

BRIDGING PROJECTS AND POLICY: BLUEPRINTS FOR SECTORAL COOPERATION ON SKILLS – 2024 Edition

Blueprint Alliances 2017 - 2021

Pact for Skills report | 2024

Power-up skills: developing Europe's workforce

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Abbreviations

Countries

Acronym	Meaning	Acronym	Meaning
AT	Austria	IT	Italy
BE	Belgium	LT	Lithuania
BG	Bulgaria	LU	Luxembourg
CY	Cyprus	LV	Latvia
CZ	Czechia	MT	Malta
DE	Germany	NL	Netherlands
DK	Denmark	NO	Norway
EE	Estonia	PL	Poland
EU	European Union	PT	Portugal
ES	Spain	RO	Romania
FI	Finland	SE	Sweden
FR	France	SI	Slovenia
GE	Georgia	SK	Slovakia
EL	Greece	SR	Serbia
HR	Croatia	TR	Türkiye
HU	Hungary	UA	Ukraine
IE	Ireland	UK	United Kingdom

Terminology

Acronym	Definition
Blueprint	Blueprint Alliance for sectoral cooperation on skills
CoVE	Centre of Vocational Excellence
ECVET	European credit system for vocational education and training
ESCO	European Skills, Competences, Qualifications and Occupations compendium
EQF	European Qualifications Framework
EQAVET	European Quality Assurance in Vocational Education and Training
FWL projects	Forward-Looking projects

HE	Higher Education
LSP	Large-Scale Partnership
MOOC	Massive Open Online Course
RSP	Regional Skills Partnership
SME	Small and medium-sized enterprises
S3	Smart Specialisation Strategies
TVET	Technical and Vocational Education and Training
VET	Vocational Education and Training
VOOCS	Vocational Open Online Courses
WISEs	Work Integration Social Enterprises

Introduction

This paper presents an overview of activities and outputs of the Blueprints for sectoral cooperation (referred to as Blueprints in this report) that are funded through the Erasmus+ programme. Blueprints support collaboration between businesses, trade unions, research institutions, education and training authorities, and public authorities with the aim of developing and implementing strategies to address skills gaps in specific sectors/ecosystems. In the current programming period (2021–2027), Blueprints are supported through the Erasmus+ action – ‘Alliances for Innovation – Lot 2: Alliances for sectoral cooperation on skills’. The Blueprints approach was introduced in 2016 by the Skills Agenda and follows on from the Sector Skills Alliances, which were implemented under the former Leonardo da Vinci programme.

This report showcases the progress made by the 28 Blueprint Alliances that have been funded between 2018 and 2022, out of the total of 40 Blueprints that have been funded since 2018. The present report builds on the [‘Bridging projects and policy: Blueprints for sectoral collaboration’](#) paper published in 2023. It provides:

- updated information on the 21 Blueprints featured in the previous edition;
- new summaries for the seven Blueprints that started their activities in 2022.

The next section of the report presents an overview of the Blueprints, including the main trends and activities, emerging lessons and themes, as well as an overview of Blueprint products and outputs that is presented in Annex 3. The report then presents more detailed summaries of each individual Blueprints including the main activities and impacts achieved to date, as well as synergies and connections with other relevant initiatives including with the Pact for Skills. Through these summaries, this report aims to promote the Blueprints and their achievements, encourage their upscaling and strengthen the synergies with the Large-Scale and Regional Partnerships under the Pact.

For the drafting of this report, the following research activities were undertaken:

- desk research with a focus on Blueprints’ websites and other relevant sources (including the [EU Funding and Tenders Portal](#));
- consultation with Blueprint coordinators, complemented by ad-hoc queries where needed.

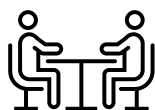
The report was finalised and published in November 2024.

Blueprints for sectoral cooperation: main trends

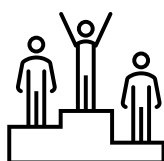
This section outlines key trends observed across the 28 Blueprints for sectoral cooperation on skills examined in this paper, focusing on the Blueprint consortia and organisations, their main achievements, and strategies for ensuring sustainable results. It also presents an overview of the links between the Blueprints, the Pact for Skills and other EU skills-related initiatives, such as Centres of Vocational Excellence (CoVEs) and Forward-Looking Projects.

Blueprint consortia

As shown in Table 1, the 28 Blueprints that were funded between 2018 and 2022 comprised 676 partner organisations¹. There are on average 24 partners per Blueprint consortium, and the size of consortia varies, ranging from a minimum of 14 (PANTOUR) to 39 (SPIRE-SAIS) partners.



Average consortium size: 24



Largest consortium: SPIRE-SAIS (39 partners)



Average country coverage: 12

Partners in consortia usually include national, EU-level or international-level industry associations, chambers of commerce, individual companies, trade unions, (technical) universities, research centres and vocational education and training (VET) providers. As reported above, the average size of consortia overall is 24 but the average consortia size ranges from 32 in Energy-Intensive Industries ecosystem to 15 in the Tourism ecosystem. Blueprint consortia cover a wide range of countries, both within and outside the EU. On average, consortium members come from 12 different countries, with the greatest diversity of partners found in Blueprints under the Creative and Cultural Industries ecosystem (17). The countries most represented across Blueprint consortia are Italy (79 partners out of 676 overall, 12%) and Spain (71 partners out of 676 overall, 11%). Further information on consortium composition is presented in Table 1 below.

¹ Following Erasmus+ calls for proposals in 2022, 2023 and 2024, 20 additional Blueprints have been funded. These started operating in 2023 onwards and cover ecosystems including Retail, Proximity & Social Economy, Electronics, Mobility-Transport, Textile, Health, Digital, Aerospace & Defence, Renewable Energy, Agri-Food, Construction. These Blueprints will be covered in subsequent editions of this paper.

Table 1 Overview of consortiums by ecosystem (2018 to 2022)

Ecosystem	Number of consortiums	Total number of organisations	Average consortium size	Average country coverage	Country of coordinating organisations
Additive Manufacturing ²	1	18	18	9	EU-level
Aerospace & Defence	2	55	28	12	IT
Agri-Food	2	60	30	12	IT
Construction	1	25	25	12	ES
Creative & Cultural Industries	2	50	25	17	ES; NL
Digital	4	89	22	12	EU-level; FR; LT
Electronics	1	19	19	12	EU-level
Energy-Intensive Industries	2	63	32	12	DE; EU-level
Health	1	25	25	11	EU level
Mobility-Transport-Automotive	4	102	26	12	CZ; IT; NL; SE
Proximity & Social Economy	2	56	28	10	ES; EU-level
Renewable Energy	3	62	21	11	ES; IT
Textiles	1	23	23	9	EU-level
Tourism	2	29	15	9	ES; IT
Total	28	676	24	12	8 different countries

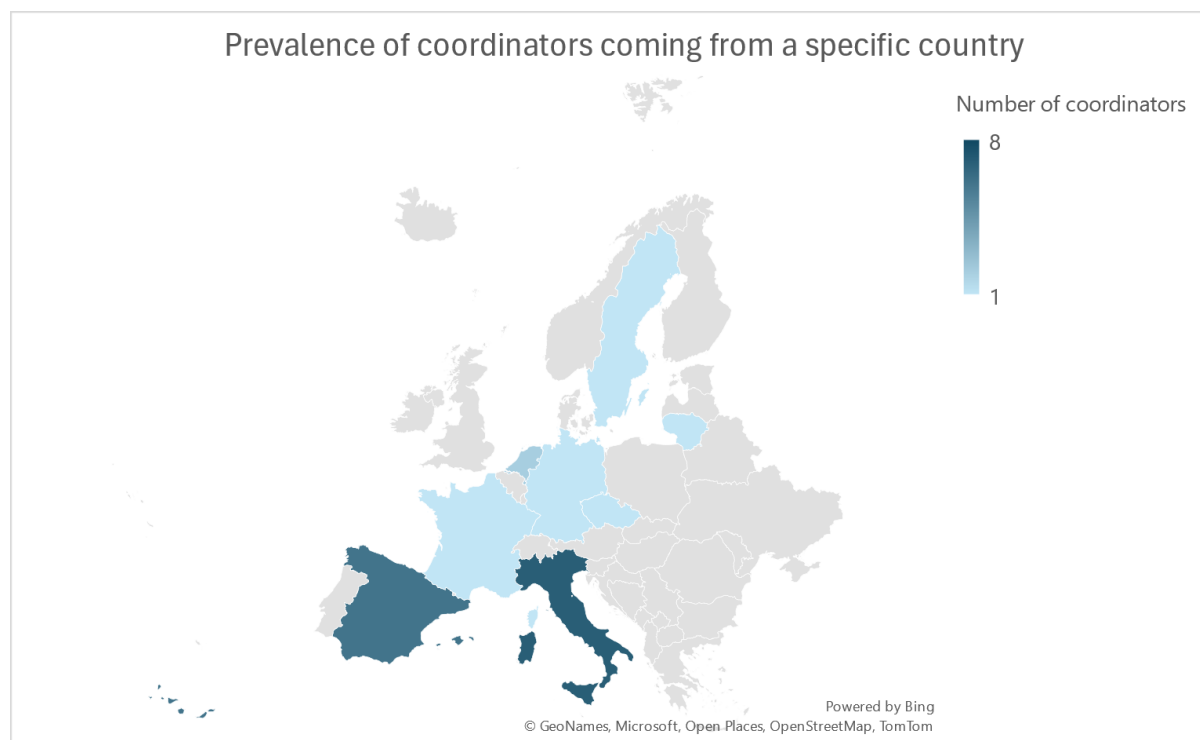
Blueprint coordination

All Blueprints are coordinated by an individual organisation from the consortium, acting as the formal Blueprint coordinator. The organisations coordinating Blueprint consortia were most frequently EU-level organisations (eight organisations). Organisations based in Italy and Spain tend to take up the role of Blueprint coordination relatively more often (seven organisations in Italy and six organisations in Spain coordinating Blueprints). The UK remains the leading non-EU country hosting the most consortia partners, representing 14 out of 23 non-EU partner countries (61%). Norway followed with 5 partners (22%), as it continues to participate in the Erasmus+ programme through its membership in the

² Additive Manufacturing is not an industrial ecosystem but a cross-cutting sector. However, it has been included as a standalone category in both the table and the paper for the sake of simplicity.

European Economic Area (EEA). The 2022 Blueprints cohort also marked the introduction of Georgian and Ukrainian partners into Blueprint consortia.

Figure 1 Country of coordinating organisations



The Blueprint coordinator is usually supported by additional bodies e.g. steering committees, steering boards, project boards to support strategic direction and overseeing the project's implementation. In addition, many Blueprints have specific forums or working groups including:

- advisory bodies with external experts e.g. National Advisory Groups in the case of the Construction Blueprint, the Advisory Board in SKILLSEA and Thematic Groups in MATES;
- regional Working Groups that support the implementation of Blueprint activities at the regional or local level (e.g. National/Regional Skills Partnerships established under NTG).

Many Blueprints have also appointed a specific body or partner responsible for the Quality Assurance of the project (e.g., ASSETs+, STAFFER, CYANOTYPES, baSE).

In terms of internal work organisation, Blueprint projects tend to be structured around Work Packages or Tasks corresponding to the specific goals of the project. In this case, Task or Work Package leaders are appointed among consortium members. Usually, the first Work Package is dedicated to project management and is led by the main coordinating organisation, while the final Work Package is focused on ensuring the Blueprint's sustainability beyond the project's completion.

Annex 2 maps the different governance bodies reported by Blueprint coordinators.

Deliverables and results

Blueprints have produced a great variety of outputs, ranging from research on skills intelligence and anticipation, to the identification and/or creation of training courses and curricula, and the organisation of events and dissemination activities. Common deliverables include:

Power-up skills: developing Europe's workforce

- reports providing state-of-the-art analyses on current and anticipated skills needs;
- reports on emerging job profiles;
- reports on revised or emerging competency frameworks;
- methodological tools that can be exploited by the sector e.g., to devise training programmes or job offers;
- training modules, learning platforms or Massive Open Online Courses (MOOCs), revised or emerging VET programmes;
- reports outlining a sectoral skills strategy or long-term roll-out plan.

While some earlier Blueprints (e.g., DRIVES) had already worked with innovative approaches like micro-credentials, the Blueprints from the 2021 cohort (e.g., I-RESTART and ARISA) expanded on this topic by integrating micro-credentials into their planned activities.

Blueprints also implement dissemination activities to enhance the visibility and uptake of their project results. These include networking events, conferences and webinars supported by regular newsletters or magazines. These dissemination activities may also provide a great opportunity to collaborate with Blueprints in other sectors (e.g., [joint event](#) featuring CYANOTYPES and baSE).

Impact and achievements of Blueprints

Blueprint consortia create opportunities to work together to address skills needs and gaps and promote greater preparedness and adaptability to changes in the labour market. At EU level, the Blueprints have followed in the steps of their predecessors – the Sectoral Skills Alliances – by contributing to flagship initiatives. For example:

- The work of Blueprints (e.g. DRIVES, EO4GEO) on designing core curricula and training programmes have contributed to the further development of European Vocational Core Profiles (EVCPs). These profiles were noted as a key action to support skills in the 2020 Council Recommendation on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience.
- All Blueprints contributed to the recent update of the European Skills, Competences, and Occupations (ESCO) classification system. Blueprints have collaborated with the ESCO team by adapting occupational profiles or proposing new ones or adding skills to the job descriptions, based on their own research on the needs of their respective sector.

Annex 3 presents an overview of the deliverables for each Blueprint classified according to the following categories: Training Products, Job Profiles, Competency Frameworks, Skills Intelligence and Forecasts and Sectoral Skills Strategy and Sustainability Plans. In addition to the summaries of individual Blueprints presented in this report, further details of specific outputs can be found on individual Blueprint websites, also included in Annex 3.

Success factors

Across Blueprints, the diversity of consortium partners and their motivation to work together has been identified as a key factor for the successful implementation of the project. Coordinators have also noted a number of other factors that have underpinned the successful implementation of Blueprint projects.

- Several Blueprints indicated the important role of **external experts**, including associated and affiliated partners, and the wider network of stakeholders in supporting the project by providing expertise, contributing to testing findings or disseminating deliverables.
- Blueprint coordinators stressed the importance of keeping sectoral stakeholders engaged through a **bottom-up approach**, for example by involving them in the design and/or validation of project outputs.
- **Transparency and communication** between partners were also deemed crucial to overcome challenges related to the project's implementation. Although language barriers and the challenge of aligning different interests were identified, the partners' strong motivation helped to mitigate these difficulties.
- Adapting the Blueprint to **national and local contexts**, notably by involving local stakeholders, was also described as a key success factor by Blueprint coordinators.
- For the Blueprints of the 2019 and 2020 cohort, the COVID-19 pandemic and subsequent lockdown measures required **flexible and innovative** approaches to deliver expected activities including in-person meetings and deliverable such as in-person training and events.

Sustainability of results and synergies with the Pact for Skills and other EU skills-related initiatives

Supporting the ongoing value and impact of results beyond the project's lifespan is an important dimension of many Blueprints. For instance, Blueprints often develop 'Sustainability Plans' outlining steps for maintaining financial viability after Erasmus+ support ends, ensuring that outputs can continue to be utilised and disseminated after the EU grant period. In addition, creating synergies and connections with other relevant EU initiatives is also an increasingly important dimension of this work.

The Pact for Skills represents an important opportunity for Blueprints to build on their legacy and widen their impact.

- Most Blueprint Alliances have built synergies with the Large-Scale Partnerships set up under the Pact for Skills either by ensuring that consortia partners sign the Pact for Skills Charter or by encouraging Blueprint coordinators to take an active role in the establishment of Large-Scale Partnerships in their sector/ecosystem (e.g. DRIVES, MATES, FIELDS, METIS, among others).
- Blueprints that target different segments of the same industrial ecosystem have worked together to launch partnerships under the Pact (e.g. ESSA and SPIRE-SAIS, EO4GEO and ASSETS+, DRIVES and ALBATTIS).
- In some instances, Blueprints work hand in hand with LSPs to reach EU targets in specific sectors such as the [Digital Decade targets](#) (CHAISE and Digital LSP) or the [Action Plan for digitalising energy](#) (EDDIE and the Digitalisation of the Energy System LSP).

