kingdom), Univerza V Ljubljani (Slovenia)	EUTOPIA's collective aims to become by 2025 an open, multicultural, confederated operation of connected campuses that facilitates both free movements for all its members, whether staff or students, open cooperation and vigorous participation for all the citizens of its associated communities. In June 2019, the EEU alliance was chosen as one of the initial 17 winning projects of the new European Universities Initiative competitive call launched by the European Commission to build a European Higher Education Area.	The EUTOPIA European University (EEU) alliance brings together the operations and intentions of ten regionally and nationally distinct European universities	26	EUTOPIA TRAIN: https://eutopia-university.eu/english-version/portfolio/research/eutopia-train	https://eutopia-university.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eutopia.pdf
14	**FORTHEM**	Fostering Outreach within European Regions, Transnational Higher Education and Mobility	**Johannes Gutenberg-Universität Mainz (Germany)**	Université de Bourgogne (France), Jyväskylän yliopisto (Finland), Uniwersytet Opolski (Poland), Universita' degli Studi di Palermo (Italy), Latvijas Universitāte (Latvia), Universitat de València (Spain)	Our goal is to educate open-minded European citizens committed to our common democratic values, together solving the obstacles for seamless student and staff mobility and providing students with 21st century skills such as problem-solving, critical thinking, creativity, flexibility, self-direction and good communication skills because we believe in intercultural dialogue and in Europe's multiculturalism and multilingualism.	FORTHEM consists of multidisciplinary public research universities that are situated (all but one) outside capital regions. Each university comes from a diverse country, has distinct cultural heritages and languages, educational and administrative systems, economic and political realities, and varying stances regarding the European Union.	36	FIT FORTHEM: https://www.forthem-alliance.eu/fit-forthem/	https://www.forthem-alliance.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-forthem.pdf
15	**SEA EU**	The European University of the Seas	**University of Cádiz (Spain)**	University of Western Brittany in Brest (France), University of Kiel (Germany), University of Gdańsk (Poland), University of Split (Croatia), University of Malta (Malta)	Key deliverables and activities: generate new management and operational structures required for the joint governance of SEA-EU; remove academic barriers to credit recognition and develop a protocol for joint SEA-EU programmes at all educational levels, leading to the award of recognised joint degrees, and starting with marine and maritime issues; increase in both virtual/digital and physical mobility across the 6 universities of the Alliance; increase options for teaching study-units and courses offered in the English language and at least in one other (non-native) language across the SEA-EU community; craft and approve a longer-term, joint strategy for education and training with links to research and innovation, and to society.	SEA-EU aims to strengthen the links between teaching, research, innovation and knowledge transfer. It will encourage excellence in research and teaching to gain more knowledge and a better understanding and management of the marine environment. It will assist in building the human resources and skills necessary to match the needs of the evolving marine and maritime sectors, now and in the foreseeable future. SEA-EU will provide and improve tools and techniques to measure and anticipate ocean-based and driven impacts, build frameworks for more effective ocean governance as well as empower societies and communities to achieve the Sustainable Development Goals for the oceans.	32	reSEArch-EU: https://sea-eu.org/researcheu/	https://sea-eu.org/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-sea-eu.pdf
16	**UNITE!**	University Network for Innovation, Technology and Engineering	**Technische Universität Darmstadt (Germany)**	Aalto University (Finland), KTH Royal Institute of Technology (Sweden), Institut Polytechnique de Grenoble (France), Politecnico di Torino (Italy), Universitat Politecnica de Catalunya (Spain), Universidade de Lisboa (Portugal)	Based on their long-standing successful cooperation within the CLUSTER network, Unite! partners share a strong commitment to implement a paradigm shift for excellence in learning, teaching and research in accordance with the European core values of human dignity, liberal democracy, the rule of law, and social inclusion.	Unite! originates from the CLUSTER network – Consortium Linking Universities of Science and Technology for Education and Research – and builds on three decades of close and dedicated cooperation on different aspects of higher education, research, innovation and social responsibility. UNITE! (University Network for Innovation, Technology and Engineering) will educate a new generation of European students in science, technology and engineering, transcending the traditional engineering education, with an entrepreneurial mind-set.	0	UNITE H2020: https://www.unite-university.eu/about-us/european-universities-initiative/h2020	https://www.unite-university.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-unite.pdf
