THE PIONEER ALLIANCE MISSION STATEMENT

A European University Alliance committed to a future of inclusive, resilient and sustainable cities

Our ambition rooted in long-lasting cooperation

An alliance shaping the future of inclusive, sustainable and resilient cities

70% of Europe's population lives in urban areas. **Cities are at the forefront of the transition to a sustainable society** as the physical and social environment where most live. **It is at their level that many of the great challenges we face must be addressed, be they environmental** (climate change, pollution, land use)**, economic** (labour shortages, unemployment, poverty) **or social** (migration, exclusion, ageing, insecurity). As local governments, cities combine the strong legitimacy endowed by proximity to citizens with the capacity to act at scale for change. To maintain this connection with the public, cities must continue to renew their governance models to include **new forms of citizen participation** that offer channels for people expression and empower individuals and communities to be actors in the making of urban policy. The co-construction of **inclusive, sustainable, and resilient cities** requires, in particular, approaching the green and digital transitions from **interdisciplinary and holistic** perspectives. These are at the heart of the teaching and research skills of our universities' academic staff.

The PIONEER members are Université Gustave Eiffel (FR), Avans University of Applied Sciences (NL), ISCTE - University Institute of Lisbon (PT), Laurea University of Applied Sciences (FI), Technische Hochschule Köln - University of Applied Sciences (DE), University of Huelva (SP), IUAV University of Venice (IT), Tomáš Baťa University in Zlín (CZ) and University of Žilina (SK). Bern University of Applied Sciences (CH), although an associate member, is also fully committed in all the activities of the alliance.

Figure 1: The PIONEER Alliance partners

Joining our forces to better meet the challenges of cities

PIONEER's greatest asset in this respect is **to bring together 10 nationally leading universities, complementing each other, from as many countries in Europe.** They provide education to over 130.000 students with 16.000 faculty and staff members distributed on 34 campuses and 16 regions. They can boast a unique combination of scientific and professional educational fields, covering the wide range of disciplines that are needed to tackle the challenges of cities in an interdisciplinary way combining education and research on social sciences, humanities, arts, architecture, urban studies, public administration, information technologies, engineering, and many others.

Our partners' commitment to working for the good of the urban citizens has deep roots. It relies on both a long experience of serving cities in close cooperation with their ecosystems and a strong focus on sustainable development. The PIONEER Alliance will be served by the links with our campus cities and the unique strengths regarding sustainability each of us brings to the table:

- **A long experience of serving cities in close cooperation with their ecosystems.** Working on the challenges of cities is an integral part of our identity. As public institutions, serving citizens underpins our deep integration in our regional environments. All our universities are strongly connected with their ecosystems including cities, metropolitan areas, regions, private sector organisations, NGOs and civil society. Each alliance member brings unique strengths:
  Université Gustave Eiffel gathers a fourth of research staff forces on cities in France. Its excellence has been recognised by the funding, following the recommendations of an international jury, for the I-Site FUTURE, which is dedicated to urban studies. **AVANS University of Applied Science**, in the Netherlands, is famed for its close relations with the ecosystem stakeholders, student well-being programme, contribution to the development of the bio-based circular economy and the applied research on the relation between government and citizens. **ISCTE-University Institute of Lisbon** has a metropolitan vocation and the two campuses located in Lisbon and Sintra combine teaching and research in social sciences, digital technologies and architecture with an interdisciplinary perspective, in close connection with urban ecosystems.

Laurea University of Applied Science is strongly connected to the cities of the Helsinki-Uusimaa region and has an expertise of co-creation with ecosystems stakeholders. For these merits, it has been awarded as the first national Unit of Excellence for Regional Development. This legacy has been endorsed by all its educational and research programmes. **Technische Hochschule Köln – University of Applied Science** has strong ties not only within all business sectors of Cologne itself, but also with the chemical/pharmaceutical industry of the Leverkusen area, and with SME in the Oberberg county. In the spirit of famous entrepreneur Tomáš Baťa, **Tomáš Baťa University** places great emphasis on the entrepreneurial university and regional development concepts supported by excellent research in particular in the areas of applied informatics, security technologies and alternative sources of energy. Founded as the College of Railways, then renamed the University of Transports, the **University of Žilina** in Slovakia has a long record of training the engineers at the service of cities for all transport modes.