LSPs can use Blueprint results to help their members fulfil reskilling and upskilling commitments in their ecosystem. By working with LSPs, Blueprint projects can maximise the reach and impact of their work with the intended beneficiaries of their outputs. The importance of this synergy is illustrated by the close links between LSPs and Blueprints. In some cases, Blueprints have directly informed the set up and activities of Pact for Skills LSPs (e.g., BeWell) while more recently Pact for Skills LSPs have developed new Blueprint projects to support identified priorities and needs.

Several Blueprints have also formed connections with Centres of Vocational Excellence (CoVEs) and Forward-Looking (FWL) projects.

- [CoVEs](#) are institutions that promote high-quality vocational education and training through collaboration among educational providers, employers, and stakeholders, focusing on specific sectors or skills. Some CoVEs have strong ties with Blueprints, including through shared partners and methodologies (e.g., [CoVE AILEEN](#) and SAM Blueprint).
- FWL projects are initiatives designed to explore and develop innovative practices and approaches in vocational education and training, aiming to enhance skills and employability in response to emerging labour market needs. In some cases, Blueprints have contributed to the creation of FWL projects that drive innovation in areas such as micro-credentials tailored to their specific sector (e.g., SAM). Blueprint coordinators may also coordinate FWL projects targeting specific segments of the workforce (e.g., Construction Blueprint through the [Pact4Youth](#)) taking place as part of the LSP's activities.

Blueprints for sectoral cooperation on skills: individual summaries

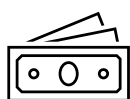
The following section includes individual summaries for the 28 Blueprints that started their activities between 2018 and 2022. Each individual Blueprint summary details the Blueprint's aims and objectives, internal governance structure, key deliverables, and results achieved to date. It also highlights the project's main challenges and success factors. In addition, the summaries include a forward-looking section that explores synergies with other EU skills-related initiatives and outlines sustainability plans. Finally, contact details of Blueprint coordinators are provided to encourage cooperation and outreach.

Additive Manufacturing³

Sector Skills Strategy in Additive Manufacturing - SAM

Overview

The [Sector Skills Strategy in Additive Manufacturing – SAM](#) Blueprint aimed to contribute to the smart, sustainable and inclusive growth of the Additive Manufacturing sector. Additive Manufacturing, better known as 3D printing, has the potential to improve the production of components, including efficient use of materials, while also increasing demand for digital skills among workers. While Additive Manufacturing is not a standalone industrial ecosystem, it is a cross-cutting technology that can have applications in multiple industrial ecosystems.



EUR 3.97 million



2019-2023

Associated projects:

- Skills4EII (2025)
- [GREEN](#) Forward-Looking project
- [FIVE](#) Forward-Looking project
- [AREOLA](#) Cooperation partnership
- [AILEEN](#) CoVE

Implementation

Governance structure

The SAM consortium was led by the European Federation for Welding, Joining and Cutting (EFW) and comprised a total of 17 partners from nine countries⁴. SAM also engaged with several associated partners who participated in a wide range of project activities and supported the dissemination of Blueprint outputs. Three more bodies constituted SAM's governance structure to oversee the Blueprint's implementation. These were:

- 1) The [European Management Organisation](#);
- 2) The [International AM Qualification Council \(IAMQC\)](#);

³ Additive Manufacturing is not an industrial ecosystem but a cross-cutting sector. However, it has been included as a standalone category in the paper for the sake of simplicity.

⁴ The full list of partners is provided in Annex 1.

3) The [International AM Industry Council \(IAMIC\)](#).

Main deliverables

The SAM Blueprint produced the following key deliverables.

- The [European AM Observatory](#), which provides real-time mapping and monitoring of the Additive Manufacturing sector's needs, technological trends, skills shortages and mismatches, as well as policies and figures that are relevant for the sector. To set up the Observatory, SAM published a series of key documents including: [five reports](#) addressing the findings on skills needs, mismatches and shortages in the sector; [three reports](#) collecting the feedback of students on the existing or attended AM training courses; one report on the implementation of the [1st International Metal AM Coordinator Course](#); two reports mapping Additive Manufacturing projects implemented between [2019–2020](#) and between [2020-2022](#), and a [Sector Skills Strategy Roadmap](#) (updated in 2023), which identified the key challenges in the Additive Manufacturing sector, mapped the project main contributions and provided 30 [Strategic Recommendations](#) for stakeholders to implement until 2030.
- The [International AM Qualification System \(IAMQS\)](#), which is part of the Observatory and ensures the coherence of qualifications in the Additive Manufacturing sector. IAMQS is being implemented through a network of Additive Manufacturing VET and higher education training centres.
- A Sector Skills Strategy in the Additive Manufacturing Sector including a [glossary](#), a [milestones report](#), a [technological long-term industrial plan](#), a [professional profiles and skills roadmap](#) and a [visual timeline](#). These resources help define the European AM Skills Strategy.
- The Forecast Methodology: an assessment of current and future skills in AM, which provides an interactive guide to outline the development of the methodology for determining the skills mismatches, gaps and shortages in the Additive Manufacturing sector. As part of this activity, several kits have been developed including the [surveys and interviews kit](#), the [real case scenarios' kit](#), the [short term kit](#), the [foresight scenario kit](#), and the European Skills, Competences, Qualifications and Occupations (ESCO) and EU Skills Panorama.
- A methodology for developing and revising professional profiles and skills, which includes a [methodological guideline](#), a [kit of templates](#) and a [context and training tools guideline](#).
- Four stages of testing of AM training programmes were implemented, covering mainly technical subjects. A new emerging Occupational Profile/Qualification was developed, and the International AM Designer for Polymers was piloted. The project has also developed and piloted new modules addressing specific needs. The table below presents all modules developed under the Blueprint:

Table 2. Modules developed under the SAM Blueprint

Modules for International AM Designer for Polymers	New modules addressing specific needs
Overview on polymer materials and properties (CU65)	Metal AM Binder Jetting process for Independent and Advanced levels (CU72)
Designing Polymers AM Parts (CU66)	AM for Aerospace & Part Quality Control
Post Processing for Polymers (CU67)	Certification, Qualification and Standardization in Additive Manufacturing (CU63)
Design for Material Extrusion (CU68)	Business for AM (CU64) & Outlook of professional careers in Additive Manufacturing
Design for PBF Polymer (CU69)	Sustainability for AM (CU73)
Design for VAT Photopolymerization (CU70)	Metal AM Sustainability and Circularity CU
Design for Material Jetting (CU71)	Polymer AM Sustainability and Circularity

- Training resources, such as presentations, case studies and practical exercises, were developed and [are publicly accessible](#).

Furthermore, SAM implemented the following dissemination and awareness-raising activities:

- 18 national rollout activities, conducted from January to June 2023, mobilising all partners in promoting dedicated events at national and regional levels to raise awareness about the IAMQS training offer and potentialities, reaching more than 4000 stakeholders.
- The raise awareness campaign (RAC), which was undertaken to enhance awareness among various groups, including existing workers, [academic and vocational talents, pupils, children, teachers](#) and the general public, about the numerous benefits of AM. The RAC materials encompass informative posters, YouTube videos, podcasts, presentations, animations or videos, quizzes, Tech4Kids activities, and more tools available in several languages.

The full list of deliverables is available on the SAM [website](#).

Success factors

The expertise of partners from both industry and education ensured effective implementation of activities, particularly in developing a sustainable skills strategy and a harmonised qualifications system. Establishing a reliable governance structure and well-defined operational procedures for each governing body was crucial for sustaining the Blueprint's core deliverables, especially the AM Observatory and the International AM Qualification System (IAMQS).

Challenges faced

The COVID-19 pandemic posed several challenges to the Blueprint, particularly in relation to internal coordination and the delivery of activities. Nonetheless, consortium partners demonstrated a high degree of flexibility and quickly adapted to the new reality by switching to online tools, including webinars (targeting the general public) and podcasts featuring speakers who discussed key topics in Additive Manufacturing such as 'Careers in Additive Manufacturing', 'Sectoral Applications' and 'Women in Additive Manufacturing.' These activities targeted companies, policymakers, higher education and VET students, and industry representatives. Due to the COVID-19 outbreak, the Blueprint was granted an extension, which allowed SAM to implement face-to-face training and awareness-raising activities once in-person meetings became possible. This also allowed SAM to better plan the sustainability of the Blueprint's outcomes after the end of the funding period (originally foreseen for 2022).

Additionally, as a consortium of project partners from all over Europe, partners have developed a central system (AM Observatory) for the identification of the AM skills necessary to supply the industry now and in the future. SAM, through EWF and its network, continues to engage with industry stakeholders and covers the entire value chain in Europe. The collaboration between Experts from the Qualification and Industrial Councils and bodies involved in the European Observatory continues through education projects focused on the update of the International AM Qualification System (IAMQS) towards the twin transition, which targets developing training programmes that cover digital and green skills, as well as specific industrial requirements.

Results and impacts

The activities organised under the Additive Manufacturing Observatory have prompted unprecedented, large-scale collaboration among stakeholders from over 115 industrial organisations. More than 800 stakeholders from 29 countries, representing eight industrial sectors, participated in the surveys and interviews to identify skills gaps as part of the Observatory's forecast methodology. Moreover, as part of the International AM Qualification System (IAMQS), existing training programmes have been revised and new ones have been developed from scratch and piloted, resulting in 32 courses and 662 hours of training overall, in which more than 900 learners took part.

At the EU level, the SAM Blueprint played an active role in revising occupational and skills profiles for the Additive Manufacturing sector. This effort was part of the review of the current ESCO classification to enhance and update its content.

Lastly, the SAM Blueprint has also contributed to increasing the attractiveness of the Additive Manufacturing sector as a career choice for primary, secondary, VET and university students through its awareness-raising campaigns. Overall, more than 80 schools were involved in Tech4Kid activities, reaching 4315 children and young people. In addition, more than 3400 participants were involved in AM open day events organised at partners' facilities, and over 3700 professionals were reached.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The cross-sectoral nature of SAM means it can contribute to multiple Large-Scale Partnerships under the Pact for Skills. SAM has already achieved strong synergies with the Blueprints for the [automotive sector \(DRIVES\)](#), [maritime technology \(MATES\)](#), the [construction sector \(Construction Blueprint\)](#), [steel \(ESSA\)](#), and [defence \(ASSETs+\)](#), that have supported dissemination and validation of the results of the project. As an example, SAM was presented in the General Assembly meeting of the ESSA project during their event “Skills and Jobs in the Future-Proven Steel industry” in May 2021. SAM and DRIVES project coordinators have conducted several meetings to support the alignment of the AM and Drives Frameworks. As a result of this synergy, an AM working group has been created in the Automotive sector, and the AM profiles/qualifications are used as reference for the development of AM skills of the Automotive workforce.

The consortium has drafted an [Action Plan](#) to ensure the Blueprint’s sustainability after the end of the project. The Blueprint’s sustainability strategy will rely on SAM’s core outputs. While the International AM Qualification System (IAMQS) and the Additive Manufacturing Observatory are expected to be the main legacy of the Blueprint, other key results that will support SAM’s long-term impact are the Additive Manufacturing Skills Strategy Roadmap, the forecast methodology and kits produced within this framework, the methodological guideline to design and review professional profiles in Additive Manufacturing, as well as the awareness-raising material.

In 2025, SAM will become a partner in the Blueprint Alliance Skills4EII (Skills Alliance for the Green, Digital and Social Transformation of the Energy-intensive industries).

Beyond the impact of project results, SAM’s external initiatives at an international, European, national and regional level continue to strengthen collaboration within the sector. At a European level, initiatives such as [Skills Intelligence](#), [ESCO](#) and the [European Association of the Machine Tool Industries \(CECIMO\)](#) actively involve members and stakeholders in advancing their skills and training opportunities in the Additive Manufacturing sector.

A close collaboration with CEDEFOP Skills Intelligence allowed to publish [SAM fiches](#), which supported the framework with relevant data and figures on AM education.

SAM had regular collaboration with the ESCO Team on the integration of the AM Occupation Standards and Skills in ESCO. Four meetings were conducted to clarify the AM occupation-specific skills required by the labour market, and the possible integration of AM Engineers and Operators, AM Supervisors, AM Designers and AM Inspectors Profiles into the Classification tool. In 2021, the Metal AM Operator description following ESCO Guidelines enabled the integration of the profile in ESCO portal. Progress on the review and validation of the Metal AM Process Engineer for PBF and the Metal AM Coordinator qualifications was made in 2021, but no further integration happened. In the long term, the remaining AM qualifications addressed by the International AM Qualifications System should be referenced and classified in ESCO, maintaining this collaborative relationship.

The fruitful synergies established with other Blueprint projects have enabled the development of a common Forward-Looking project, [GREEN](#), which is setting core green skills for the labour market by integrating skills into VET curricula and training of teachers, trainers and professional development. The project will aim to improve the effectiveness of policies and practices in the field of education and training across six industrial sectors (Automotive, Energy, Batteries, Defence, Maritime and Additive Manufacturing), involving EWF and the European Association of Manufacturing Technologies

(CECIMO) and engaging partners from other Blueprints in the Maritime, Automotive, Batteries, Defence and Energy Ecosystems.

SAM has also supported the creation of the [FIVE](#) Forward-Looking project on micro-credentials (MCs), which aims to develop an innovative European forward-looking approach to MCs, with a focus on Welding and Fish Farming industries as case studies.

[AREOLA](#) ran in parallel with SAM and was focused on Augmented Reality/Virtual Reality for Aerospace Laser Beam Powder Bed Fusion (PBF-LB) Operators, targeting the needs of the Aerospace sector related to PBF-LB Operators' skills through online training materials and virtual training tools. This work involved some SAM partners.

Finally, the [CoVE AILEEN](#) aimed to develop CoVEs for Advanced Manufacturing technologies, focused on welding and additive manufacturing technologies. This project started in the month SAM ended, and involved common partners (IDONIAL, MTC, UBRUN; EWF, ISQ, FAN3D, and LAK). AILEEN is building upon SAM methodology to design and review qualifications, relying on a modular approach where each competence unit is individually validated and assessed, enabling individual progression pathways with automatic capitalisation of previously acquired competence units.

Contact information

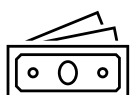
- Blueprint coordinator – Adelaide Almeida, Education Project Manager, EWF – at madealmeida@ewf.be
- Check out the [website](#) of the SAM Blueprint

Aerospace and Defence

Towards an innovative strategy for skills development and capacity building in the space geo-information sector supporting Copernicus User Uptake – EO4GEO

Overview

The [Towards an innovative strategy for skills development and capacity building in the space geoinformation sector supporting Copernicus User Uptake – EO4GEO](#) Blueprint aimed to bridge potential gaps between the skills taught and the skills needed at European level in the space/geospatial sector. EO4GEO sought to foster the uptake and integration of space/geospatial data and services in a broad range of application domains such as smart cities, climate change adaptation, emergency response, real estate and building management, tourism and management of cultural heritage.



EUR 3.87



2018-2022

Associated projects:

- [SPACE4GEO LSP](#)
- [Aerospace and Defence LSP](#)
- [Copernicus Academy Network](#)

Implementation

Governance structure

The EO4GEO consortium was led by the Geographical Information Systems International Group Association (GISIG), based in Italy, and is comprised of a total of 25 partners from 13 countries⁵. The Blueprint Steering Committee was composed of the representatives of GISIG as general Project Coordinator, KU Leuven as Scientific and Technical Coordinator, PLUS as Education and Training Coordinator and Climate-KIC as Exploitation Coordinator. The consortium was supported by a strong group of over 50 associated partners, including associations or networks active in the same fields, as well as an Advisory Board of individual experts. Many partners are members of the Copernicus Academy Network set up by the European Commission as part of its Earth Observation programme Copernicus.

Key deliverables

The EO4GEO Blueprint produced the following key deliverables.

- The [Body of Knowledge](#), which is an inventory of 1 000 relevant concepts, knowledge resources and skills for the Earth Observation and Geo-Information (EO/GI) sectors, available through a user-friendly online search tool.
- [EO4GEO Tools](#), which is a suite of tools based on the information available in the Body of Knowledge and targeting training and educational providers working in the field, as well as

⁵ The full list of partners is provided in Annex 1.

companies, public sector organisations, NGOs, research centres for designing curricula, defining occupational profiles, describing a job offer or an occupational profile (i.e. publications, lectures, CVs).

- The [EO4GEO Training Material](#), which is a training catalogue containing resources (e.g. lectures, webinars, videos, tutorials and courses) ranging from base modules to framework curricula for full programmes.
- A [Sector Skills Strategy](#) defining the strategic and operational objectives to promote skills development in the Earth Observation and Geo-Information (EO/GI) sector and the long-term action plan to address skills needs.