17	**YUFE**	Young Universities for the Future of Europe	**Maastricht University (The Netherlands)**	University of Antwerp (Belgium), University of Bremen (Germany), University of Cyprus (Cyprus), University of Essex (United Kingdom), University of Eastern Finland (Finland), Universidad Carlos III de Madrid (Spain), Tor Vergata University of Rome (Italy), University of Rijeka (Croatia), Nicolaus Copernicus University in Toruń (Poland)	We aim to bring radical change and transform the European higher education by becoming the leading model of a student-centred, open and inclusive European University. In this way, YUFE makes Europe-wide higher education a reality for local and international students of all backgrounds.	The cooperation within YUFE started from the YERUN network (Young European Research Universities Network) of which seven of YUFE's academic institutions are part, which allowed them to already work together on several joint activities. The Young Universities for the Future of Europe (YUFE) aims to bring a radical change by becoming the leading model of a young, student-centred, non-elitist, open and inclusive European University based on the cooperation between higher education institutions, public and private sector, and citizens.	4	YUFERING: https://yufe.eu/wp-content/uploads/2023/11/YUFERING_D5.2_YUFE_OS_Model_Guidelines_ResearchersEvaluation_public.pdf	https://www.yufe.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-yufe-updated-jan-2021.pdf

Annex 4. Foundational Data: European Universities Initiative Alliances - Call 2020

NO.	UNIVERSITY ACRONYM	UNIVERSITY NAME	LEADER	PARTNERS	MAIN CONCEPT	MODEL DESCRIPTION	ASSOCIATED PARTNERS INFO	H2020	UNIVERSITY WEBSITE	FACTSHEET
1	**ATHENA**	Advanced Technology Higher Education Network Alliance	**Instituto Politécnico Do Porto (Portugal)**	Hellenic Mediterranean University (Greece), Universität Siegen (Germany), Univerza v Mariboru (Slovenia), Universita Degli Studi Niccolo Cusano Telematica Roma (Italy), Université d'Orleans (France), Vilniaus Gedimino Technikos Universitetas (Lithuania)	To deliver inclusive, innovative, high-quality international education permanently aligned with global market needs, addressing societal and environmental challenges as well as European research priorities, thus granting the highest employability standards, effective career transitions to our students and added value to our ecosystem.	ATHENA is a federation of mid-size Higher Education Institutions in seven European countries	53		https://athena-uni.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-athena.pdf
2	**AURORA**		**Vrije Universiteit Amsterdam (The Netherlands)**	Háskóli Íslands: University of Iceland (Iceland), Universität Duisburg-Essen (Germany), Universitat Rovira i Virgili (Spain), Universität Innsbruck (Austria), Universita Federico II of Naples (Italy), Univerzita Palackévo v Olomouc (Czech Republic), Handelshøjskolen i København (Denmark), University of East Anglia (United Kingdom)	Aurora is a partnership of like-minded and closely collaborating research-intensive European universities, who use their academic excellence to drive societal change. As 11 universities working together, we aim to harness our academic prowess to influence societal change through research and educational activities –and ultimately to contribute to the achievement of the sustainable development goals.	Aurora was formed in 2016 as a consortium of research-intensive universities deeply committed to the social impact of their activities, and with a history of engagement with their communities.	12	Aurora RI: https://aurora-universities.eu/research/	https://aurora-universities.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-aurora.pdf
3	**CIRCLE U.**		**University of Oslo (Norway)**	Aarhus University (Denmark), Humboldt-Universität zu Berlin (Germany), King's College London (United Kingdom), Université de Paris (France), University of Belgrade (Serbia), University of Louvain (Belgium)	Our Circle, grounded in a dedication to ethical principles and a sustainable society, links together our missions in education, research, innovation and service to society, and paves the way for the universities of the future. Initiatives in key areas make these links stronger and concrete and focus efforts on sustainability.	Our seven universities are all comprehensive, research-intensive universities firmly built on academic freedom and integrity as fundamental values. Each play important roles in shaping national and regional higher education and research systems.	34	ERIA project ("Empowering Research and Innovation Actions"	https://www.circle-u.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-circle-u.pdf**