- **A strong focus on sustainable development.** The **University of Huelva**, Spain, was born out of societal demand, so from its beginning it has been strongly committed to society and its environment. The university includes leading research groups in green energies which adds up to a territory with strong potential as a hub for green hydrogen. The Erasmus Mundus master's degree in urban climate and sustainability contributes to create experts and professionals who are equipped, to lead the management of urban environments in a sustainable and climate-sensitive manner. **University Iuav of Venice** is committed to developing economic, environmental, and social sustainability by mainstreaming it into the actions and behaviours in teaching and research, governance, spaces, and community. To this end, IUAV promotes and organise many actions and projects while encouraging responsible lifestyles to improve the quality of the university experience and the relationship with the peculiar urban context of the city of Venice. **Bern University of Applied Sciences** has strong ties to the cities of the Bern region and has established collaboration in various areas ranging from smart cities, transdisciplinary transformation in urban development, to sustainable food systems while being an integral part of the innovation ecosystem in the region.

Our vision for a European open campus connected to ecosystems

PIONEER objectives. To enact our vision, we have defined 3 general objectives that will underpin the PIONEER project's actions in the years to come.

1) **Open campus**: Shape the inclusive PIONEER open campus with and for inclusive, sustainable and resilient cities, through extensive mobility, shared European values, career development and inter-operable tools.

2) **Co-creation of programmes**: Integrate education, research, development and innovation communities across partner universities & European city ecosystems for the co-creation of new skills and knowledge needed by the future inclusive sustainable and resilient cities and their citizens.

3) **Transformation**: Transform the partner universities to better orchestrate the collaboration of their communities and their ecosystems to develop generations of learners able to respond to the global challenges of inclusive, sustainable and resilient cities and maximise PIONEER alliance impact on society, as well as on educational and scientific excellence on the long-term.

A joint endeavour to build a European open campus for all learners

Our campus will be founded on the principle of openness: we envision PIONEER as an alliance for all, starting with students and staff, so that everyone can benefit from the opportunity to study or work abroad, to discover new cultures, and to be involved in our joint projects and structures. **PIONEER will give the opportunity of a European education to all our students**: thanks to physical mobility and internationalisation at home, everyone will have the chance to benefit from the educational offering in other PIONEER universities, and to participate to multiple joint online and blended learning activities. **The open European campus will enable students to develop three main sets of skills: linguistic** (being able to study and work in a foreign language), **intercultural** (capacity to collaborate with students and professors from diverse academic, professional and cultural backgrounds), **and international skills** (broadening their knowledge through comparative approaches across Europe). The PIONEER open campus will also be an environment where students will be able to deliberate and enact European values (democracy, human rights and sustainability). This education will foster European citizenship and enhance Europe-wide employability of students and staff.

PIONEER will orchestrate value co-creation

Strengthening the inclusion, sustainability and resilience of future cities requires creative thinking, the combination of multidisciplinary expertise, and the collaboration of many stakeholders embedded in different institutional and geographical environments. Organizing such collaboration between stakeholders who are very heterogeneous in terms of governance, priorities, time frames, and who are hierarchically independent is in itself a challenge. Drawing upon its scientific excellence on cities, broad geographical coverage, long-standing ties to the cities where its campuses are located, and collaborative expertise, **PIONEER's role is to be an interface enabling all stakeholders to develop creative thinking and work together for the future of cities through orchestration of value co-creation to citizens**.

Practically, the orchestration of value co-creation will include the following activities: 1) attracting the different categories of stakeholders to join the alliance activities; 2) connecting stakeholders, bridging their needs and knowledge, and building trust to encourage partnership at the European scale; 3) aligning and coordinating actors in order to share a common vision, agenda, vocabulary and set up cooperation rules to co-create value and manage conflicts; 4) ensuring value co-creation and fair sharing of value; and 5) maintaining and renewing stakeholder's engagement on new co-creation value proposition.

Leveraging the organic connections between universities, local governments, business and civil society

PIONEER universities' strategy to co-develop, experiment, implement and **scale-up the orchestration of value co-creation is supported by the quadruple helix approach**, a tool which helps us visualize the relations between the different stakeholders of the future of cities. The helix is made of four categories of stakeholders (1/ universities of the PIONEER alliance, 2/ public authorities, i.e. cities, metropolitan areas and regions, 3/ private sector: industry and SMEs, and 4/ citizens and civil society) whose actions constantly and organically interact and feed into each other to generate new knowledge and new skills. For example, the design of new curricula will be fed by the needs for expertise of metropolitan regions, will involve challenge-based learning and will encourage entrepreneurship. When the starting point is a research project, it will feed the development of new learning, involve citizens in the collection of data in living labs, and lead to innovation for new markets. The transformation will benefit to all

stakeholders (students, staff, and ecosystems stakeholders) through the European dimension of all activities, which will bring the complementary expertise, comparative approaches, practice sharing, as well as multiple exchange and project opportunities.