The full list of deliverables is available on the EO4GEO [website](#).

Success factors

A key success factor is the development of a pivotal tool like the Body of Knowledge, as it allowed partners to craft a variety of other tools based on its framework. Furthermore, the Blueprint also benefited from constant monitoring of its results (e.g. via surveys) and their application in different national contexts, which fostered synergies between the Blueprint as an EU initiative and initiatives at the national level.

Lastly, the appointment of partners as Blueprint ‘Ambassadors’ successfully created a multiplier effect and ensured that the EO4GEO results would be clearly communicated to partners’ networks and other stakeholders. Establishing and maintaining a good communication culture among experts involved in the Blueprint was considered key to ensure the sustainability of the project and active involvement of the partners. For example, the EO4GEO’s database of experts was updated regularly, and the consortium liaised with the registered experts on a regular basis, reporting new activities and informing them about the project’s outcomes.

Challenges faced

Channelling the results of the Blueprint towards educational providers and/or end users remained a slow and difficult process, often due to bureaucracy and resistance to change. The dissemination of the EO4GEO outputs highlighted differences in the uptake of EO4GEO solutions across regions, stressing the importance of implementing a more targeted approach and agenda to address specific needs at the local level.

Results and impact

Thanks to the tools, materials and knowledge structures developed under EO4GEO, existing education providers can now improve their curricula efficiently. New education providers (e.g. companies in the sector that want to develop and offer training in the field) also have a methodology and tools at hand when entering the VET market. Students and trainees have more relevant courses to attend and have access to a larger network for international placements while, in turn, potential employers can have access to candidates with higher competences.

At EU level, the important work of the EO4GEO Blueprint on defining training curricula and occupational profiles has been contributing to the further definition and refinement of European Vocational Core Profiles (EVCPs). The EO4GEO has also contributed to updating the ESCO system.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

There are two Large-Scale Partnerships under the Aerospace and Defence ecosystem: the Large-Scale Partnership for Aerospace and Defence, and [SPACE4GEO](#), the Large-Scale Skills Partnership on Space Data, Services and Applications, launched in April 2023 as a natural evolution of the EO4GEO Alliance. While the Large-Scale Partnership for Aerospace and Defence covers the ‘upstream’ side of the sector encompassing space infrastructure and manufacturing, SPACE4GEO was established to pull coordinated efforts of all key stakeholders to support skills development in the space downstream and geoinformation sector. SPACE4GEO, as evolution of the EO4GEO Alliance, adopts the strategic and operational results set in the EO4GEO Sector Skills Strategy and builds further on the EO4GEO project results, ensuring their maintenance and evolutionary development.

The SPACE4GEO LSP is a network of stakeholders and experts from academia, private and public sectors, aiming to ensure strategic cooperation on skills development. The LSP, governed by a specific agreement among members and having GISIG as operational body, promotes, disseminates and exploits the Blueprint results after its finalisation, according to the [EO4GEO Long-term Action Plan](#) published at the end of the project. Possible revenue streams are identified, including applying to EU/national (co)funded projects, setting up membership with an operational fee, developing paid services or calling on investors/sponsors.

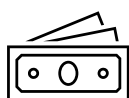
Contact information

- Blueprint coordinator – Milva Carbonaro, Coordinator (CEO), GISIG Association – m.carbonaro@gisig.it
- Check out the [website](#) of the Blueprint

Alliance for Strategic Skills addressing Emerging Technologies in Defence – ASSETs+

Overview

The [Alliance for Strategic Skills addressing Emerging Technologies in Defence – ASSETs+](#) Blueprint aimed to develop a skills strategy for defence technologies, particularly Artificial Intelligence, Robotics, C4ISTAR and Cybersecurity. ASSETs+'s strategic goal was to ensure European sovereignty and autonomy in the defence sector by attracting highly skilled young workers and upskilling employees.



EUR 3.96 million



2020-2024

Associated projects:

- [Aerospace and Defence \(ASD\) LSP](#)
- [European Defence Challenge](#)
- [European Digital Innovation Hub \(EDIH\) Tuscany X.0](#)

Implementation

Governance structure

The ASSETs+ consortium was coordinated by the University of Pisa in Italy alongside 29 partners from eight countries⁶. The Blueprint also involved associated partners as well as a network of 50 associated stakeholders who helped define the project's strategic direction. Furthermore, the consortium appointed a board of external experts that complemented and evaluated the Blueprint's outputs.

The Steering Committee of the ASSETs+ Blueprint, which met every four months, was the main decision-making body of the project and provided strategic leadership. It was led by an industry representative and included a representative from each type of stakeholder (company, sector representative, university and VET provider), as well as a Project Coordinator and a Quality Assurance Manager. ASSETs+ was implemented through eight Work Packages. Adjustments to the planning, including the involvement level of each partner, were monitored and reported during a weekly Coordination Team meeting (involving the Coordinator and the Work Package leaders). Recurring meetings were organised by each Work Package leader to address any issues concerning the tasks under each Work Package. Persisting issues were escalated to the Coordination Team and eventually to the Steering Committee. Lastly, industry meetings were also scheduled every month to keep the industrial partners engaged by providing a comprehensive view on the status of project activities.

⁶ The full list of partners is provided in Annex 1.

Main deliverables

The ASSETS+ Blueprint produced the following key deliverables.

- [35 ASSETS+ implemented courses](#), which provided over 1300 participants with new skills and knowledge related to key technologies expected in the defence sector in the coming years, with a focus on Artificial Intelligence, Robotics, C4ISTAR and Cybersecurity. The courses were available for ASSETS+ partners and associated stakeholders, and specifically designed for undergraduate and postgraduate students, and/or aerospace and defence professionals. The programmes were built on pedagogical approaches such as project-based learning, laboratory and challenges. In addition, a Train the Trainers e-learning programme (<https://assets-plus.eu/train-the-trainers-e-learning-programme/>) and some guidelines ([R3.4 Guideline for Education & Training Programme Prototype Implementation](#) ; [R3.6 Training the trainers guidelines and materials](#) ; [R3.7 Technical Report of the Education and Training Programmes Implementation](#) ; [R3.9 Guideline for Education and Training Programme large scale exploitation](#)) were developed to support teachers and education providers in courses implementation.
- [A defence technologies roadmap](#) identifying job profiles and related skills and technologies. These were based on the research conducted by the ASSETS+ project team on technologies and skills required for different 'capability areas' in the sector. The technologies, skills and profiles refer to High Performance Computing Systems, Cybersecurity Systems, Autonomous Systems, and Intelligent Information Systems. The most relevant skills include analytical skills and cognitive capabilities, STEM and ICT skills, as well as soft skills. The job profiles identified as a priority for up-skilling or re-skilling are Data Scientist, Software Architect, Aerospace Engineer, and Maritime Engineer. Then, the Security Architect and the Defence Manager have been identified as new emerging occupational profiles.
- [A Body of Knowledge](#), which was a guidance document providing a detailed breakdown of the knowledge required by any person working for or on behalf of defence sector bodies or organisations.
- A [European Defence Skills Strategy](#), named "Strategy for developing Skills and competences in the Defence Sector", which presents the action plan to improve EU Defence capabilities. It defines the defence sector's human resources needs and nine macro goals spanning from technological to employability, from raising the attractiveness of the sector to the consolidation of the ecosystems and detailed into 37 operative actions to assure a roadmap for future implementation.
- The [European Observatory for Qualifications](#), which plans to work on the implementation of the European Qualification System for Defence at transnational, national and regional levels through a network of Defence training centres. The Observatory's goal is to address the skills needs and tackle the shortages experienced by professionals in the European Defence labour market. By doing so, it aims to foster the continuous development and qualification of the Defence workforce within both European and national contexts.

- A [series of synthetic fiches](#) highlighting best practices to address skills shortages and mismatches in the sector related to: international conferences; European projects; journals; policies; university courses; postgraduate studies; training; and funding opportunities.

Furthermore, ASSETs+ implemented the following dissemination and awareness-raising activities.

- [The European Defence Challenge \(EDC\)](#): an open competition to attract young talents to the defence industry and encourage them to initiate a career in defence-related technologies. All undergraduate and graduate students from all faculties in European universities, VET centres and other institutions dedicated to education were able to participate. After the success of the first four editions (577 registered students, from 24 countries and 126 different institutions), a fifth one has been opened, with the topic: “Towards a Safer Tomorrow: Multidisciplinary Approaches to Landmine Clearance and Security Enhancement” (<https://assets-plus.eu/challenge/>).

The full list of deliverables is available on the [ASSETs+ website](#).

Success factors

A key success factor of the ASSETs+ Blueprint has been the consortium partners’ expertise. ASSETs+ benefitted from a close collaboration between its members and its close links with a wide ecosystem of stakeholders across the defence sector, sectoral organisations, higher education institutions, VET providers and research centres. The strong collaboration among these actors in the context of this Blueprint resulted in stronger coordination between policymakers, industry representatives, and education and training stakeholders, ultimately leading to greater impact. Another success factor was identified in ASSETs+’s blended and iterative approach to its work, which combined data-driven analysis and human expertise. For example, ASSETs+ used Big Data to analyse technical documents on skills for emerging technologies in defence and relied on this analysis to design education and training programmes. The Blueprint also organised holistic and future-oriented brainstorming sessions, harnessing the expertise of partners to gain an in-depth understanding of all the facets of the defence sector (e.g. possible interrelations among cutting-edge technologies, the implication of well-suited competences and soft skills, and good practices to deploy at organisational and regulatory levels). Outputs were validated by industrial experts to stay aligned with the sector’s needs. The process was conducted annually to closely monitor and spot emerging skills trends. This approach, leveraging both qualitative and quantitative techniques and methods, allowed this Blueprint to achieve near real-time monitoring of the sector. This mix of methods provided a comprehensive overview of the current and future landscape of defence technologies. The necessity of this approach was underscored by the high level of confidentiality surrounding industrial information. Thus, presenting data-driven evidence facilitated the engagement of experts in fruitful discussions. The approach is fully scalable and replicable in different domains.

Challenges faced

Since implementation began, the ASSETs+ Blueprint encountered a series of challenges, both related to the sector and the broader socio-economic context. For instance, the design of education and training activities, due to the fast pace of the sector and the level of detail needed for the programmes to be effective, required constant monitoring of the labour market to identify matches between the needs of companies and the training offers to fill in the skills gaps of current and future workforce. Aside from the specific context and needs of the sector, the COVID-19 crisis resulted in additional challenges for the

Power-up skills: developing Europe’s workforce

ASSETs+ Blueprint. On the one hand, the pandemic affected several partners' capacity (i.e. management of emergencies, staff partial unemployment), putting a strain on the project and causing delays in the delivery of a number of outputs. On the other hand, lockdown measures caused disruptions in education systems, albeit also opening up new opportunities by promoting online learning on a larger scale. The four-year duration of the project increases the risk of staff turnover among partners and changes in resource availability. Therefore, a smooth handover is essential to ensure a seamless transition. This requires an open and positive attitude from both partners and the coordinator in welcoming new team members. It is particularly important to explain ongoing activities clearly and adjust communication to help new members integrate into the already established team.

Results and impacts

Access to qualified skills is a challenge for the European defence industry, and ASSETs+ actively worked to address this challenge by attracting students to the sector. To this end, the project implemented 35 education courses with the aim to provide students with new skills and knowledge related to key technologies relevant for the sector. Moreover, the above-mentioned European Defence Challenges saw the participation of 577 students from 126 higher education institutions across Europe. The Blueprint was successful in building an extensive network of contacts in the sector, as it currently counts 50 associated stakeholders and more than 90 experts have been involved in ASSETs+ activities. These activities included workshops to establish the ASSETs+ strategy for developing skills and competences for the defence sector, where 279 ideas were generated. The Blueprint's web presence also had a strong outreach, with its LinkedIn page counting over 850 followers. The ASSETs+ Blueprint also achieved good visibility by participating in many national and international conferences, forums and summits to present the project and its contribution towards addressing the skill needs of the European defence industry. Lastly, ASSETs+ contributed to updating the ESCO system.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

To make a bigger impact and work better with important partners to tackle the challenges emerging from COVID-19 and changes in the labour market, ASSETs+ closely collaborated with the Aerospace and Defence (ASD) LSP as part of the Pact for Skills. As a member of the Pact, ASSETs+ contributed to several events and workshops targeting the defence sector. ASSETs+ maintained a strong and ongoing relationship with the ASD LSP throughout all phases of the project.

The post COVID-19 recovery and emerging new technologies are transforming the way people work and acquire new skills, forcing businesses to quickly adapt and train their own workforce, particularly in a fast-changing sector such as defence. In this context, ASSETs+ developed demand-driven upskilling and reskilling programmes on cutting-edge technologies to help the workforce continuously acquire new skills and stay up to date. Furthermore, ASSETs+ worked on developing a sustainable strategy for developing human resources in the defence sector based on six pillars: qualifications; policies; project and funds; technologies; human resources; technical standards; and best practices.

The Blueprint project has provided an opportunity to establish a strongly connected partnership with many common teaching and research interests. The ASSETs+ partnership decided to continue with the European Defence Challenge, which has attracted numerous students, teachers, and professionals from fields ranging from IT to security to robotics. The European Defence Challenge has been deemed crucial for attracting students from across Europe and enhancing awareness of the defence sector. The fifth edition commenced immediately after the project ended.

The [European Digital Innovation Hub \(EDIH\) Tuscany X.0](#) has an interesting community of players in the defence and aerospace sector grown around the Leonardo Company, Thales Alenia Space (Alenia Spazio) and Nuovo Pignone. It is composed of more than 140 SMEs that are eager to learn and apply new technologies in their daily activities. The EDIH in collaboration with the University of Pisa will use some of the resources developed within ASSETs+ mainly for continuous education of employees in the sector.

Contact information

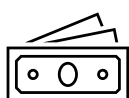
- Blueprint coordinator – Gualtiero Fantoni, Associate Professor, University of Pisa – at gualtiero.fantoni@unipi.it or [here](#).
- Check out the [website](#) of the ASSETs+ Blueprint.

Agri-food

Addressing the current and future skills needs for sustainability, digitalisation and the bio-economy in agriculture: European skills agenda and strategy - FIELDS

Overview

The [Addressing the current and Future skill needs for sustainability, digitalization and the bio-economy in agriculture: European skills agenda and Strategy – FIELDS](#) Blueprint aimed to modernise the agriculture, agrifood and forestry sectors and help render the global food supply chain consistent with the United Nations’ Sustainable Development Goals. FIELDS seeks to update training curricula and improve human resources to yield a competitive and sustainable bio-economy.



EUR 3.9 million



2020-2023

Associated projects:

- [I-RESTART](#) Blueprint
- [Agri-food](#) LSP

Implementation

Governance structure

The FIELDS consortium was led by the University of Turin (UNITO) and co-coordinated by Confagricoltura. It comprised a total of 31 partner organisations and one affiliated partner from 12 different countries⁷. A High Steering Committee, consisting of Work Package leaders, ensured the project’s quality. Bi-weekly meetings were held to discuss ongoing activities with involved partners.

⁷ The full list of partners is provided in Annex 1.

Additionally, a High Advisory Board, including external organisations, contributed to the validation of the Blueprint.

Main deliverables

The FIELDS Blueprint produced the following key deliverables.

- Databases providing information on existing curricula/courses, European projects, best practices, regulatory frameworks and funding opportunities. [The national and EU regulatory frameworks](#) and [funding opportunities document](#) laid the basis for their respective databases. The databases are freely available, representing an up-to-date source of information for those interested in developing upskilling and reskilling activities.
- A series of key documents including a [stakeholder strategic plan](#) and analysis report; [a trend and scenario analysis](#); and a [methodology definition document](#) presenting the pedagogical approach to be used to develop training programmes to upskill and reskill farmers in technological and soft skills. A [profiles prioritisation document](#) that classifies all training needs identified during the trend and scenario analysis will also be used.

Furthermore, FIELDS implemented the following dissemination and awareness-raising activities:

- seven issues of a FIELDS newsletter translated into nine consortium languages;
- multiple scientific papers published online;
- multiple meetings and participation in various [events](#) between 2020 and 2023 at national, EU and international level.

The full list of deliverables is available on the FIELDS [website](#).