4	**E3UDRES2**	ENGAGED AND ENTREPRENEURIAL EUROPEAN UNIVERSITY AS DRIVER FOR EUROPEAN SMART AND SUSTAINABLE REGIONS	**St. Pölten University of Applied Sciences (Austria)**	Polytechnic Institute of Setúbal (Portugal), Polytehnica University Timisoara (Romania), Hungarian University of Agriculture and Life Sciences (Hungary), University College Limburg (Belgium), Vidzeme University of Applied Sciences (Latvia)	With a multidisciplinary international team, E³UDRES²' core topics of research revolve around the foundation and establishment of Future Universities, as well as the transformation of their environment and local communities into smart and sustainable regions. Scientists and educators with different backgrounds and experiences from all partner universities of E³UDRES² are currently actively conducting research and novel approaches in the areas of circular economy, human contribution to artificial intelligence, and wellbeing and active aging. E³UDRES² pools knowledge, core competences and skills and shares resources of the following six higher education institutions:	Our European University E³UDRES² consists of a combination of unique, scientific universities and universities of applied sciences (UAS). In addition, E³UDRES² members are ambitious, flexible, small or medium-sized university (<15,000 students), located in a small or medium-sized European city (<250,000 inhabitants) of one of the smaller European countries (<20 million Inhabitants) and anchored in their surrounding environments but internationally connected and active within the European Higher Education Area.	9		https://eudres.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-e3udres2.pdf**
5	**EC2U**	European Campus of City-Universities	**University of Poitiers (France)**	University of Coimbra (Portugal), University Alexandru Ioan Cuza of Iasi (Romania), Friedrich Schiller University of Jena (Germany), University of Pavia (Italy), University of Salamanca (Spain), University of Turku (Finland)	The Alliance's ambition is to develop an innovative space allowing mobility to flow freely between the seven universities and associated cities. This model of openness will contribute to overcome clichéd views of regional and national identities and achieve a united and stronger Europe.	Alliance consisting of seven long-standing, education- and research-led, locally and globally engaged universities from four diverse regions of the European Union	30	https://ec2u.eu/ri4c2-project-awarded-horizon-2020-funding/	https://ec2u.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-ec2u.pdf**
6	**EELISA**	European Engineering Learning Innovation and Science Alliance	**Universidad Politécnica de Madrid (Spain)**	Budapesti Műszaki és Gazdaságtudományi Egyetem (Hungary), École des Ponts ParisTech (France), Friedrich-Alexander-Universität Erlangen-Nürnberg (Germany), İstanbul Teknik Üniversitesi (Turkey), Scuola Normale Superiore (Italy), Scuola Superiore Sant'Anna (Italy), Universitatea Politehnica din București (Romania), Université Paris Sciences et Lettres (France)	EELISA aims to transform European higher education while strengthening links between engineering and society by: Re-inventing the "European engineer", Democratizing engineering education and more	first alliance of Higher Education Institutions (graduate engineering schools, technology universities and full-spectrum universities) from different countries in Europe meant to define and implement a common model of *European engineer* rooted in society.	34	https://eelisa.eu/eelisa-innocore/	https://eelisa.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eelisa.pdf**
7	**ENGAGE.EU**		**University of Mannheim (Germany)**	Luiss Libera Università Internazionale degli Studi Sociali Guido Carli (Italy), NHH Norwegian School of Economics (Norway), Tilburg University (The Netherlands), University of National and World Economy (Bulgaria), University Toulouse 1 Capitole (France), WU Vienna University of Economics and Business (Austria)	These existing and new challenges, such as digitalisation and artificial intelligence, climate change, ageing societies and migration, must be tackled successfully to ensure a sustainable and positive future. ENGAGE.EU will inspire active societal engagement in the current and future state of Europe – and beyond.	ENGAGE.EU is an alliance of leading European universities in business, economics, and the social sciences, which aims to provide European citizens with the set of skills and competences needed to tackle major societal challenges.	0		https://engageuniversity.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-engage.eu_.pdf**