7 scientific topics to address the challenges of future cities

The PIONEER alliance's co-creation mission to shape education, research, development and innovation, and public policy on issues related to the future of cities will be focused on 7 scientific topical programmes and one transversal and soft skills programme.

The 7 topical programmes will also initiate projects linked to public policy, be it through traditional policy briefs, or through the orchestration of public debate and new channels for decision making, thus bringing a wide variety of stakeholders to the table, especially some that are not that experienced in working together.

The 7 topical programmes have been designed to answer the **needs of European citizens** following the **priorities defined by the EU**. In particular, the Green Deal, the 100 Carbon neutral cities, the Regional smart specialisation strategies, Digital transformation, and Open science are all at least partially covered by the topical programmes. The 7 topical programmes have also been carefully thought-out to be large enough to invite joint work by scholars coming from different disciplines and methodological traditions, and precise enough to co-create new relevant curricula and pave the way for genuine research agendas.

The 7 PIONEER topical programmes are listed below and associated with examples of subjects that can connect **the communities** to work on the needs of European citizens highlighted by the European networks of the partners:

1. **Questioning urban transitions.** Critically assessing urban transitions**,** including the role of the cities in society and citizen participation

2. **Nature in the city.** Assessing greening to capture CO2 and cool areas; Cultivations in urban areas; Developing biodiversity in urban areas

3. **Energy in the city.** Power supply, Energy consumption; Energy production; Innovative energy management; Energy Transition

4. **Vulnerability, inclusion, and health in the city.** Studying exposure to pollution; Critically assessing inequalities, inclusion, exclusion; Healthy living; Services and their accessibility for vulnerable population

5. **Mobility.** Sustainable and smart mobility; Shared mobility

6. **The Digital transition.** Addressing the effects of digitalization; Business transformation; Transformation of uses; Government and citizen interaction

7. **Sustainable and resilient cities.** Management mode at city level, strategic vision; Adaptability to natural and social crises: climate change, health crisis, terrorism; Sustainable materials.

The topical programmes are completed with an 8th programme for **transversal and soft skills** which will take care of activities related to multilingualism, European values such as participative democracy and human rights and staff training on learning methods.

The topical programmes, as well as the transversal and soft skills programme, implemented on the open campus, will contribute to 12 of the Sustainable Development Goals: SDG 3: Good health and well-being; SDG 4: Ensure

inclusive and equitable quality education and promote lifelong learning opportunities for all; SDG5: gender equality; SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all; SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; SDG10 : Reduced inequalities; SDG11: Make cities and human settlements inclusive, safe, resilient and sustainable; SDG 12: Ensure sustainable consumption and production patterns; SDG 13: Take urgent action to combat climate change and its impacts; SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; SDG 17: Partnerships for the goal.

PIONEER Structures

By 2024, the PIONEER open campus will be a daily reality for thousands of members of our communities across Europe, in 10 countries.

New structures will be established, shared by all our institutions, which will be ideal vehicles to achieve PIONEER's ambition. They will be channels designed for cooperation, regardless of participants' location.

- The **Knowledge Hub** will be structured around the 7 topical programmes, one soft and transversal skills programme and enabling activities. It will integrate the communities, processes and activities experimented in the (1) Education Hub, (2) Research, Development and Innovation (RDI) Hub which are closely related to the (3) Ecosystems Hub. The three hubs converge to support new European learning activities. Concretely, the Knowledge Hub topical programmes will include new curricula, double degrees, joint courses, micro-credentials, learning by developing
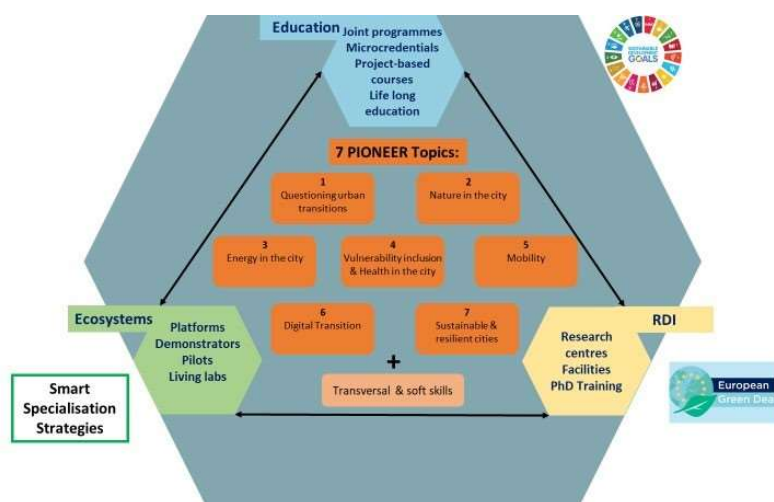