Success factors

FIELDS used innovative research methods such as focus groups and scenario analyses to identify skills needs in the agri-food sector by reaching out to different target groups (i.e. both people in initial training and agri-food workers, consultants, stakeholders). This helped identify shared solutions to common issues and has maximised the Blueprint's impact by fostering open communication. Furthermore, frequent online meetings have been helpful to ensure partners remain focused on the implementation of their respective Blueprint activities. Lastly, partners have translated FIELDS materials into 12 consortium country languages, maximising dissemination by ensuring that Blueprint's activities reach the largest number of people.

Challenges faced

The COVID-19 pandemic posed several challenges, particularly in terms of coordination and cooperation, as face-to face meetings could not take place for more than a year. This posed risks to the implementation of activities and progress achieved. However, FIELDS mitigated the potentially negative impacts of the pandemic by organising online meetings every two weeks, which ensured that partners remained committed.

Results and impacts

Stakeholders in the industries covered by FIELDS have gained access to state-of-the-art knowledge about present and future skill needs, existing EU projects and funding opportunities, best practices and

Power-up skills: developing Europe's workforce

regulatory frameworks. Moreover, thanks to FIELDS' research on current and future skills needs, the Blueprint was also involved in the update of the ESCO classification system.

One of the Blueprint's key results is [the European Agri-food and Forestry Skills Strategy](#), which covers the following key areas: harmonisation of VET systems; monitoring of the skills in the agri-food and forestry ecosystem; key performance indicators; partnership and governance; learning content and structure; and training modules. The Strategy is expected to improve risk management, address the loss of practical skills, improve understanding of new technologies, develop business and leadership skills and bring about a more coordinated approach to skills development.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

Nine FIELDS partners have joined the Agri-food Pact for Skills, which was launched by COPA-COGECA and FoodDrinkEurope in 2021. In May 2022, the FIELDS consortium held a plenary meeting to further promote the Agri-food Pact for Skills to its partners. All FIELDS partners are expected to become members of the Pact for Skills, ensuring that cooperation between VET providers, universities, food industry associations, agriculture associations and umbrella organisations at EU level continues beyond the Blueprint's life.

Lastly, FIELDS' long-term action plan, published in 2023, aims to ensure the Blueprint's sustainability. It outlines strategies to promote the ongoing use of the Skills Strategy and training materials and encourages the development of national roadmaps for implementation and curriculum adoption by external VET providers.

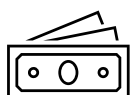
Contact information

- Blueprint coordinators – Remigio Berruto and Patrizia Busato, University of Turin and Daniele Rossi, COPA-COGECA – at Remigio.berruto@unito.it, patrizia.busato@unito.it, and d.rossi@confagricoltura.it
- Check out the [website](#) of the Blueprint

Inclusive Reskilling and upskilling Toward competitive Agrifood and veterinary sector: European agenda Strategy – I-RESTART

Overview

The [Inclusive Reskilling and upskilling Toward competitive Agrifood and veterinary sector: European agenda Strategy – I-RESTART](#) Blueprint focuses on reskilling and upskilling the workforce in the agri-food and veterinary sectors. Its objectives include retraining employees transitioning from heavy industry to the agri-food sector and engaging students interested in entering the agri-food labour market. Additionally, the project aims to enhance digital skills and support the sector's transition to the Green Deal initiative.



EUR 3,85 million



2022-2026

Associated projects:

- [FIELDS](#) Blueprint
- [Agri-food](#) LSP
- FooDSTA
- [ASKFOODS](#)
- [EQVEGAN](#)

Implementation

Governance structure

The I-RESTART consortium consists of 29 partners from 11 countries⁸, including 11 education and training providers, three education and training networks, 12 representatives from the agri-food industry, and one European veterinary specialist. The Blueprint is coordinated by Professor Remigio Berruto from the University of Turin (UNITO). The consortium is represented by a High Steering Committee composed of the Work Package (WP) leaders, which also serves as the quality assurance body. This committee meets bi-monthly to monitor project progress. Specific management tools, available on the project's intranet, facilitate task tracking, information sharing, and document management. Day-to-day operations are overseen by UNITO's project management team. The project is structured around nine Work Packages (WP), each led by a different partner. The involvement of umbrella organisations like COPA-COGECA and FoodDrinkEurope ensures strong connections and engagement with stakeholders in defining strategies and future scenarios for the agri-food system.

Main deliverables

The I-RESTART Blueprint produced the following key deliverables.

- A [Trends and Scenario Analysis](#), which is an inventory of future trends and scenarios and future skills needs in the animal production, food industry and veterinary activities, in areas of knowledge that respond to social and labour market needs (animal production, agrifood industries, business models, One-Health).

⁸ A full list of partners is provided in Annex 1.

- The refined version of the [European strategy](#) formerly made within the project FIELDS that will present concrete actions to improve the upskilling and reskilling of the workforce. A draft version will be available by the end of the year.
- A [report](#) on urgent skills needs per country and per sector, identifying the urgent skills needs brought about by the COVID-19 crisis and emerging technologies.
- [Lines of competence](#) emerging from skills intelligence and scenario analysis.
- [Databases](#) of relevant curricula/courses, European projects, best practices, regulatory frameworks and funding opportunities, as well as a [report](#) explaining the methodology used to devise the databases.

Furthermore, I-RESTART implemented the following dissemination and awareness-raising activities:

- open days in eight countries, with [related reports](#) detailing the feedback of the workforce involved;
- [newsletters](#) reporting on the Blueprint's activities.

The full list of deliverables is available on the I-RESTART [website](#).

Success factors

The coordinator for both FIELDS and I-RESTART is UNITO. This common coordination has streamlined the exploitation of results from FIELDS, enhancing the efficiency of I-RESTART's implementation. This shared coordination has eliminated the need to duplicate documents and database records, allowing for the integration and upgrading of common platforms, such as databases and learning management systems. These platforms manage key deliverables, including the European strategy on skills enhancement in the agriculture, food industry and forestry sectors.

The cost savings from platform design were reallocated to develop the website www.agrifood-pact4skill.eu, which is used to share project results and guidelines for several initiatives, including FIELDS, EQVEGAN, ASKFOOD, I-RESTART, and the newly negotiated AGRIFOODSKILLS, also coordinated by UNITO. This integration enables the seamless incorporation of materials from different projects into the Agrifood Pact for Skills platform, fostering collaboration and knowledge sharing among all members of the Pact. The approach has a multiplier effect, significantly boosting upskilling and reskilling efforts.

The inclusive management of the large consortium, which brings together experienced partners with new collaborators, has led to more diverse perspectives and innovative solutions. This broad network covers a wide range of skills and competencies, strengthening the project's overall impact.

Additionally, Daniele Rossi, former chair of the Research and Innovation (R&I) Committee of COPA-COGECA—the European association of farmers and cooperatives representing over 20 million members—plays an informal role as co-coordinator, further supporting the project's strategic goals.

Challenges faced

The challenge lies in aligning 30 partners to work towards common objectives across different Work Packages. This can lead to communication issues and a lack of engagement from some partners. These challenges can be addressed through frequent meetings. In-person meetings, in particular, have proven effective to align the perspectives of different partners and are organised when there is a lack of interaction.

Expected results and impacts

The project aims to reskill and upskill the workforce in the agri-food and veterinary sectors by offering 12 lines of competencies, surpassing the initially planned 10 curricula. Partners will identify skills gaps, create occupational profiles, and develop detailed curricula alongside a European strategy and 10 country-specific roadmaps. These roadmaps will address each country's unique needs while maintaining EU quality standards to support learning mobility across Europe.

Training content will be delivered through micro-credentials, promoting inclusivity and enabling workers to enhance their skills while remaining employed. The pilot training will involve 16 trainers and 120 trainees across eight countries, with 40 students participating in a work-based learning scheme focused on advanced entrepreneurial skills, supported by 32 mentors. This approach aims to foster intergenerational skill exchange and is implemented through micro-credentials.

In autumn 2024, the training materials will also be used in Kenya and Ghana to support poultry livestock farmers, with a primary focus on women. Over 250 people participated in Open Days held across seven countries (Italy, Spain, the Netherlands, Austria, Greece, Portugal, Romania). Although task completion was delayed, choosing significant events for stakeholder and expert involvement ensured greater impact among stakeholders and VET providers.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

All I-RESTART partners have signed the Agri-food Pact for Skills, underscoring their strong commitment to the initiative. The Agri-food Pact for Skills will keep drawing on resources from I-RESTART, FIELDS, and other projects like FoodSTA, ASKFOODS, and EQVEGAN, leveraging the expertise of partners from across these initiatives. Efforts are currently underway to develop a prototype of the Observatory on Agrifood Skills, which will serve as a permanent hub for disseminating project outcomes, providing training, and organising events within the framework of the Agri-food Pact for Skills.

I-RESTART builds on the results of its “sister project” FIELDS, particularly in terms of databases and Trend and Scenario Analysis. While FIELDS has already identified trends and constructed scenarios around future skills needs in the agri-food sector (focusing on sustainability, digitalisation, and bio-economy), I-RESTART complements this work by adapting it to the specific needs of the veterinary sector. For One-Health, I-RESTART conducted the trends and scenario analysis from scratch.

I-RESTART partners have utilised the platform framework developed by FIELDS. FIELDS collected data primarily on agriculture, the food industry, and forestry sectors, with a strong focus on bioeconomy, sustainability, and digitalisation. In contrast, I-RESTART collected data from the animal production, veterinary, and food industry sectors, emphasising soft skills, One-Health, and sector-specific emerging trends.

Contact information

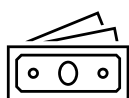
- Blueprint coordinator Remigio Berruto (UNITO) at remigio.berruto@unito.it or to the co-coordinator Daniele Rossi (d.rossi@confagricoltura.it).
- Check out the [website](#) of the Blueprint.

Construction

Establishing a new Strategy on Construction Skills in Europe – Construction Blueprint

Overview

The [Establishing a new Strategy on Construction Skills in Europe – Construction Blueprint](#) aimed to develop a skills strategy for the construction industry. It sought to support a better alignment between companies' skills needs and those taught in vocational training centres, focusing on themes such as energy efficiency, circular economy and the digitalisation of the construction industry.



EUR 4 million



2019-2023

Associated projects:

- [Construction](#) LSP
- [Pact4Youth](#) Forward-Looking project

Implementation

Governance structure

The Construction Blueprint consortium was led by the Spanish Fundación Laboral de la Construcción and comprised 24 partners from 12 countries⁹. The consortium gathered three sectoral European organisations, nine national sectoral representatives and 12 VET and higher education providers.

The consortium developed an elaborate governance structure. Technical issues were monitored by project leaders appointed by each partner. They reported to Work Package leaders who, in turn, reported to the lead project manager. Each partner appointed at least a project manager, a team leader, a technician, a financial officer, an administrative assistant and communication staff to manage the Blueprint. Partners also appointed separate National Advisory Groups in every participating Member State, constituted by local experts from the training field and the construction industry. The National Advisory Groups provided external feedback to improve the work of the Construction Blueprint. Their contribution varied from evaluation of results to participation in dissemination activities and/or exchange of knowledge and practices.

Main deliverables

The Construction Blueprint produced the following key deliverables.

- A [report](#) analysing the political, economic, social, technological, legal and environmental (PESTLE) factors impacting the construction industry and skills shortages and mismatches.
- A [Status Quo report on Sectoral Skills](#) outlining discrepancies between current and future skills to establish the training needs of workers in the sector.

⁹ The full list of partners is provided in Annex 1.

- A [report analysing skills needs](#) in the construction industries of project countries, particularly within the fields of energy efficiency, digitalisation and circular economy.
- A [Roadmap and Action Plan](#) identifying the strategies, measures, activities, results and plan of action to adapt skills demands within the construction industry to the current skills offer.
- An [interactive map](#) showcasing good practices and initiatives tackling gaps and mismatched skills in the construction industry. These good practices provide information on the leading organisation, aims, target groups and impact of the initiative.
- The [Construction Skills Observatory](#), a web-based tool to anticipate skills needs at the European and national levels, which compiles results about the skills most in demand - from around 3000 surveyed European construction companies - alongside secondary sources.
- A [report analysing transversal skills](#) needs across the construction sector.
- A new [VET Training Curricula](#), promoting upskilling and reskilling of construction workers and students within the fields of energy efficiency, circular economy and digitalisation.
- A [Moodle platform](#), including 75 free short courses for self-study in several languages targeted at students, workers, trainers or VET officers and addressing Energy Efficiency, Circular Economy and Digitalisation.
- A [European-level report](#) on the professions and qualifications required for modernising the sector, providing an overview of the relationship between skills gaps and job profiles and recommendations for upskilling strategies. [National reports](#) on the modernisation of occupational profiles were also produced for various EU countries.

The full list of deliverables is available on the Construction Blueprint's [website](#).

Success factors

A key success factor for the Construction Blueprint has been the strong level of commitment from consortium partners, which has had a positive impact on the quality of results. Partners proved to be resilient and flexible when reacting to new challenges in the sector and used online tools to continue working together during the COVID-19 pandemic. The use of regular feedback to engage with partners and ensure their involvement and receptiveness was successful in promoting bilateral dialogue during the project. This dialogue was particularly important, as notifying partners about the evolution of outcomes, bottlenecks or critical points was essential to enable them to adjust work, and meetings enabled collective decision-making and agreement on necessary corrective actions. A particular success was the selection and work of each Work Package leader, who promoted proactive approaches to ensure active participation from all partners. The National Advisory Groups proved a successful mechanism to review the partnership's work and ensure its success by revising and validating results. Lastly, regular monthly news sent to all partners, meetings with Work Package leaders and agile project management proved to be useful tools for project implementation.

Challenges faced

The Construction Blueprint operated in an industry facing challenges related to innovation, employment and competitiveness, which affected project activities in some cases. While the COVID-19 crisis encouraged consortium partners to experiment with alternative ways of working to ensure the Blueprint

work would continue, a three-month extension to finalise the outputs had to be requested as the outbreak of the pandemic caused delays in the project.

From a managerial perspective, the main challenge was the coordination of such a large consortium (24 partners). However, support from the Work Package Leaders allowed successful finalisation of the project.

Results and impact

The main impact and benefit of implementing the project is that it brought together the construction industry and Vocational Education and Training (VET) providers. This enabled the project to tackle the challenges of addressing the skills shortages of workers within the sector and of matching the workers' skills with the needs and demands of the labour market. This new strategy is connected to the general growth strategy of the European construction industry, and complements other initiatives and measures implemented for the sector.

Furthermore, as the Construction Blueprint worked to promote the attractiveness of the construction industry as a first vocational choice among young people and women, its efforts to gather best practices and launch campaigns, both in-person (in primary schools for example) and on social media, were particularly impactful. In connection with this, the role of the [Sectoral Skills Alliance](#) website in identifying and promoting existing solutions to facilitate the mobility of VET students, unemployed people, trainees, job seekers, trainers and training staff in Europe has been crucial.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The consortium has joined the Large-Scale Partnership for the Construction ecosystem. By joining the Pact for Skills, partners committed to developing their own programmes and activities to respond to the construction sector's priorities.

Similarly to the Construction Blueprint, the Spanish Fundación Laboral de la Construcción is implementing the [Pact4Youth](#) (2023-2024), an Erasmus+ Forward-Looking project. This project supports youth employability in the construction sector, in line with Key Principle 4 of the Pact for Skills in Construction related to attracting more young people and women in the sector.

A second edition of the Construction Blueprint has recently been approved for funding, also led by Fundación Laboral de la Construcción. This new project will start in 2025 and will last for four years. The consortium will be composed of 21 partners from 10 EU countries. The project will have a strong connection with the Pact for Skills in Construction, the framework under which all project activities will be developed.

Contact information

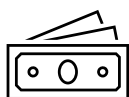
- Blueprint coordinator – Beatriz Oliete, Head of Training Projects, Fundación Laboral de la Construcción (FLC) at boliete@fundacionlaboral.org
- Check out the website of the [Construction Blueprint project](#)

Creative and Cultural Industries

Cultural Heritage Actions to Refine Training, Education and Roles - CHARTER

Overview

The [Cultural Heritage Actions to Refine Training, Education and Roles – CHARTER](#) Blueprint aims to establish a lasting, comprehensive Sectoral Skills Strategy to ensure that Europe possesses the cultural heritage skills needed to foster sustainable societies and economies. These skills encompass transversal competencies, including digital and technological skills, as well as green and blue economy expertise.