8	**ENHANCE**	The European Universities of Technology Alliance	**Technische Universität Berlin (Germany)**	Chalmers tekniska högskola (Sweden), Norges teknisk-naturvitenskapelige universitet NTNU (Norway), Politechnika Warszawska (Poland), Politecnico di Milano (Italy), Rheinisch-Westfälische Technische Hochschule Aachen (Germany), Universitat Politècnica de València (Spain)	The aim of ENHANCE is to create a new European academic space for the interaction between innovative technological progress, society and our environment. The alliance is committed to socially inclusive and sustainable research and education. It applies inter- and transdisciplinary approaches and methods of co-creation and knowledge-exchange, to tackle to world's most pressing problems. To unlock our biggest potential, we allow the boundaries within our seven universities and society to become permeable. ENHANCE will ensure that education and research will have a positive social, economic and environmental impact. Our alliance will help to build a joint European sphere of knowledge, underpinning sustainable development, adhering to the highest standards of good practice in teaching and research, inclusivity and diversity.	ENHANCE will drive responsible societal transformation. Our strong alliance of seven European Universities of Technology will inspire and push for the development and utilisation of science and technology, for the benefit of society – turning global challenges into meaningful opportunities.	30	https://enhanceuniversity.eu/enhanceria/	https://enhanceuniversity.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-enhance.pdf
9	**ENLIGHT**	European university Network to promote equitable quality of Life, sustainability and Global engagement through Higher education Transformation	**Ghent University (Belgium)**	University of Bordeaux (France), University of the Basque Country (Spain), Comenius University Bratislava (Slovakia), National University of Ireland Galway (Ireland), University of Göttingen (Germany), University of Groningen (The Netherlands), University of Tartu (Estonia), Uppsala University (Sweden)	ENLIGHT aims to undertake a fundamental transformation of European higher education that empowers learners as globally engaged citizens with state-of-the-art knowledge, skills, and innovation potential to tackle major societal transitions and to promote equitable quality of life and sustainability. ENLIGHT wants to establish the foundations of an open integrated European University System to ensure the free movement of students and staff and sharing of resources.	ENLIGHT is a European University formed by nine comprehensive, research-intensive universities from nine European countries (Belgium, Estonia, France, Germany, Ireland, Netherlands, Slovakia, Spain, Sweden), training over 300,000 learners per year and sharing a deep commitment to their social responsibility.	23	https://www.ugent.be/en/research/research-ugent/eu-trackrecord/h2020/collaborative-h2020/enlight-rise.htm	https://enlight-eu.org/	**https://enlight-eu.org/docs/factsheets/ENLIGHT-EN.pdf**
10	**ERUA**	European Reform University Alliance	**The University of Paris 8 Vincennes Saint-Denis (France)**	Roskilde University (Denmark), The University of Konstanz (Germany), The University of the Aegean (Greece), The New Bulgarian University (Bulgaria)	We share a vision of universities as creative spaces, an awareness of the power of experimental approaches, and an understanding of the promises of diversity. To address the challenges and problems of today, we want to bring together academics from all of Europe and students from the top and bottom socio-economic deciles, from rural and urban settings, from local and global backgrounds. Together we aim to shape a more just, open and inclusive society.	As Reform Universities we continuously question and transform our institutions. We foster the critical function of the modern university by reflecting upon, assessing and advancing alternatives to current models. We do so by drawing upon the diverse experiences and backgrounds of the university community, which embody the diversity of the society around us, and encourage and allow all to participate in shaping the future of the university.	27		https://erua-eui.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-erua.pdf