Figure 2: The PIONEER knowledge Hub

modules, lifelong education workshops, hackathons, comparative case studies, joint research proposals, etc. These European learning and research activities will be carried out with ecosystems partners at all levels: local, regional, and international. Thus, the European campus will enable to find new, multidisciplinary and transnational creative solutions to the global challenges of urban development.

- The **Forum** will support the Knowledge Hub by bringing together our ecosystem partners along with our members to work on projects of future cities which place students and learners at the heart of joint activities. It will be defined by openness: students, staff, associated partners, and any other relevant stakeholders, will be invited to take part in the co-creation activities. The Forum will maintain the interface with pan-European ecosystems to generate knowledge exchanges, orchestrate policy-making initiatives,

and offer avenues of research. The Forum will thus be at the centre of the network of stakeholders nurtured by the alliance, one of our great assets that will allow future cities and us to be more ambitious, to offer more value to everyone, to facilitate relevant academic research and placement of graduates, as we will all benefit from the relation of trust that will have been established. It will give companies participating in our ecosystems an opportunity to work with the Living Labs, Test Beds, Research Infrastructures and Technology Infrastructures available in cities and with the PIONEER partners in order to co-create, test, validate and scale-up innovation across Europe. The Forum will facilitate talents circulation, help to identify employment and research needs, provide students with internships offers, and showcase PIONEER training offering for citizens, cities, companies and NGOs. This Forum will be nurtured by the cutting-edge knowledge from education and research, development and innovation programmes from the PIONEER orchestrating committee; it will operate through regular events during the project and beyond and a digital platform to maintain interactions between events.

PIONEER Alliance governance

Governance principles

Our governance was designed to conciliate wide representation of our communities' stakeholders with effective decision making, taking into account that we need to work together across 10 countries and as many academic cultures. Multilateralism will be not only a necessity, but a principle and a value: we aspire at projects undertaken with wide support, thus accepting the needs for compromise as inherent to achieve our ambitions.
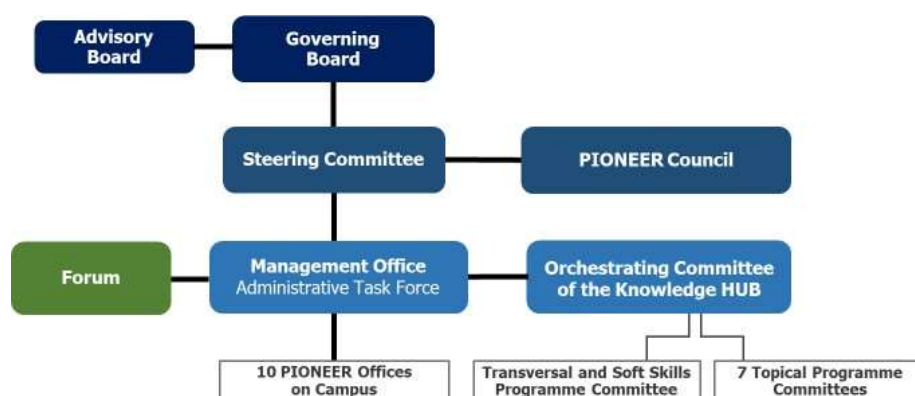

Figure 3: Alliance Governance and structures

Governance bodies

The Alliance **strategic** governance will be ensured by the **Governing Board** of Rectors supported by the Advisory Board composed of 10 members external to our universities and providing expert advice to decision-makers. The Governing Board will define the strategic orientations and the allocation of means requested for the long-term sustainability. The Alliance **executive** governance bodies will implement the strategy: the **Steering Committee** will be composed of one representative and their deputy for each member, and a **PIONEER council** of Elected Representatives will ensure that all voices are heard, including that of students, academic and non-academic staff,

so that PIONEER moves forwards with our communities. The representatives will be designated through common rules adopted by the alliance with the aim of ensuring fair representation.