EUR 3.99 million



2021-2024

Associated projects:

- [Creative & Cultural Industries LSP](#)
- [CYANOTYPES](#) Blueprint
- [Creative FLIP](#)
- [INCREAS](#)

Implementation

Governance structure

The CHARTER consortium is coordinated by the University of Barcelona and comprises 28 full and affiliate members, and 19 associate members from 15 countries¹⁰. The consortium combines a diverse and multi-focal group of stakeholders representing different fields of expertise, such as education and training providers; industry representatives and employers; European and international networks; and regions.

The consortium is led by a Steering Committee, which includes the Project Coordinator along with the leaders and co-leaders of each of the seven Work Packages. The Steering Committee is tasked with monitoring the development, activities and plan of each Work Package.

Main deliverables

The CHARTER Blueprint produced the following key deliverables.

- A [report](#) presenting a new integrated model of the cultural heritage sector, defining its scope, dynamics and boundaries in relation to existing cultural, statistical, occupational and economic conceptual definitions, policy principles and frameworks.
- [Factsheets](#) with samples of brief descriptions of families of competences according to the matrix describing the new landscape of the cultural heritage sector.

¹⁰ The full list of partners is provided in Annex 1.

- A [report](#) featuring an investigation on how formal and non-formal education and training are transmitted and how these pathways may lead to qualifications for cultural heritage jobs and professions.
- A [report](#) benchmarking innovative/emerging curricula.
- An [overview](#) of the European landscape for standards and certification schemes to support mutual recognition and promotion of certifications in the sector.
- A [document](#) identifying the gaps and needs in the educational and training programmes in relation to the needs of the cultural heritage professional market. Following this, a [preliminary analysis report](#) was conducted to fill gaps between education and training supply and labour market needs.
- A [literature collection](#) on education and training including a comprehensive overview of the existing approaches and possible on-going development.
- A [report](#) mapping the roles and dynamics of internal and external stakeholders in the cultural heritage sector and implications for education and training systems in the cultural heritage sector.
- A [proposal](#) of eight VET, HE and lifelong learning guidelines for innovative/emerging occupations in Europe in cultural heritage areas.
- A [report](#) presenting a detailed analysis of six Regional Cultural Heritage Ecosystem case studies. This document aims to extract relevant insights and conclusions about the orchestration, governance and other systemically important stakeholders and elements that determine the sector-integrated dynamics in each Regional Cultural Heritage Ecosystem.

Furthermore, CHARTER implemented the following dissemination and awareness-raising activities:

- several communication tools, including a newsletter and a '[CHARTER news](#)' section on the Blueprint's website with articles, flash news, interviews, webinars and links to external content and events.

The full list of deliverables is available on the CHARTER [website](#).

Success factors

An effective communication strategy and the creation of synergies between stakeholders, institutions, programmes and sectoral initiatives contributed to the success of the different stages of the Blueprint implementation. Efficient internal procedures to manage the large consortium have been implemented, including through the adoption of management plans by the Work Packages leaders. Another success factor is that the CHARTER project includes a component to test its methodology and findings through analysing specific regional ecosystems as part of its regional roll-out strategy. Regional workshops have been organised in the Basque Country (Spain), the Sibiu County (Romania), the Free Hanseatic State of Bremen (Germany), the Alentejo Region (Portugal), the Tuscany Region (Italy) and the Västra Götaland Region (Sweden).

Challenges faced

Some of the challenges faced by CHARTER are related to language barriers within the culture and heritage sectors as not all stakeholders speak English (i.e. the working language of the Blueprint). To ensure their involvement and active participation, a number of translation and interpretation services had to be put in place.

As with other Blueprints, the COVID-19 pandemic introduced several additional challenges. Internally, it complicated the implementation and management of a large consortium as meetings and events had to be organised online. Furthermore, the COVID-19 crisis had a dramatic impact on the culture and heritage sectors, underscoring the importance of the CHARTER Blueprint's work.

Results and impacts

The CHARTER Blueprint has achieved several identifiable impacts. For example, the report on a new landscape for heritage professions allowed to increase awareness of cultural heritage as a sector of increasing economic value that permeates several other economic sectors due to its broad innovation potential and societal impact. The report also has the potential to support the development of a common approach to the classification of cultural heritage in educational, occupational and economic frameworks across Europe, with a view to define more aligned curricula for cultural heritage studies' recognition. Moreover, the report on cultural heritage education and training in Europe contributes to a better understanding of how education and training lead to qualifications in the cultural and heritage sector. The CHARTER factsheets not only help identify professional skills and competences in the heritage sector, draft competences profiles and suggest relevant tools, but they also enable the identification of needs and gaps in education and training provision and contribute to an integrated strategy for capacity building and professional recognition in the sector. Through this work, the CHARTER Blueprint is also contributing to EU-level policymaking by providing input for the updating of existing occupational profiles for the cultural heritage sector in the ESCO classification system.

In 2022, CHARTER received the EU Social Award for the Best Social Media Activity, which recognises the project's achievements in aspects related to social media communication and management¹¹. In 2023, the literature collection outlined possible on-going developments in education and training in the cultural heritage sector. Various reports were produced to identify the gaps and needs in the educational and training programmes followed by suggestions on how to fill these gaps. Moreover, Report 3.6 provides guidelines for developing innovative educational pathways in vocational education (VET), higher education (HE), and lifelong learning (LLL), promoting adaptability and future skills in cultural heritage professions. Report 4.3 offers insights from regional case studies, informing best practices and highlighting local challenges in relation to the integration of cultural heritage in regional development policies and strategies.

In 2024, it is expected that CHARTER booklets will be published summarising the key recommendations of the previous research milestones. This will be accompanied by a set of recommendations and a skills strategy document which will summarise the range of challenges and opportunities for the cultural heritage sector.

¹¹ [CHARTER wins Best Social Media Activity EU Social Award - CHARTER \(charter-alliance.eu\)](https://charter-alliance.eu)

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The CHARTER Blueprint is involved in the Pact for Skills through its collaboration with the Large-Scale Partnership for the Cultural and Creative Industries (Creative Pact for Skills). CHARTER consortium members are actively involved in the working groups established under the Pact to cooperate and identify next steps for the sector.

It is important to highlight the synergies established with other EU projects, such as Creative FLIP, INCREAS, and CYANOTYPES (Blueprint on Cultural and Creative Industries). CHARTER has worked closely with these and other EU initiatives. For instance, CHARTER were invited to coordinate and deliver a workshop at the final Creative FLIP conference in Brussels (November 2023), and they co-organised a workshop in Helsingborg with Creative FLIP and CYANOTYPES, held in the framework of the European Creative Industries Summit in May 2023. This collaboration led to the joint drafting of a policy paper on the "Suitability, visibility, and accessibility of CCSI-relevant employment information in European statistics and ESCO", contributing to the European Year of Skills.

In the coming months, the consortium is expected to publish a report summarising and illustrating the challenges and opportunities within the sector and upskilling and reskilling possibilities in relation to other sectors. The CHARTER booklets will also be published to summarise the key recommendations of the previous research milestones. A policy paper and stakeholder agreement will also be established to set up a skills observatory that could continue beyond the project's end date. Finally, the Blueprint aims to establish a CHARTER Alliance long-term Action Plan for the roll-out of the methodology, procedures, technological solutions and recommendations developed by the CHARTER Alliance.

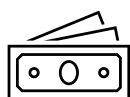
Contact information

- Blueprint coordinator – Dr. Lluís Bonet – at lbonet@ub.edu, the Blueprint Project Manager – Herman Bashiron Mendolicchio hmendolicchio@ub.edu, or [here](#).
- Check out the [website](#) of the CHARTER Blueprint.

Strategic Skills for Creative Futures – CYANOTYPES

Overview

The [CYANOTYPES](#) Blueprint is a pan-European project addressing the Cultural and Creative Industries (CCI) sector's needs and skills gaps. It aims to support the co-creation and delivery of a training programme with future-oriented transversal skills and practical transnational modules, covering a range of qualifications in both VET and tertiary education. CYANOTYPES also aims to provide inputs for workplace training and microlearning for existing and new occupational profiles.



EUR 3,99 million



2022-2026

Associated projects:

- [Creative & Cultural Industries](#) LSP
- [CHARTER](#) Blueprint
- [DEUS](#) CoVE
- [MOSAIC](#) CoVE

Implementation

Governance structure

The CYANOTYPES consortium is coordinated by the University of the Arts Utrecht. It is composed of 20 members and 28 associated partners from 19 different countries¹², including higher education institutions, European networks, industry sector partners, regional partners and quality assurance and training organisations. The project has a Steering Committee and an External Advisory Board.

Main deliverables

The CYANOTYPES Blueprint produced the following key deliverables.

- Several [reports](#) on the initial outcomes of the first phase of the Blueprint, which focuses on background research and information gathering regarding the skills needs and gaps within the CCI ecosystem.
- A [Continuous Skills Intelligence Gathering and Mapping Analysis](#), to address upskilling and reskilling activities and skill demands within the industry.
- Reports addressing skill needs and strategies in the CCI sector. These include [Addressing Urgent Skills Needs for CCI Sector](#) and the [Skills Strategy for CCI Sector](#).

Furthermore, CYANOTYPES implemented the following dissemination and awareness-raising activities:

- several events, complemented by an [annual CYANOTYPES Events report](#) to capture feedback and outcomes from each session.

The full list of deliverables is available on the CYANOTYPES [website](#).

¹² The full list of partners is provided in Annex 1.

Success factors

Following the project launch, the consortium collaborated to identify skills gaps and develop the CCI Skills Strategy, aligning it with the EU Skills Agenda and the Creative Pact for Skills. The project also hosted its inaugural Creative Skills Week in October 2023, successfully engaging a broad cross-section of the CCI ecosystem.

Currently, the partnership continues to work proactively toward its goals. Several curriculum development teams have been established, bringing together diverse perspectives from business, VET, and higher education to design and implement the “Creative Agency Circle” model¹³.

Challenges faced

The project began during the challenging period following the COVID-19 crisis. Partners successfully adapted to these difficulties by implementing innovative solutions, such as online workshops to complement physical events. Managing a diverse consortium representing various sectors of the same ecosystem posed additional challenges. However, partners collaborated effectively to develop and co-create a shared vision.

Results and impacts

The consortium has held the second edition of the [Creative Skills Week](#) in September 2024, powered by the [SACCCORD](#) project. In 2025, the piloting phase for the CYANOTYPES Framework will begin with eight sectoral pilots and eight cross-sectoral pilots to test and improve the framework and curricula in various learning contexts. A further call for Open Pilots will be launched in spring 2025 and support will be provided for a large number of pilots in diverse contexts. Following the conclusion of the Open Pilots, the information and results will be gathered to finalise the [Train-the Trainer Framework](#) and make it widely available.

The Train-the-Trainer Framework is based on the Creative Agency Model to help individuals and organisations identify the level of skills-readiness and develop key skills for future creatives. The aim is to update existing and future education and training programmes, helping learners develop knowledge and skills that promote transversal thinking. Transversal competences are essential to address upcoming challenges as they can provide the expertise to gain access to different tasks and job roles, enabling individuals to adapt to changes in their careers and in times of crisis.

¹³ Train the Trainer Framework – Cyanotypes

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The CYANOYPES consortium is a member of the [Creative Pact for Skills](#), which is the Large-Scale Partnership for the CCIs. The Creative Pact for Skills is a shared engagement and approach to skills development that encourages collaborative upskilling and reskilling efforts among different stakeholders. Within the CCI sector, the Creative Pact for Skills consortium works alongside CoVE projects such as [DEUS](#) and [MOSAIC](#). DEUS is a VET project coordinated by the Matera – Basilicata 2019 Foundation, that aims to create a European-wide learning and training approach in critical thinking and entrepreneurship to find participatory, creative and cost-effective solutions to local challenges within the CCI sector. Similarly, the MOSAIC project aims to foster high quality skills that lead to quality employment and career-long opportunities which meet the needs of an innovative and sustainable economy within the Arts & Crafts sector.

Furthermore, as members of the [Pact for Skills](#), the CYANOTYPES consortium has access to knowledge on upskilling and reskilling needs, advice on relevant funding instruments to boost the skills of adults in their regions and countries, and partnership opportunities. The project aims to make a substantial impact on upskilling and reskilling within the CCIs, fostering learning in ecosystems designed to be regenerative.

Contact information

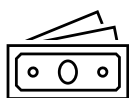
- Blueprint coordinator David Crombie (HKU University of the Arts Utrecht) at david.crombie@hku.nl
- Check out the [website](#) of the CYANOTYPES Blueprint.

Digital

Artificial Intelligence Skills Alliance - ARISA

Overview

The [Artificial Intelligence Skills Alliance \(ARISA\)](#) Blueprint aims to equip employees, job seekers, business leaders, and policymakers with the knowledge and resources to accelerate upskilling and reskilling into AI-related professions, thereby unlocking new business opportunities across Europe.



EUR 3,5 million



2022-2025

Associated projects:

- [Digital LSP](#)

Implementation

Governance structure

The ARISA consortium is composed of 17 full partners from 13 countries¹⁴. They implement the Blueprint and make up the steering committee, which is the highest decision-making body of the project. The Blueprint's coordinator is DIGITALEUROPE, and EXELIA is responsible for quality assurance.

Additionally, ARISA includes 33 associated partners from 15 countries. These partners actively contribute to the Blueprint, receive early access to resources, and participate in networking activities with other ARISA members. Representing a wide range of ICT representative bodies, educational and training institutions, regulatory bodies, and industry stakeholders, the associated partners bring diverse expertise.

An advisory board of experts further supports ARISA, offering feedback and insights that are integrated into the ongoing development of the Blueprint.

Main deliverables

The ARISA Blueprint produced the following key deliverables.

- The [AI Skills Strategy for Europe](#), which is a strategic plan aiming to reduce skills shortages, gaps, and mismatches to ensure a high standard and diverse skillset among the general public.
- [The AI Skills Needs Analysis](#), which sheds light on the most needed AI roles and skills in Europe.
- Curricula covering various AI professional roles and policy- and decision-makers.

¹⁴ The full list of partners is provided in Annex 1.

- Training materials to upskill and reskill employees, job seekers, business leaders, and policymakers into AI-related professions.

Furthermore, ARISA implemented the following dissemination and awareness-raising activities:

- various [newsletters](#) sharing the progression and news of the consortium;
- events hosted by the consortium, including [the Digital-LSP Stakeholder and Matchmaking Event](#), the [AI Skills Strategy for Europe: Online Launch Event](#), the [Strategic Leadership in the Era of Artificial Intelligence Workshop](#), and the [AI and Policymaking Workshop](#).

The full list of deliverables is available on the ARISA [website](#).

Success factors

Today in the European Union, only 8% of enterprises are using an AI technology¹⁵. The ARISA consortium will fast-track the upskilling and reskilling of employees, job seekers, business leaders and policymakers into AI-related professions to open Europe to new business opportunities.

Two years into the project, ARISA can report several success factors:

Relevant expertise. The ARISA consortium and its extensive network of associated partners and advisory board members bring together a wealth of knowledge across various domains. Consequently, ARISA is well-positioned to foster collaboration and drive impactful, inclusive solutions.

Agile approach. Facing a rapidly evolving AI landscape, the ARISA consortium has demonstrated its agility and forward-thinking approach in adapting to emerging trends and challenges. This flexibility is evidenced by a recent Grant Agreement Amendment, which incorporates these changes, ensuring the Blueprint remains aligned with the latest technological advancements and market needs.

Strong collaboration and engagement. The consortium partners maintain a close and active dialogue, ensuring continuous support and knowledge-sharing. This high level of engagement fosters a collaborative environment where partners help each other overcome challenges and capitalise on opportunities.

The key values which will enforce the success of this Blueprint include:

Innovative education to support employers and learning providers to offer innovative learning pathways to gain in-demand, future-proof skills necessary for AI-related professions. To ensure this, ARISA has developed a host of curricula and accompanying materials that will be distributed freely for learning providers to adopt. The project has also been running workshops to urgently upskill policymakers and decision-makers and is currently rolling out an innovative learning platform.

Inclusion is to ensure that employees, job seekers, business leaders, and policymakers all understand AI and to drive collaboration and contribution to AI-based solutions that are inclusive and human-centred. The ARISA curricula strongly emphasise AI ethics, ensuring that students are equipped with the knowledge to develop responsible and ethical AI applications. Additionally, the project actively recruits students from diverse backgrounds and ensures gender representation, fostering an inclusive learning environment that reflects the diversity needed in AI.