11	**EUNICE**	European University for Customised Education	**Poznan University of Technology**	Brandenburg University of Technology Cottbus-Senftenberg (Germany), University of Cantabria (Spain), University of Catania (Italy), University of Mons (Belgium), Université Polytechnique Hauts-de-France (France), University of Vaasa (Finland)	The overall objective can be described in 4 main pillars. The first of them will be the establishment of EUNICE foundations – the long-term joint strategy as a European University where quality education meets research, innovations, society and industry. Secondly, to create EUNICE campus. The unique, inter-university space where students and staff members are inspired by the mobility, customised (student-oriented) curricula and work-based tasks. The third pillar creates a bridge between EUNICE campus and knowledge-creating teams where European identity will be expanded through culture and education with strong respect to the multilingualism and multiculturalism priorities. The final pillar aims to develop knowledge by research & training (industrial and challenge-based driven) concept as a perfect opportunity to link students, researchers, industrial partners, regional entities and civil society actors.	EUNICE partners are mostly mid-sized institutions that are characterised by an emphasis on people as individuals. In this context, interpersonal relationships are favoured, and the students are the focus of the partners' concerns. EUNICE will be a person-centred University, developing a customised education that will address the challenges of the industrial sector, society and the world of work. In order to do so, EUNICE will develop modern and innovative pedagogical methods and provide enhanced student services, in terms of enrolment, recognition, student counselling and guidance aimed at boosting the employability of all students.	50	REUNICE	https://eunice-university.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eunice.pdf
12	**EuniWell**	The European University for Well-Being	**University of Cologne (Germany)**	University of Birmingham (UK), University of Florence (Italy), Leiden University (Netherlands), Linnaeus University (Sweden), University of Nantes (France), Semmelweis University (Hungary)	EUniWell will take an integrated system-thinking approach to deliver a meaningful and sustainable step-change to the well-being of our institutions, staff, students, and societies. In partnership with societal stakeholders, and working across the knowledge-education-innovation axis, EUniWell will play a critical, intermediary role in shaping research-based policy and pedagogy to inform decision-making, underpin skills development, and realize a measurable impact on European citizens' quality of life.	EUniWell – has come together in response to the Council of the European Union's invitation for member states to pursue a horizontal, cross-sectoral, knowledge-based approach to advance the 'Economy of Wellbeing' (24 October 2019). It presents an action-oriented response to well-being, grounded in research expertise, educational leadership and civic engagement to meet the challenge set out by the Council of the European Union and the OECD.	102	https://cordis.europa.eu/project/id/101035821	https://www.euniwell.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-euniwell.pdf
13	**EURECA-PRO**	The European University on Responsible Consumption and Production	**Montanuniversität Leoben (Austria)**	Universidad de León (Spain), Politechnika Śląska (Poland), Technische Universität Bergakademie Freiberg (Germany), Polytechneio Kritis (Greece), Universitatea din Petroşani (Romania), Hochschule Mittweida (Germany)	EURECA-PRO is the global educational core hub and interdisciplinary research and innovation leader in qualitative environmental and social framework development for responsible consumption and production of goods	EURECA-PRO has a two-fold societal and planetary mission. Through its novel approach it, on the one hand, holistically contributes to the highly topical issue of Sustainable Consumption and Production under the umbrella of Sustainable Development Goal 12, and on the other hand it effectively contributes to the development of the European Higher Education Area complimentarily to Sustainable Development Goal 4.	24	The Research and Innovation dimension of EURECA-PRO has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 101035798.	https://www.eurecapro.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eureca-pro.pdf

14	**EuroTeQ**	Engineering University	**Technical University of Munich (Germany)**	Technical University of Denmark (Denmark), Eindhoven University of Technology (Netherlands), École Polytechnique (France), Tallinn University of Technology (Estonia), Czech Technical University in Prague (Czech Republic)	We share the conviction that the societal developments of recent years call for new approaches in equipping our graduates with the necessary skills and competences, which are relevant for shaping a sustainable future that offers high quality of living, equal opportunities, and economic growth.	Six leading universities of science and technology, spread across Europe, situated in innovation eco-systems and with great collaboration experience – EuroTeQ will introduce a paradigm shift in the engineering education of the future.	45	https://euroteq.eurotech-universities.eu/initiatives/scientific-output/boosteuroteq/	https://euroteq.eurotech-universities.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-euroteq.pdf**