The Alliance **operational** governance will be the responsibility of the **Management Office** supported by an administrative task force and **10 PIONEER offices** located at each of the members' local campus. The Management Office will enable PIONEER to operate the activities in line with the strategy. It will support the **Orchestrating Committee** and the **Forum** ensuring the constant connection with ecosystems. The orchestrating committee will coordinate the PIONEER knowledge HUB activities. It will comprise **7 Programme Committees**, each focused on a thematic topic (*Questioning urban transitions; Nature in the city; Energy in the city; Vulnerability, inclusion, and health in the city; Urban mobility; Digital transition; Sustainable and resilient cities*) and one **Transversal and Soft skills** programme committee.

The Alliance **General Assembly** will gather all PIONEER bodies, representing all members of our communities, including students' representatives.

Implementation: the transformation trajectory

The building of the PIONEER Alliance itself will epitomise the co-creation process which will be the role model for the transformation of Higher Education Institutions (HEIs) to develop close collaboration with their ecosystems.

Transforming

A 3-step trajectory will guide the implementation of the PIONEER alliance and the transformation of our universities:

1) ENABLING the transformation by

- o Creating the orchestration model of value co-creation: providing initial guidelines for the development of joint activities based on the diversity and strengths of each partner, and defining specifications for interoperable digital solutions;
- o Developing toolkits, procedures and practices to enable orchestration activities (mobility, diversity and inclusion plan, career development);
- o Sharing overarching academic and European values.

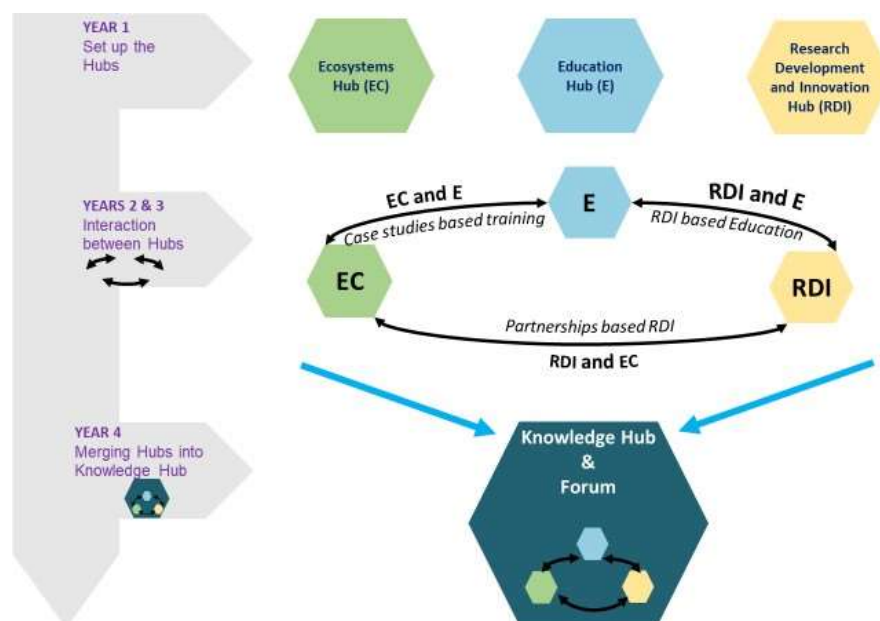**2) EXPERIMENTING the transformation by**

- o Building three hubs to gradually implement the orchestration model of cooperation;
- o Bringing communities together at the European level, connecting, sharing and foreseeing;
- o Implementing and experimenting value co-creation with topical programmes and cross-cutting activities enacting the quadruple helix model;
- o Analysing results and giving feedback in an iterative process.