¹⁵ <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240529-2>

Future-oriented approach to create a lasting partnership between education, industry and policy actors to open the EU to new opportunities powered by AI-enabled solutions. This approach is supported by the recruitment of associated partners to create a wide-ranging network of stakeholders, and a solid sustainability plan to ensure the long-term success of the Blueprint.

Challenges faced

The project encountered a few minor delays, which were addressed through a Grant Agreement Amendment. The consortium effectively absorbed and managed the impact of these delays. Another challenge was the rapid pace of technological change. The consortium overcame this by implementing a robust sustainability plan. They utilised a methodological document to organise tasks and workflows while also strengthening engagement through iterative input from market experts.

Results and impacts

As the Blueprint is still ongoing, the final results will need to be reviewed upon its completion. However, ARISA has already made a significant impact by successfully disseminating early results (notably the AI Skills Strategy for Europe and the AI Skills Needs Analysis). The Blueprint has also addressed urgent AI skills gaps by implementing targeted training initiatives. These include workshops specifically designed to enhance the AI knowledge of policymakers and decision-makers. In addition, a dedicated online learning environment is being developed to expand and upscale these crucial upskilling activities.

The consortium has successfully developed curricula, learning programmes, certification methods, and a comprehensive framework. Moving forward, the Blueprint will concentrate on piloting these learning programmes and courses, while driving further uptake of ARISA's results to ensure widespread adoption and long-term sustainability.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

ARISA has close ties with the Digital LSP through its partner European Digital SME Alliance that coordinates the LSP. The ARISA consortium also hosts events to enforce the collaboration between the Pact for Skills and the Blueprint. This includes the Digital LSP Stakeholder and Matchmaking Event. Additionally, the consortium has held a webinar titled “AI and the Future of Learning: Key Factors for Success” on 19 September 2024. This webinar has explored crucial topics such as the integration of AI in various learning environments and the development of essential skills for the future workforce.

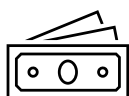
Contact information

- Blueprint coordinator – Helena Lovegrove, DIGITALEUROPE – at helena.lovegrove@digitaleurope.org; copy Chiara Longobardi (chiara.longobardi@digitaleurope.org).
- Check out the [website](#) of the ARISA Blueprint

Blueprint for Sectoral Cooperation on Blockchain Skill Development - CHAISE

Overview

The [Blueprint for Sectoral Cooperation on Blockchain Skills Development – CHAISE](#) aims to create a European strategy to address skills mismatches and shortages in the blockchain sector. It focuses on providing future-oriented training, qualifications, and mobility solutions tailored to the sector's needs.



EUR 3.9 million



2020-2024

Associated projects:

- [Digital LSP](#)
- [EU Digital Decade](#) targets

Implementation

Governance structure

The CHAISE consortium, coordinated by the University Claude Bernard Lyon 1 in France, is composed of 23 partners from 13 different countries¹⁶. An Expert Advisory Board provides technical and scientific support to the Blueprint. This Expert Advisory Board gathers 17 experts and representatives from industry, education, policymaking, civil society and scientific communities from 15 countries.

Main deliverables

The CHAISE Blueprint has produced the following key deliverables.

- The [European Blockchain Skills strategy](#), which provides a practical approach to respond to blockchain skills needs and deliver training solutions. The European Blockchain Skills strategy has been updated yearly in [2023](#) and [2024](#).
- A Blockchain registries of relevant opportunities. These include the [Registry of Blockchain educational training and offerings](#); the [Registry of Blockchain online job vacancies](#); and the [Registry of Blockchain skills matching initiatives](#).
- Several studies on key issues relevant to the blockchain sector: These include [the Study on Blockchain labour market characteristics](#); the [Study on Blockchain skills demand](#); the [Study on Blockchain skills supply](#); the [Study on skills mismatches in the European Blockchain sector](#); and the [Study on the EU Blockchain Growth Strategy](#).
- The report on [Blockchain Learning Outcome Support](#) and the [2024 Update of the Blockchain Skills Strategy](#).
- A [Blockchain Skills Forecasting Model](#) to act as a collaborative method for the anticipation of future skill demand and supply.

¹⁶ The full list of partners is provided in Annex 1.

- A [factsheet](#) on Blockchain Skills Forecast as well as updated versions of the factsheet for [2023](#) and [2024](#).
- A report on [Annual Blockchain Skills Forecasts](#) outlining a methodological framework to estimate the demand for blockchain skills by using data scraping technologies. An updated report was published in [2023](#) and [2024](#).
- A [Curriculum Structure](#) breakdown of the modules, hours and lectures to deliver training to address blockchain skill shortages.
- An [online course on Mastering Blockchain and Distributed Ledger Technologies](#), available in 11 languages.
- A Validation Methodology that specifies the procedure of how the competence of persons is certified by ECQA GmbH, through the [CHAISE examination portal](#).
- A [Blueprint](#) for the establishment of a new VET qualification on Blockchain and Distributed Ledger Technologies.
- A [guide for job seekers](#) aspiring to build a career in the dynamic and rapidly growing field of Blockchain and Distributed Ledger Technologies, and a [guide for employers](#) to attract top Blockchain talent.

The full list of deliverables is available on the CHAISE [website](#).

Success factors

The Blueprint demonstrated its success through several key factors, including high-quality project design, timely implementation, and adequate funding. These elements were supported by strong internal collaboration and the commitment of its partners.

Synergies with other skills alliances/Blueprints and thematically relevant projects has also been a crucial success factor. The consortium published several reports throughout the past years and successfully delivered blockchain training through its future-proof blockchain curriculum and training content programme.

The Blueprint also established internal and external quality assurance procedures and effective dissemination activities which also ensured the circulation of high-quality deliverables to relevant recipients and target groups.

Challenges faced

The COVID-19 pandemic disrupted the Blueprint's smooth implementation and development. In addition, the low maturity of blockchain ecosystems and limited availability of blockchain-related evidence (e.g. statistics) was a major barrier to the analysis of the blockchain field.

Results and impacts

The Blueprint leads the implementation of an institutionally validated European Blockchain Skills Strategy by coordinating the relevant stakeholders and setting up the mechanisms for strategic collaboration at European and national levels.

CHAISE has developed a forecasting mechanism to anticipate future blockchain skills needs through setting up a collaborative method for monitoring the evolution of workplace requirements. By defining EU-wide occupational requirements for the blockchain workforce, the Blueprint contributed to the

Power-up skills: developing Europe's workforce

update of existing blockchain occupational profiles in the ESCO classification system (i.e. Blockchain Developer and Blockchain Architect), as well as to the introduction of a new profile (i.e. Blockchain Manager).

CHAISE set up a network of experts and associated partners to discuss and exchange blockchain skill needs and developed an online registry with blockchain training offers across the EU. The latter provides information to small and medium-sized enterprises (SMEs) and their employees regarding available upskilling and reskilling opportunities.

CHAISE has also developed a guide for job seekers aspiring to build a career in the dynamic and rapidly growing field of Blockchain and Distributed Ledger Technologies, and a guide for employers to attract top Blockchain talent.

Lastly, CHAISE developed an innovative five-semester Blockchain VET Programme in 11 EU languages to address technical, non-technical and cross-discipline skill needs, and design transnational mobility schemes for blockchain students and professionals. The entire curriculum consists of 12 modules that are further broken down into 48 lectures, providing 120 credit points in total and leading to the award of a professional qualification (based on the chosen specialisation). The curriculum provides 1200 hours of theoretical and 480 hours of practical (work-based) learning, employing a modular structure to facilitate deployment in both formal and informal C-VET environments.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The CHAISE Blueprint has built strong synergies with the Pact for Skills as an avenue to both further contribute to boosting upskilling and reskilling, and to strengthen the outreach and impact of its deliverables. CHAISE strongly collaborates with the Digital Large-Scale Partnership (Digital LSP) and has contributed to the Pact in several ways. This includes identifying skills needs in the blockchain field, enhancing labour market and skills intelligence for the digital ecosystem, and sharing its Labour Market Analysis tools to pinpoint workplace requirements and skills needs in the sector. Additionally, the Blueprint supports the Pact for Skills by creating a network of experts to discuss and exchange blockchain skill needs and formulating an industry-validated strategy to advance blockchain skills development in Europe. In June 2024, the CHAISE Blueprint formalised its synergy with the Pact for Skills by signing the Pact for Skills charter and declaring its commitment to the initiative.

The collaboration between CHAISE and the Digital LSP aims to facilitate the exchange of knowledge and best practices, as well as joint activities focused on digital upskilling. CHAISE actively contributes to the Digital LSP's mission to help achieve the EU Digital Decade targets, which include equipping 80% of the population with basic digital skills, achieving gender balance in the digital sector, and reaching 20 million ICT specialists by 2030. In addition, CHAISE has showcased its achievements and connected with the Digital LSP stakeholders by contributing to several events organised by the Digital LSP.

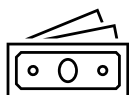
Contact information

- Blueprint coordinator – Professor Parisa Ghodous, Université Claude Bernard Lyon 1 – at parisa.ghodous@univ-lyon1.fr or [here](#).
- Check out the [website](#) of the CHAISE Blueprint.

European Software Skills Alliance - ESSA

Overview

The [European Software Skills Alliance – ESSA](#) Blueprint aims to develop a skills strategy for the software services industry in Europe. ESSA's goal is to boost growth and human capital in the sector by providing solutions to skill, upskill and reskill individuals into high-demand roles across Europe.



EUR 3.8 million



2020-2024

Associated projects:

- [Digital LSP](#)

Implementation

Governance structure

The ESSA consortium is led by DIGITALEUROPE and comprises a total of 21 full partners from 12 countries¹⁷. The consortium is complemented by 44 associated partners from 19 countries. Each of the associated partners is participating in different work strands of the project, including in the soft piloting of short curricula.

The 21 full partners of the ESSA Alliance are central to the Blueprint's activities. They are committed to closely collaborating throughout all project stages to implement the ESSA work programme and ensure that the project's aims and outputs meet the highest quality standards for the EU Software Services Community. The Project Steering Committee, composed of all ESSA Work Package leaders, meets regularly to make important collective decisions.

Associated partners are key drivers of the Alliance's growth. In the second year of the project, an onboarding process was designed and successfully implemented via the ESSA website. The network was further expanded during 2023 and 2024 as part of the ESSA Alliance's sustainability plans.

Main deliverables

The ESSA Blueprint produced the following key deliverables.

- A [report](#) analysing the most needed software roles and skills in Europe.
- A [Software Skills Strategy for Europe](#) presenting perspectives and expert recommendations to skill, upskill, and reskill individuals into high-demand professional software roles.
- A [typology](#) of nine educational profiles for software roles translating the employers' skills need into educational terms.
- A [report](#) explaining how to design software professionals' curricula.
- A [booklet of case studies](#) presenting 12 ideas to tackle the shortage of software professionals in Europe.
- An online [ESSA Software Skills Community](#).

¹⁷ The full list of partners is provided in Annex 1.

- A report on [the ESSA Learning Programmes & Materials](#) which presents the educational activities designed by the Blueprint for skilling, up-skilling and re-skilling students and professionals.
- The [ESSA Train the Trainer Programme & Materials](#) provides teachers and educators with the information necessary to implement the ESSA Learning Programmes.
- A Report on [European Mobility Programme](#) which provides an overview of the approach taken about mobility by the Alliance.
- A [report](#) on the implementation and evaluation of ESSA learning programmes pilots.
- A [report](#) on ESSA Work-Based Learning, which presents the set of educational activities designed and organised to ensure the acquisition of knowledge and skills in a vocational context, either at the workplace or in a learning institution.

The full list of deliverables is available on the ESSA [website](#).

Success factors

The presence of an experienced and dedicated consortium of 21 partners with common views to the challenges of the sector is the main driving force of the project. Furthermore, organising monthly online meetings with all partners has significantly contributed to the Blueprint's success by facilitating their active involvement in daily management and keeping them informed about updates.

Flexible project management, which accommodates changes in the initial approach, is regarded as a key success factor. Likewise, the ability to amend the Grant Agreement to adjust the work programme according to the current situation has also contributed to the Blueprint's success. This flexibility has enabled the partnership to revise various tasks and outputs, ensuring more efficient delivery and greater impact of its activities.

Challenges faced

While the variety of partners is an added value, it also presented challenges in terms of relaying ESSA's strategic vision to all consortium members, as some had differing views or perceptions about the Blueprint project.

Furthermore, the COVID-19 pandemic resulted in additional challenges, particularly as face-to-face meetings could not be held. The partnership, however, has adapted to this new challenging environment by organising monthly online meetings during the first year of the project, paired with face-to-face meetings every six months.

Results and impacts

ESSA is now in its final year of implementation, and some of its outputs have already had significant impact on the industry. The Skills Needs Analysis and Software Skills Strategy have been widely disseminated and taken up by experts and stakeholders from the industry, as well as by education and training providers. Thanks to these deliverables, the Blueprint has effectively raised awareness about the need for cross-sectoral and public-private cooperation for skills development. In addition, the piloted learning programmes involved more than 400 students and more than 70 trainers at higher education and vocational education level. The impact of the project is further evidenced by the growth of associated partner organisations that are part of ESSA's expanding network and reach.

During its final year, ESSA is now focusing on disseminating the developed curricula and learning programmes and materials and formulating a model for the long-term sustainability of the project.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

ESSA is coordinated by DIGITALEUROPE, which also co-coordinates the Digital Large-Scale Partnership (Digital LSP). DIGITALEUROPE's activities within ESSA are fully aligned with their commitments under the Digital LSP.

The ESSA consortium has finalised a Sustainability and Exploitation Plan outlining measures to ensure the sustainability of ESSA's outputs. The Blueprint's longer-term strategy is to expand the Alliance, update and upscale VET curricula and training programmes initiated by the project team, ensure these programmes are widely adopted across the EU, keep promoting software as a career path, and identify and exploit EU funding opportunities to ensure the project's financial viability.

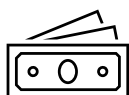
Contact information

- Blueprint coordinator – Helena Lovegrove – at Helena.Lovegrove@digitaleurope.org
- Check out the [website](#) of the ESSA Blueprint.

The Cybersecurity Skills Alliance – New Vision for Europe - REWIRE

Overview

The [Cybersecurity Skills Alliance – New Vision for Europe \(REWIRE\)](#) Blueprint seeks to advance the development of a concrete European Cybersecurity Skills Strategy by providing sustainable solutions to bridge the skill gaps between industry requirements and training providers.



EUR 3.98 million



2020-2024

Associated projects:

- [Digital LSP](#)

Implementation

Governance structure

The REWIRE consortium is coordinated by the Mykolas Romeris University in Lithuania and is composed of 25 partners from 12 countries¹⁸. REWIRE is organised around seven Work Packages and operates with the support of an Expert Advisory Board, composed of experts in the cybersecurity and VET sectors. This Board provides advice on key project outcomes.

Main deliverables

The REWIRE Blueprint has produced the following key deliverables.

- The [European Cybersecurity Blueprint](#) aiming to stimulate cybersecurity education in Europe.
- A [Cybersecurity Skills Needs Analysis](#) assessing the needs for cybersecurity skills, and providing an overview of the state of play in the sector.
- A [Cybersecurity Skills Framework](#) analysing competences, qualifications and occupations in existing cybersecurity skills frameworks, as well as revising and establishing new occupational profiles and corresponding skills needs.
- A [mapping](#) of existing training courses, university curricula and certification schemes on cybersecurity.
- The Blueprint Toolbox, which offers resources connected to education, training and education including the [Cyber Range Establishment methodology and roadmap](#), the [REWIRE Curricula and Training Framework](#), the [Results of the 1st Cybersecurity VOOCs delivery](#), and the [Cybersecurity Skills Assessment Recommendation](#).

Furthermore, REWIRE has implemented the following dissemination and awareness-raising activities:

- a [dissemination plan](#) to ensure visibility of the project;

¹⁸ The full list of partners is provided in Annex 1.

- various dissemination materials including banners, posters and brochures.

The full list of deliverables is available on the REWIRE [website](#).

Success factors

REWIRE's success is rooted in its extensive and diverse network of partners, including VET centres, academia, industry, and representatives from both European and national sectors. This network facilitates outreach to relevant stakeholders, connects with cybersecurity specialists, and provides access to deliverables produced by other cybersecurity-related EU projects.

Challenges faced

The biggest challenge REWIRE has faced is the turnover of partners or staff within partner organisations, which can disrupt collaboration within the consortium.