15	**Eut+**	European University of Technology	**Université de technologie de Troyes (France)**	Hochschule Darmstadt, University of Applied Sciences (Germany), Rīgas Tehniskā universitāte (Latvia), Technological University Dublin (Ireland), Technical University of Sofia (Bulgaria), Cyprus University of Technology (Cyprus), Universidad Politécnica de Cartagena (Spain), Universitatea Tehnică din Cluj-Napoca (Romania)	EUt+ brings Europe, Universities and Technology together. Here is our shared vision on each of these principles, as articulated around our central pillar "Think Human First".	Our vision and mission are underpinned by the pivotal role that technology plays in forging an inclusive and sustainable future: humanity today faces challenges of unprecedented breadth such as climate change, overused resources, growing inequality, and the social consequences of the digital era.	39	https://www.univ-tech.eu/inno-eut	https://www.univ-tech.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-eut.pdf
16	**FILMEU**	European University Alliance for Film and Media Arts	**Lusófona University, Film and Media Arts Department (Portugal)**	LUCA School of Arts (Belgium), Institute of Arts, Design and Technology Dún Laoghaire (Ireland), SZFE University of Theatre and Film Arts (Hungary)	Our long-term vision implies that by 2025 FILMEU must be constituted as an exemplary collaborative structure able to deepen the cooperation between all members of the Alliance and foster their ability to act locally, regionally and globally in the cultural and creative industries and across other societal areas they impact.	FILMEU's main objective is to implement a European University of excellence focused in the fields of Film and Media Arts.	35	https://cordis.europa.eu/project/id/101035820	https://www.filmeu.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-filmeu.pdf**
17	**INVEST**	InnoVations of REgional Sustainability: European UniversiTy Alliance	**Slovak University of Agriculture in Nitra (Slovakia)**	Karelia University of Applied Sciences (Finland), University of Agribusiness and Rural Development (Bulgaria), University of Thessaly (Greece), Van Hall Larenstein University of Applied Sciences (The Netherlands)	Lead by the need to strengthen the link between teaching, research, innovation and knowledge transfer, encouraging mobility and enhancing the high quality and excellence in education and research, 5 universities have united their efforts based on their previous cooperation to establish the INnoVations of REgional Sustainability: European UniversiTy Alliance (INVEST)	Our vision is to create a modern European University fulfilling the needs and requirements of the new generation of Europeans willing to lead in the introduction of sustainable life in regions across Europe	23		https://www.invest-alliance.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-invest.pdf**
18	**NeurotechEU**	The European University of Brain and Technology	**Radboud Universiteit (The Netherlands)**	Universidad Miguel Hernández de Elche (Spain), Karolinska Institutet (Sweden), Rheinische Friedrich-Wilhelms-Universität Bonn (Germany), Boğaziçi Üniversitesi (Turkey), University of Oxford (The United Kingdom), Universitatea de Medicină și Farmacie „Iuliu Haţieganu" din Cluj-Napoca (Romania), Debreceni Egyetem (Hungary)	From health & healthcare to learning & education, Neuroscience has a key role in addressing some of the most pressing challenges that we face in Europe today. Whether the challenge is the translation of fundamental research to advance the state of the art in prevention, diagnosis or treatment of brain disorders or explaining the complex interactions between the brain, individuals and their environments to design novel practices in cities, schools, hospitals, or companies, brain research is already providing solutions for society at large.	Neuroscience has also a great promise to become an applied science, to provide brain-centred or brain-inspired solutions that could benefit the society and kindle a new economy in Europe.	250	https://cordis.europa.eu/project/id/101035817	https://theneurotech.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-neurotech-eu.pdf