3) Scaling-up the transformation by

- o Refining the guidelines based on pan-European cross-institutional experience
- o Scaling up the orchestration activities with a growing number of students, staff and partners from the ecosystems
- o Institutionalising the orchestrating committee including coordinators and Forum representatives.
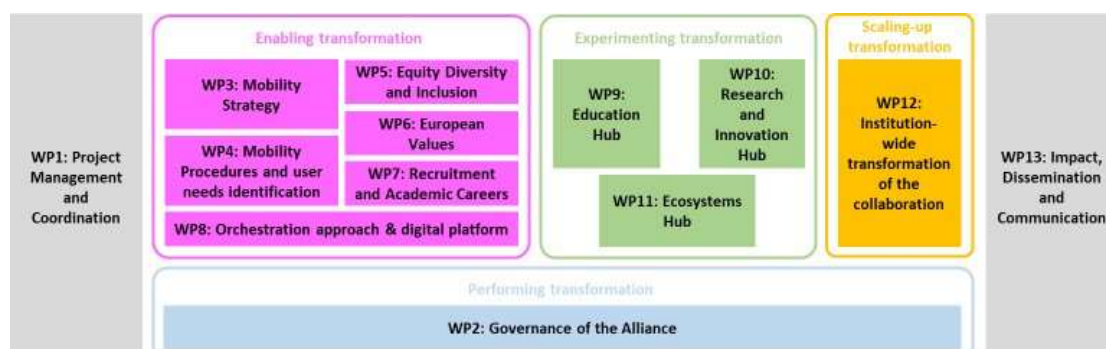
Figure 4: the transformation trajectory

The workplan

The work plan we have jointly elaborated has been designed to achieve the 3 PIONEER general objectives and thus **the three steps of transformation** of the HEIs into an alliance with an open campus.

Figure 5: The Workplan

Management and coordination

WP1 concerns the project management and coordination. It ends at year 4, whereas the Alliance governance is set up in a dedicated work package (WP2) to last on the long term with sustainable structures. WP1 will construct the project management structure, ensure the reporting, the organisation of management meetings and the quality of the deliverables.

Enabling transformation

Our commitment is to build an inclusive open campus with and for inclusive, sustainable, and resilient cities through extensive mobility, shared European values, career development and interoperable tools. Shaping together an ambitious mobility strategy will benefit all the members of our communities (WP3), including our staff who will have opportunities for career development across partner universities (WP7), it will be achieved thanks to the development of common and interoperable tools (WP4). As a European community, we will work on defining our

common values (WP6) including multiculturalism and multilingualism, which we will enact through the nurturing of diverse and inclusive environments in every one of our institutions (WP5). Our experience of working together will form the basis for the co-creation of the PIONEER Orchestration approach supported by the digital platform (WP8).

Experimenting transformation

We will strive to integrate education, research, development and innovation communities across partner universities and European city ecosystems for the co-creation of new skills and knowledge and innovation for the future inclusive sustainable and resilient cities with 3 hubs. The formation of an integrated PIONEER educational community will be central to our work, with the aim of transforming educational and learning activities (WP9), it will go hand in hand with a commitment to build a true Europe-wide research, development and innovation community (WP10). The relevance of the educational programmes and research will be shaped by co-creating on joint action plans with the ecosystem partners (WP11). Together, we will thus be actors in the emergence of transnational ecosystems communities dedicated to common values and to a shared vision of shaping the future of cities.

Scaling-up transformation

We will seek to transform the partner HEIs to orchestrate the communities and their ecosystems to develop a new generation of learners, knowledge producers and innovators able to respond to the global challenges of inclusive, sustainable, and resilient cities and maximise the PIONEER alliance long-term impact on society, educational and scientific excellence. In practice, the pan-European cross-institutional activities co-created, experimented and evaluated in the 3 hubs will be expanded to a larger scale in the overarching Knowledge Hub based on validated guidelines (WP 12).

Performing transformation

To provide a strong and reliable framework for our common endeavours, we will set up governance structures at 3 levels: strategic, executive, and operational (WP2). We will prepare the alliance programmes covering the topical areas with the PIONEER communities (WP12) gathered into the knowledge hub for long-term co-creation. The connections and the dynamic built with the external partners will be kept and reinforced through the Forum activities and exchanges, nurtured with the available tools of its Digital platform (WP8) to allow students and learners empowerment.

Communication, dissemination and impact

WP13 supports the communication, dissemination and impact of both the project and the Alliance. While constructing the PIONEER Alliance, the members will engage into a **systematic reflective and evaluative analysis** of the co-creation process to act as a **role model** for other European universities aiming at connecting closer with their ecosystems. The orchestration of the PIONEER innovative co-creation processes will lead to new institutional forms of cooperation and will constitute a role model that will provide guidelines for the transformation of European HEIs. To spread the lessons learned from our experience in co-creating and implementing the alliance's projects, and reach out to the public to explain our achievements, we will design a dissemination and communication strategy, the tools necessary for its successful implementation, and edit and disseminate a **White Book** explaining the PIONEER orchestration Model (WP13).