Results and impacts

The Blueprint has had three main objectives:

Innovation	Impact	Sustainability
Design and delivery of the European Cybersecurity Blueprint and delivery of training programmes in highly innovative fields	Promotion of the application of European Quality Assurance in Vocational Education and Training (EQAVET) and EQF/ECVET frameworks to ensure both the quality and better transferability of the project's results	Creating a lasting partnership among all types of stakeholders, provide career guidance and facilitate the transnational mobility of stakeholders

Throughout the project, the consortium followed a [dissemination plan](#) to ensure visibility and effective communication. Following the end of the Blueprint, results have been shared through various dissemination materials including banners, posters and brochures. The key results address the skills gaps in the cybersecurity sector and include the Cyber Range Platform, the Certification Schemes, the CyberABILITY and the online courses. The Cyber Range Platform offered machine, container and network virtualisation, components and tools for more realistic and automated scenario execution and more. The Certification Schemes covered specific areas of cybersecurity and followed international best practices. The [CyberABILITY](#) Platform is a digital European Cybersecurity Skills Digital Observatory which provides up-to-date information regarding the job market competences, training courses and career roadmap. Lastly, the online courses provided training and relevant certification schemes for selected occupational profiles through Vocational Open Online Courses (VOOCs), based on the REWIRE Curriculum and Training Framework.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The consortium maintains close ties with the Pact for Skills through its collaboration with the Digital Large-Scale Partnership (Digital LSP). For example, REWIRE was involved in the [Digital LSP stakeholder and matchmaking event](#). Further synergies with the Pact for Skills, as well as steps needed to ensure the sustainability and exploitation of project results beyond the duration of the Blueprint, are still being explored. During the last year of the project (2024), a detailed 'Action Plan for the European

Power-up skills: developing Europe's workforce

Cybersecurity Blueprint Sustainability' is being developed to explain how the results of the Blueprint will be disseminated after the closing of the project and how sustainability will be ensured.

Contact information

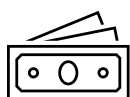
- Blueprint coordinator – Ruta Ziberkiene – at rutzib@mruni.eu or at info@rewireproject.eu
- Check out the [website](#) of the REWIRE Blueprint.

Electronics

MicroElectronics Training, Industry and Skills – METIS

Overview

The [MicroElectronics Training, Industry and Skills – METIS](#) Blueprint aimed to address the need for advanced skills in the microelectronics sector. It brought together key participants in the EU microelectronics ecosystem to develop a Sector Skills Strategy as well as a Technical and Vocational Education and Training (TVET)/educational offer.



EUR 3.98 million



2019-2023

Associated projects:

- [Microelectronics LSP](#)
- [European Chip Skills Academy](#)

Implementation

Governance structure

The METIS consortium was coordinated by SEMI Europe located in Germany and was composed of a total of 18 partners from 12 countries¹⁹. METIS' eight Work Packages are intertwined, each leading to the implementation of activities in a structured and controlled fashion.

Main deliverables

The METIS Blueprint produced the following key deliverables.

- A report on [Skills and Occupational Profiles for Microelectronics](#) describing the main mismatches on the current European microelectronics job market. The report identifies the most critical skills and knowledge required by the industry, associated job profiles, and assesses the impact of emerging technologies on these skills.
- A METIS [Skills Strategy](#) identifying the trends, challenges and opportunities associated to the skills needs in the European microelectronics industry.
- A jointly developed industry/university [METIS training](#) in microelectronics design and manufacturing, green skills and soft skills. It provides a total duration of 1,100 hours of training, divided into four topics and 88 courses, and was tested by nearly 1600 learners from more than 200 organisations representing 29 countries.
- A Long-term Action Plan for the skills development of the microelectronics industry, driven by industry and academia. To sustain the outcomes of the METIS project—particularly the developed courses and training materials—and to maintain and expand the multi-stakeholder collaboration formed during the project's implementation, the consortium has established the [EU](#)

¹⁹ The full list of partners is provided in Annex 1.

[Chips Skills Alliance](#). This initiative is driven by both industry and academia to ensure continuous skills development in the microelectronics sector.

The full list of deliverables is available on the [METIS website](#).

Success factors

A crucial success factor for METIS is the Blueprint's relevance for the [European Chips Act](#), whose objective is to overcome the skills and talent shortages in the semiconductor industry. Therefore, the results of METIS – such as the Skill Strategy and the development of its long-term action plan – are highly relevant to the implementation of the Act. Another success factor has been the strong cooperation between METIS and other Blueprints (e.g., DRIVES) to overcome common challenges and explore the potential for synergies.

Challenges faced

Building and hosting adapted training courses was a challenge for the Blueprint due to the lack of a centrally managed e-learning platform and the lack of experience of the participants in sharing courses with the wider public. However, METIS was able to overcome this limitation by collaborating with the DRIVES Blueprint, which gave METIS access to its own online platform for the dissemination of the METIS' course catalogue. Both consortia met regularly to discuss further potential collaboration.

Results and impacts

The Microelectronics Sector Skills Strategy developed by METIS helps match skills demand and supply using a methodology to assess, anticipate and monitor the evolution of relevant skills, competences and occupations in the sector. The project also defines and refines occupational profiles based on existing competence frameworks and the ESCO classification system, which the Blueprint has helped to update. METIS has paved the way for the development of microelectronics-specific competence framework(s) and introduced innovative learning-outcome-based VET curricula, jointly developed by industry and education providers. The Blueprint has thus contributed to enhancing the visibility of the microelectronics sector as a professional career path. METIS has also helped to tackle the gender dimension of employability in the sector.

Synergies with the Pact for Skills, Centre of Vocational Excellence (CoVEs) and Forward-Looking projects

Through its three core elements—assessing skills needs, designing and delivering innovative training, and developing a long-term action plan - METIS has laid the groundwork for further sectoral collaboration under the Large-Scale Partnership for Microelectronics (Microelectronics LSP). SEMI Europe – the METIS Coordinator – is running the secretariat of the LSP and has developed a [vision paper](#) for a European Chips Skills Academy.

Contact information

- Blueprint coordinators – Christopher Frieling, Director, Advocacy and Public Policy and Maria Afsar, Manager, Government Projects at SEMI Europe – at cfrieling@semi.org and mafsar@semi.org or [here](#).
- Check out the [website](#) of the METIS Blueprint.

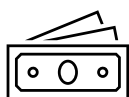
Energy-Intensive Industries

European Steel Skills Agenda and Alliance - ESSA

Overview

Main aims and objectives

The [European Steel Skills Agenda and Strategy – ESSA](#) Blueprint aimed to close skills gaps and address skills shortages, recruitment difficulties and talent management issues in the steel industry. In addition to climate change-induced demands for energy efficiency, the sector is impacted by rapid technological developments. In particular, the growing digitalisation of production processes means new skills are needed. ESSA worked to address these challenges and ensure that the current and future workforce adapts to these changes by gaining relevant skills and shifting towards new working practices. The Blueprint has since evolved into a sustainable European Steel Skills Alliance, featuring governance structures such as the Foresight Observatory, Skills Radar, and the online training platform steelHub.



EUR 3.99 million



2019-2023

Associated projects:

- [Energy-Intensive Industries](#) LSP
- [SPIRE-SAIS](#) Blueprint
- [steelHub](#)
- Skills4EII

Implementation

Governance structure

The ESSA consortium is led by the German Technical University of Dortmund and comprises a total of 24 partner organisations from 12 countries, alongside 20 associated partners providing their technological and skills expertise²⁰. The Blueprint is governed by existing EU and national steel structures, namely:

- the European Steel Technology and Skills Foresight Observatory as the main European coordination unit, conducting a regular European Steel Technology and Skills Foresight Survey (Skills Radar);
- the online training ecosystem [steelHub](#);
- the European Community of Practice of Steel Regions, connecting and supporting different National-Regional Steel Training Ecosystems in the main European steel regions to exchange, initiate, develop and implement good practice for skills and training.

²⁰ The full list of partners is provided in Annex 1.

Main deliverables²¹

The ESSA Blueprint produced the following key deliverables.

- Flyers in different languages.
- A report analysing cross-European VET frameworks and standards for sector skills recognition.
- A database of professional profiles as well as a guiding video.
- A Sector Skills Matrix, to identify steel-sector relevant occupational qualification programmes in five European countries with a significant steel industry.
- A report on the piloting and sustainable implementation of the Blueprint framework/strategy, tools and measures that includes a prototype of the Blueprint New Skills Agenda for Steel and outlines a coherent strategy with ESSA Foresight Observatory, the Regional Training Ecosystem and the online training ecosystem steelHub for which new stakeholders must be engaged in the project.

Furthermore, ESSA implemented the following dissemination and awareness-raising activities:

- several newsletters;
- the organisation of the ESSA Mid-Term in May 2021, Final Conference in May 2023 and ESSA's participation in over 970 recruitment/dissemination events all over Europe.

To access the deliverables, please contact Blueprint coordinator.

Success factors

Keeping national and regional specifications and needs at the forefront when establishing a European framework has contributed to the Blueprint's successful implementation. Besides the work carried out at the EU level by the Blueprint, there are nine national/regional roll-outs running their own training systems according to specific national/regional demands and solutions (Belgium, Czech Republic, Finland, Germany, Italy, Poland, Romania, Spain and UK).

Being open to new partners, activities, feedback and being flexible enough to change planned approaches when the practical application shows their limitations, proved to be important factors for the successful implementation of the Blueprint. Lastly, the diversity of partners' backgrounds has also had a positive impact as each one of them has brought in their specific competences and activities.

Establishing a well-defined governance structure has proven beneficial for both the project's implementation and its sustainability beyond the funding period. The presence of an EU-level governance board, alongside local stakeholders responsible for execution, ensures that national and regional specificities are effectively considered.

An important outcome of ESSA is the online training platform steelHub. With steelHub, ESSA reached more than 12,000 learners up to now and about 1,000 learners every month since June 2022. steelHub is used by 25 steel manufacturing companies (Celsa, ArcelorMittal, SIDENOR, and others), 10 universities, two high schools and one equipment provider. The Learning Solution Directory includes about 1,500 learning solutions in different languages.

²¹ Links to the deliverables are currently not available online.

Challenges faced

External factors such as the COVID-19 pandemic and the energy crisis have resulted in new challenges for some of the consortium partners, affecting their participation and commitment.

Results and impacts

Remarkable cooperation between companies, training providers, research institutes, steel associations and social partners has been fostered through the ESSA Blueprint.

Furthermore, several Blueprint outputs have had significant impact or have the potential to support skills development in the steel sector in the years to come. For example, the online platform 'steelHub' has been used extensively by companies, training providers and individual learners. Thanks to this platform, the European steel industry has now a clear and integrated governance structure, which ensures the ongoing adjustment of sectoral skills and strategies.

Steel companies' current and future skills requirements were identified and published in a report offering concrete examples to demonstrate how the steel company departments (particularly human resources departments), curriculum developers, qualification providers and other stakeholders can use the generated profiles for job profile definitions during the assessment, career development and curriculum design. This will support organisations with the digital transformation adaptation. Lastly, a common database of professional profiles related to the steel sector and the Sector Skills Matrix can support the systematic identification of steel-sector relevant occupational profiles and qualification programmes.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

Together with the Skills Alliance for Industrial Symbiosis ([SPIRE-SAIS](#)), ESSA has established the Large-Sale Partnership for Energy-Intensive Industries ([LSP EII](#)) under the Pact for Skills. The LSP EII was formed based on the outcomes of ESSA, along with the SPIRE-SAIS Blueprint and Alliance, and involves various sector associations, including those from cement, minerals, steel, aluminium, water, engineering, chemicals, and logistics.

As part of a partnership between the LSP and other Pact for Skills members, a new project has been approved: Green, Digital, and Social Transformation of the Energy-Intensive Industries (Skills4EII). This project aims to further develop the findings and measures from SPIRE-SAIS and ESSA. It will engage with new Blueprints (e.g., ChemSkills), related projects (e.g., ECoP H4C, IS2H4C, BRIDGES 5.0, BEYOND 4.0, greenSME, RACE), and EU programmes, such as Industry 5.0 and the Community of Practice for Industry 5.0. A key focus of this new project will be to enhance outreach at the regional level, including the establishment of Hubs for Circularity and Centres of Vocational Excellence (CoVEs).

ESSA and SPIRE-SAIS are coordinated by the same organisation (TU Dortmund University).

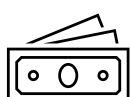
Contact information

- Blueprint coordinator – Antonius Schöder, Social Research Centre Dortmund (sfs), TU Dortmund University – at antonius.schroeder@tu-dortmund.de
- Check out the [website](#) of the Blueprint
- Online Training Platform steelHub (<https://steeluniversity.org/learn/steelhub/>), contact Jorge Muract (worldsteel, steeluniversity: muract@steeluniversity.org)

Skills Alliance for Industrial Symbiosis – a Cross-Sectoral Blueprint for a Sustainable Process Industry – SPIRE-SAIS

Overview

The [Skills Alliance for Industrial Symbiosis – a Cross-sectoral Blueprint for a Sustainable Process Industry – SPIRE-SAIS](#) Blueprint aims to address possible skills shortages in the Energy-Intensive Industries, while providing EU citizens with the necessary skillsets for future job profiles in the sector. The project's goal is to update the curricula, qualifications and knowledge that are required to support essential cross-sectoral collaboration and Industrial Symbiosis activities.



EUR 3.95 million



2020-2024

Associated projects:

- [Energy-Intensive Industries](#) LSP
- [ESSA](#) Blueprint
- Skills4EII

Implementation

Governance structure

The SPIRE-SAIS consortium is led by the German Technical University of Dortmund and comprises 39 partners from 12 countries²². SPIRE-SAIS is run by a Project Executive Team consisting of Work Package leaders.

Main deliverables

The SPIRE-SAIS Blueprint produced the following key deliverables.

- A report [on Industrial Symbiosis and Energy Efficiency in European Process Industry: State of Art and Future Scenario](#) describing the current state of the implementation of the Industrial Symbiosis and Energy Efficiency concepts in the European process industries.
- A report on [\(Company\) Skills Requirements and Foresight](#) providing more insights into industry skills requirements.
- A [mapping](#) of the current VET provision.
- A [Training Framework](#) covering training courses, measures, arrangements, tools and activities for integration within VET, company and association training programmes.
- An open online training platform [SKILLS4Planet](#), including a capability assessor as well as skills and learning directories.
- Different factsheets on [technological development](#), [skills requirements](#) and [VET systems](#) in five EU countries.

The full list of deliverables is available on the SPIRE-SAIS [website](#).

²² The full list of partners is provided in Annex 1.

Success factors

Setting up a sustainable sectoral skills alliance and agenda is a socially innovative process that required involved organisations to demonstrate flexibility, agility and openness to any new partners, activities and feedback loops.

Furthermore, the Blueprint has developed several performance indicators for each Work Package that were used to monitor and assess the project performance against targets and objectives, ensuring SPIRE-SAIS' successful implementation.

Challenges faced

Given the diverse perspectives and needs of consortium partners (e.g. job profiles may differ depending on whether they are related to SMEs or large companies), a significant challenge for the Blueprint was to establish a common framework and shared understanding. Furthermore, during the project period, the participating companies and sector associations faced additional obstacles from the COVID-19 pandemic and the energy crisis, which prioritised market survival.

Results and impacts

The Blueprint has developed educational modules and tools which can foster greater awareness of the needs and opportunities of the sector. New skills have been identified, including digital ones for the practical implementation of the Industrial Symbiosis in globally competitive industries. These skills anticipate the industry's new requirements and are based on proactive, practical approaches to respond to the future needs of the Energy-Intensive Industries in Europe and beyond. For example, the Blueprint's most successful deliverable was a common job profile selection dedicated to Industrial Symbiosis and Energy Efficiency, accompanied by the corresponding relevant skills. As part of this work, SPIRE-SAIS has also contributed to EU-level initiatives by sharing the results of its research on skills in the sector to support the updating of occupational and skills profiles within the ESCO classification system.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The Pact for Skills Large-Scale Partnership for Energy-Intensive Industries (LSP EII) was established based on the results of SPIRE-SAIS, alongside the European Steel Skills Alliance (ESSA Blueprint) and with different sector associations (from cement, minerals, steel, aluminium, water, engineering, chemicals). Currently, more than 20 SPIRE-SAIS consortium partners have become members of the Pact for Skills. As part of a partnership between the LSP and other Pact for Skills members, a proposal has been submitted for the Green, Digital, and Social Transformation of Energy-Intensive Industries (Skills4EII). The LSP is expected to engage with new Blueprints (e.g., ChemSkills) and projects (e.g., ECoP H4C, IS2H4C, BRIDGES 5.0, BEYOND 4.0, greenSME, RACE) as well as EU programmes (such as Industry 5.0 and the Community of Practice Industry 5.0).