19	**RUN-EU**	REGIONAL UNIVERSITY NETWORK - EUROPEAN UNIVERSITY	**Politécnico de Leiria (Portugal)**	Limerick Institute of Technology (Ireland), Athlone Institute of Technology (Ireland), Häme University of Applied Sciences (Finland), Politécnico do Cávado e do Ave (Portugal), NHL Stenden University of Applied Sciences (The Netherlands), Széchenyi István University (Hungary), Vorarlberg University of Applied Sciences (Austria)	Our mission is supported through the development of: Future and Advanced Skills Academies (FASA), which promote and develop joint student-centred, challenge and work-based flexible learning activities, including Short Advanced Programmes and European Degrees, through collaborative and pedagogically innovative inter-university and interregional approaches to higher education; European Innovation Hubs (EIH), which will stimulate and create joint interregional research, innovation and regional stakeholder engagement projects and activities across the alliance; European Mobility Innovation Centre (EMIC), which will build and share expertise in innovative physical and virtual mobility initiatives and will assess the quality of new mobility activities.	We are an established network of seven like-minded and regionally focused HEIs committed to societal transformation in our regions in the context of both new and emerging regional and global challenges but in particular sustainable regional development. To achieve this collective mission, we focus on the delivery of collaborative, future and advanced skills-based teaching, learning, research and engagement activities across the network. Partner institutes have a regional as opposed to a city focus and also have a proven track record in the delivery of future and advanced skills activities in teaching, learning, research and engagement relevant to future societal challenges.	34		https://run-eu.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-run-eu.pdf
20	**T4E**	The European University for Knowledge Entrepreneurs	**Saarland University (Germany)**	The University of Alicante (Spain), The Estonian Academy of Arts (Estonia), The University of Silesia in Katowice (Poland), Sofia University St. Kliment Ohridski (Bulgaria), The University of Trieste (Italy), Vytautas Magnus University (Lithuania)	As members of the Transform4Europe alliance, we share a common concept of transformation and our goal is to train and educate agents of change towards a more just, sustainable and resilient future, thereby acting as drivers of transformation ourselves. Proactive transformation as we understand it is the result of an analytical process and based on transformative knowledge-entrepreneurialism as described above.	Transform4Europe is a new partnership composed of like-minded universities. Despite our differences in size, scope and profile, we share a common vision for higher education in Europe as a major player in shaping the future of Europe through a knowledge-entrepreneurial approach embedded in our regions.	18	https://cordis.europa.eu/project/id/101035805/pl	http://www.transform4europe.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-t4e.pdf

21	**ULYSSEUS**	An open to the world, persons-centered and entrepreneurial European University for the citizens of the future	**University of Sevilla (Spain)**	University of Cote D'Azur (France), University of Genoa (Italy), Technical University of Košice (Slovakia), MCI | The Entrepreneurial School (Austria), Helia University of Applied Sciences (Finland)	We have a vision: to develop an excellency-recognized European University built upon the European values of social cohesion and respect for human rights. We strongly believe that European Universities should be open-to-the-world, solidary institutions beyond European borders.	Ulysseus thrives on a strong sense of community. From the oldest to the youngest educational institutions, from comprehensive to specialized business and technical Universities, from established, research-based centers to experts in entrepreneurship and academic innovation, our motto is to combine efforts, connect Europe, and gather the best of each region.	95		https://ulysseus.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-ulysseus.pdf
22	**UNIC**	European University of PostIndustrial Cities	**Erasmus University Rotterdam (The Netherlands)**	University of Deusto (Spain), Ruhr University Bochum (Germany), University College Cork (Ireland), Koç University (Turkey), University of Liège (Belgium), University of Oulu (Finland), University of Zagreb (Croatia)	UNIC's aim is to unlock a truly European experience for a new generation of students who will advance the post-industrial transformations of our cities. Highly-skilled graduates and new scientific disciplines that respond to the needs of the changing economy are in great demand, while deep technological and structural changes are affecting both how we teach and how we learn. We believe that universities in post-industrial cities are ideally placed to rethink and redesign higher education, and we believe the only way to do that is by empowering our students to co-create the UNIC University together with staff and city stakeholders.	The exceptionalism of our university resides in our locations, our histories and traditions, our experiences and the superdiverse nature of our student bodies. The differentiated vision of UNIC is that the cities are vital partners. Our universities work hand-in-hand with city institutions to ensure that urban issues feed into teaching and research in a manner that is accessible and inclusive for all learners. UNIC is inclusive, non-traditional, urban, and unique.	27	https://www.unic.eu/en/research	https://www.unic.eu/en	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-unic.pdf
23	**UNITA**	Universitas montium	**Università di Torino (Italy)**	Universidade Beira Interior (Portugal), Université de Pau et de Pays de l'Adour (France), Université Savoie Mont Blanc (France), Universitatea de Vest din Timisoara (Romania)	Our shared vision and values drive us to pursue these key objectives: 1. Creating a participative, open, inclusive and effective European university. 2. Developing excellent research-driven and student-centred education. 3. Promoting multilingualism and the diversity of languages in Europe. 4. Reducing inequalities between core and non-central regions through the sustainable development of rural and mountain areas. 5. Creating an inspiring learning environment. 6. Reaching Mobility 4 all. 7. Contributing to strengthening a European Identity. 8. Ensuring the continuity and uptake of the UNITA approach.	The name UNITA – almost the same as Italian unità (unity) – evokes the strong links and commonalities that bring us together to create a groundbreaking and innovative alliance aiming at a closer integration. The subtitle Universitas Montium, written in Latin, stresses that UNITA universities all speak Romance languages and are committed to fostering linguistic diversity and to the development of rural and cross-border mountain areas. We are an alliance of six comprehensive research universities from five countries with different sizes and trajectories	30	http://www.univ-unita.eu/	http://www.univ-unita.eu/	**https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-unita.pdf**
24	**UNIVERSEH**		**Université Fédérale de Toulouse (France)**	Université du Luxembourg (Luxembourg), Heinrich-Heine-Universität Düsseldorf (Germany), Luleå Tekniska Universitet (Sweden), Akademia Górniczo-Hutnicza im. Stanisława Staszica w Krakowie (Poland)	We wish to create new higher education interactive experiences for the university community, teachers and students, and for the benefit of society as a whole. Such initiatives will enable broadminded, informed and conscientious European citizens to capture and create new knowledge and become smart actors of European innovation, valorisation and societal dissemination within the Space sector, from science, engineering, liberal arts to culture.	UNIVERSEH is an alliance of five young and mature universities from five European countries. It was established in November 2020 to develop a new way of collaboration in the field of Space, within the new "European Universities" initiative promoted by the European Commission.	68		https://universeh.eu/	https://education.ec.europa.eu/sites/default/files/document-library-docs/european-universities-factsheet-universeh.pdf

Annex 5. European Universities Questionnaire

No.	QUESTION
	GENERAL INFORMATION
1.	What is the name of your alliance?
2.	What is the selection year?
3.	What is your role in the project?
	GOVERNANCE MODEL
4.	What is the governance model of your alliance? How is governance organized?
5.	What are the main governance bodies?
6.	What is the involvement of students in governance? Do you have a separate student governance body?
7.	Are there any barriers/limitations of the chosen governance model?
	ASSOCIATED PARTNERS
8.	How many associated partners do you have?
9.	How did you select your partners for this alliance? Which criteria were taken into account when selecting partners?
10.	What are the roles of your associated partners in your alliance?
	PREVIOUS COOPERATION
11.	What was your previous cooperation with other partners like (prior to creating this alliance)?
12.	How long before the creation of your alliance did you cooperate with your alliance partners?

	RESEARCH
13.	Can you indicate leading research areas within your alliance?
14.	Is this alliance joint research a priority compared to other research initiatives undertaken beyond the alliance?
	CREATING YOUR ALLIANCE
15.	What are the biggest obstacle/barriers in creating your alliance?
16.	How did the creation of your alliance contribute to the reinforcement/enhancement of your current university activities?
17.	Do you find common concept approach in creating your alliance a limitation or an asset? Would you chose a different approach today? If so, what would you do differently?
18.	What are your biggest achievements so far within the alliance?
19.	What is the added value of your alliance creation and cooperation between partners?
	FUTURE OF YOUR ALLIANCE
20.	What are the expected outcomes after 3-year pilot phase of this project?
21.	What are the biggest threats to your alliance?
22.	What are the main limitations of EUI?
23.	How do you foresee the future of your alliance in 2030?