Contact information

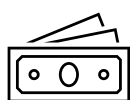
- Blueprint coordinator – Antonius Schröder, Social Research Centre Dortmund (sfs), TU Dortmund University – at antonius.schroeder@tu-dortmund.de
- Check out the [website](#) of the Blueprint

Health

Blueprint Alliance for a future health workforce strategy on digital and green skills - BeWell

Overview

The [Blueprint Alliance for a future health workforce strategy on digital and green skills – BeWell](#) aims to unite all healthcare stakeholders who are committed to developing, implementing, and scaling strategies for upskilling and reskilling the European health workforce. The project's goal is to create a strategy for green and digital skills in healthcare that can be applied at local, regional, national, and ultimately European levels through the Pact for Skills initiative. By addressing current skill gaps and enhancing these skills, the project will equip the health workforce to better manage future challenges and adapt to changing societal needs. By tackling existing skill mismatches and strengthening competencies, the initiative will better prepare the health workforce to respond to emerging challenges and evolving societal contexts.



EUR 3.8 million



2022-2026

Associated projects:

- [Health](#) LSP
- [Health Industry](#) LSP
- [Long-Term Care](#) LSP
- [EUVECA](#) European Platform for VET Excellence
- [Caring Nature](#)
- [Care4Skills](#)
- [JA HEROES](#)
- [H-PASS](#)

Implementation

Governance structure

The consortium is coordinated by the European Health Management Association (EHMA) and consists of 24 beneficiaries and five associated partners in 11 European countries²³.

The Advisory Board (AB) consists of experts from piloting and potential rollout countries that cover a broad range of expertise such as health, care, vocational education and training (VET) and labour market. The AB provides external feedback and brings complementary expertise and knowledge for the evaluation activities of three Work Packages (WP): WP4 on qualification matrices and certification, WP5 on designing curricula and training programmes and WP6 on piloting. The experts are essential to ensure a continuous and high-quality external review and evaluation of the core project results produced by the 'training block' Work Packages (WP4-WP5-WP6). The project consortium partners, each a respected expert organisation in their respective fields, are fully dedicated to delivering high-quality outputs that align with the ambitions of the BeWell project and the objectives of the Large-Scale Partnership for the Health ecosystem.

²³ The full list of partners is provided in Annex 1.

Importantly, the project uses co-creation methods with their partners to assure the appropriate engagement and participation of the project's target groups and final users, where stakeholders help prioritise, define challenges and identify solutions for developing, reviewing, validating and integrating project results.

Main deliverables

The BeWell Blueprint produced the following key deliverables in its first two years.

- Launch of the [Large Scale Partnership \(LSP\) for the Health Ecosystem](#), which marks a multistakeholder partnership under the Pact for Skills for the re- and upskilling of the healthcare workforce. The partnership includes education and training providers, VET and HE, key industry stakeholders from MedTech and pharmaceuticals, public authorities at regional and national levels, social partners, labour market actors and research institutions. The partnership currently features more than 45 signatories, and its activities are supported by a dedicated 'Partnership Steering Committee', which helps BeWell implement the LSP initiatives.
- Launch of the first version of the '[Skills Strategy](#) for the digital & green upskilling and reskilling of the health and care workforce', validated through consultation with consortium partners. This strategy has been translated into eight BeWell languages [FR, NL, DE, GR, RO, IT, BG and NO] alongside a short summary version.
- Launch of the [Online Public Consultation](#) to validate the Skills Strategy.
- Launch and regular update of the [Skills Monitor](#), a web-based tool to capture and facilitate comparative analysis on digital and green skills training programmes in the health and care sectors in the EU.
- 10 training programmes for the occupational profiles of: Coordinator, Advanced Practice Nurse, Nurse, Health Assistant, Doctor, Medical Technician, and Administrative Staff. Training topics include - Telemedicine for nurses; Healthcare data protection management (GDPR); Introductory Training Programme on Cybersecurity for Healthcare Staff; Digital tools for problem solving; Empower Office and/or Google suite knowledge; Big Data and Analytics; Healthcare ICT and Electronic Health Records Management.
- Green and emerging occupations training programmes, which are currently being developed.
- Implementation of a [Pilot Training for Urgent Needs for Digital Skills](#) aiming to address the urgent needs for both digital and green skills.

The full list of deliverables is available on the BeWell [website](#).

Success factors

The project will use co-creation methods to ensure the appropriate engagement and participation of the project's target groups and final users. Extensive stakeholder engagement activities will help prioritise, define challenges and identify solutions for developing, reviewing, validating and integrating project results. The implementation of the Blueprint relies on very experienced partners, traditionally involved in the topic from different points of view. These include researchers, training experts, European associations with top experience representing health workforce (e.g., nurses, general practitioners, pharmacists, health managers) and other European associations covering additional crucial areas of the health ecosystems (innovators, industry, regional policy making). These organisations also have strong experience in involvement and coordination of European-wide collaboration, supporting good planning and communication across the board. The Health LSP builds on the solid basis of the Blueprint consortium, both in terms of directly involving key organisations and taking advantage of their established networks to rapidly build a strong partnership.

Challenges faced

The main challenges stem from the complexity of the subject, the specific features of the health ecosystem, and the broad scope of the two main themes (i.e., digital and green skills). These two skill groups have different starting points, as noted in early phases of BeWell. The development of green skills, in particular, begins from a much lower baseline in terms of current practices and understanding.

Results and impacts

BeWell plans to develop skills intelligence on the digital and green skills needs of the health workforce. The project will build comprehensive curricula and training programmes that will target all professionals of the health and care workforce. These training programmes will be disseminated in initial education and continuing professional development, and are co-created by universities, VET providers and companies in the sector. In addition, the consolidation of the Large-Scale Partnership for the Health Ecosystem under the Pact for Skills will ease and reinforce the consultation process when developing the Skills Strategy, which is the Blueprint's main deliverable.

Following the first draft of the 'Skills Strategy' in 2026, a two-year online public consultation will be launched to gather feedback from patients, the health workforce, professionals, and decision-makers. This consultation will help validate the strategy, which will then be published in conjunction with the final conference in Brussels. The Skills Strategy and training programmes are thoughtfully designed to account for disparities across European healthcare and education systems, ensuring effective integration.

Significant progress has been made on training programmes, with comprehensive curricula and digital modules already piloted and refined based on feedback. These programmes target the entire health workforce, including students, professionals, and emerging roles, developed from scoping reviews and focus groups.

BeWell's extensive dissemination activities, targeting regulatory authorities and involving over 40 organisations, ensure long-term impact. Continuous consultations with stakeholders, including patients and citizens, have reached over 10,000 individuals. The project's focus on co-creating the Skills Strategy with diverse stakeholders aims for a significant, lasting European impact.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

As per the European Skills Agenda 2020, BeWell launched the Large-Scale Partnership for the Health Ecosystem in December 2022 under the Pact for Skills²⁴. The partnership aims to create a platform for discussing, anticipating, and addressing the skill needs of the health workforce, taking into account current challenges such as staff shortages. This includes identifying and forecasting skill gaps in the sector, integrating existing initiatives, and developing a future-proof skills strategy for implementation at local, regional, national, and European levels. BeWell is fully aligned with the Pact for Skills, as the creation of the Large-Scale Partnership for the Health Ecosystem is an outcome of the BeWell Blueprint. Additionally, BeWell has established direct connections with the other two health-focused Large-Scale Partnerships on Health Industry and Long-Term Care. Since these partnerships have recently launched their Blueprints, specific synergies will be explored, beginning with their participation in the upcoming Health Ecosystem LSP workshop and a potential joint meeting or event in 2025.

BeWell leverages existing skills intelligence and expert networks that have been involved since the project's inception, ensuring that key stakeholders in the health sector—including Blueprint projects and other Pact partners—are actively engaged and deeply involved in the initiative. To promote the project and its partners, BeWell has attended numerous events organised by the Commission or affiliated bodies such as the '[Digital Health & Wellness Summit 2023](#)', the [#EURegionsWeek](#) and other events organised through the European Committee of the Regions, or by some of BeWell's partners ([EHMA Conference](#) and [Digital Health Uptake project](#)).

Additionally, the BeWell coordinating organisation, EHMA, is a partner of the [2021 EUVECA - EUROPEAN PLATFORM FOR VET EXCELLENCE IN HEALTH CARE](#), a project designed to support the development of future-oriented skills in the health and care sector. Both projects are in close contact and regularly exchange good practices. BeWell is also partnering with other projects, such as [Caring Nature](#), [Care4Skills](#), [JA HEORES](#) and [H-PASS](#) and engages in joint activities.

Contact information

- Blueprint coordinator - Lyudmil Ninov, BeWell Programme Manager, European Health Management Association – at lyudmil.ninov@ehma.org
- Check out the [website](#) of the Blueprint

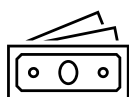
²⁴ Read the partnership manifesto here: https://bewell-project.eu/wp-content/uploads/2024/03/Skills-Partnership-for-the-health-ecosystem_final_commitment-edits-BeWell.pdf

Mobility-Transport-Automotive

Alliance for Batteries Technology, Training and Skills – ALBATTTS

Overview

The [Alliance for Batteries Technology, Training and Skills – ALBATTTS](#) aimed to address the challenges caused by the push towards electromobility in the battery value chain, which resulted in new skills needs.



EUR 3.98 million



2019-2024

Associated projects:

- [Automotive \(Automotive Skills Alliance\) LSP](#)
- [DRIVES](#) Blueprint
- [CaBatt](#)
- [European Battery Alliance \(EBA\) Academy](#)
- [Batteries European Partnership Association \(BEPA\)](#)
- [FLAMENCO](#) Forward-Looking project
- [CHAlleNGE4S](#)
- [VOLTAGE](#) CoVE
- [TRIREME](#)

Implementation

Governance structure

The ALBATTTS consortium was composed of 20 partner organisations from 11 countries, as well as three additional associated partners²⁵. ALBATTTS Blueprint is led by a coordinator (Skellefteå municipality in Sweden), who works in collaboration with a Steering Board and a Steering Board Leader. The activities of the Blueprint are organised into six Work Packages, each managed by a different consortium member acting as Task Leader. Among these Work Packages, two are transversal, while four specifically focus on the research, development, and implementation of Sectoral Skills Intelligence. These Work Packages aim to enhance the vocational education and training offerings within the sector.

Main deliverables

The ALBATTTS Blueprint produced the following key deliverables.

- A series of [reports](#) and research outputs on key thematic areas including sectoral intelligence and support to VET.
- Three releases of a [report on Sectoral Skills Intelligence and Strategy](#). These describe the general strategic actions to be followed to boost the overall up- and reskilling and skills development within the European battery sector and contains a set of practical recommendations and considerations mapped against the battery value chain and other areas of interest within the battery value chain.

²⁵ The full list of partners is provided in Annex 1.

- A report on the [Strategy Blueprint for Education and Training in the Sector of Batteries and Electro-mobility](#), describing the expected future development of the education and training needs within the battery value chain in Europe.
- A report on [Sustainability and Legacy](#), which, while emphasising the results obtained, outlines that the project's long-term sustainability is ensured through eight interrelated elements of sustainability management, recognised within the context of the Automotive Skills Alliance (ASA). These elements foster collaboration in skills development across the automotive and battery sectors. Additionally, the report addresses further measures to enhance the project's sustainability.

Furthermore, ALBATTTS implemented the following dissemination and awareness-raising activities:

- a series of [factsheets with highlights](#) on the project's results.

The full list of deliverables is available on the ALBATTTS [website](#).

Success factors

The success of the ALBATTTS Blueprint stems from a coherent collaboration between partners who were committed to bringing solutions to an emerging sector in Europe, which is challenged by security of supply and energy dependence. The Blueprint engaged in research on a wide range of topics, which had a positive impact on its work. Another success factor was the need to promote skills intelligence and capacity-building results in increased efforts to implement creative and innovative approaches, build synergies and reinforce cooperation among stakeholders in the sector.

Challenges faced

Some of the challenges faced by the ALBATTTS Blueprint were closely linked to the outbreak of the COVID-19 pandemic, which resulted in all events having to be moved to a partial or total virtual format. This led to a loss of networking opportunities between 2020 and 2021. Furthermore, the war in Ukraine and the disruptions of value chains represented another challenge experienced by the sector, highlighting the need to ensure Europe's autonomy in the battery sector.

Results and impacts

One of the main results of ALBATTTS was an increased level of cooperation between relevant stakeholders in the battery and electromobility value chain. This cooperation has enabled the development of a shared approach to vocational education and training for the battery production sector. Other key results correspond to the Blueprint's main strands of work, namely gathering intelligence on skills needs across the battery sector; identifying the skills, knowledge, competencies and job roles needed in the vertically integrated cell production area; and conducting research on future skills needs. Through this work, the Blueprint has contributed to EU-level policymaking by participating in the update of existing occupational profiles for the battery production sector within the ESCO classification system.

Other impactful workstreams include developing sector-specific training courses, fostering stronger collaboration between companies and universities/VET providers through a ‘train-the-trainers’ programme (which led to the spin-off project [CaBatt](#)), and empowering key stakeholders in the battery energy sector by establishing shared values. Lastly, the ALBATTTS Blueprint has made efforts to establish closer links and synergies with other relevant stakeholders and alliances to further strengthen the impact and outreach of its work. This includes reinforcing its cooperation with the [European Battery Alliance \(EBA\) Academy](#) on key topics (e.g. sectoral intelligence, skills cards, the development of learning material and ‘train the trainer’ solutions).

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The ALBATTTS Blueprint has been involved in the Pact for Skills through its collaboration with the [Automotive Skills Alliance](#) (ASA), which is the Large-Scale Partnership for the Automotive Ecosystem (Automotive LSP). ALBATTTS ensured that its members joined the Pact and contribute to the ASA Batteries Working Group. Beyond the Automotive LSP, the ALBATTTS Blueprint built synergies with different European regions where battery clusters are being implemented, namely in France and Germany, and with other Large-Scale Partnerships under the Pact for Skills across different ecosystems (e.g. shipbuilding, renewable energies, textile sectors) to explore opportunities for cooperation. Lastly, to ensure long-term impact, the ALBATTTS Blueprint focused on developing strategies to further promote, and streamline achieved results and on defining a harmonised sustainability plan. As part of this process, the legacy of the ALBATTTS achievements was transferred to the ASA, which is also an associate member of the [Batteries European Partnership Association](#) (BEPA). Forward-Looking projects related to ALBATTTS include: [FLAMENCO](#), which began in January 2023 to pilot forward-looking approaches and methods to enable sustainable collaboration on skills intelligence in the Automotive-Mobility Ecosystem; [CHAlleNGE4S](#), which also began in January 2023 to develop and implement four targeted pilot training actions addressing different topics related to digitisation in shipbuilding.

[VOLTAGE](#), which is the Centre of Vocational Excellence (CoVE) Erasmus+ project, focused on supporting vocational excellence in the battery sector in five regions.

[TRIREME](#), a European Erasmus+ project that began in March 2024, assesses current educational and training hurdles, including training system flexibility, novel delivery methods, and training efficiency.

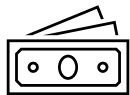
Contact information

- Blueprint coordinator – Dr. Anders Norberg, Education Strategist, Skellefteå Municipality and Mr Gustaf Ulander – at ske@project-albatts.eu or [here](#).
- Check out the [website](#) of the ALBATTTS Blueprint.

Development and Research on Innovative Vocational Education Skills – DRIVES

Overview

The [Development and Research on Innovative Vocational Education Skills – DRIVES](#) Blueprint aimed to develop a skills strategy for the automotive sector. It focused on improving human capital at all stages of the automotive supply chain, from vehicle production, automotive suppliers and sales to aftermarket services.



EUR 3.98 million



2018-2022

Associated projects:

- [ALBATTIS](#) Blueprint
- [Automotive \(Automotive Skills Alliance\) LSP](#)
- [Auto-Cove 2.0](#) CoVE
- [FLAMENCO](#)

Implementation

Governance structure

The DRIVES consortium was coordinated by the VSB-Technical University of Ostrava (VSB-TUO) in Czech Republic and comprised a total of 24 partners from 11 countries²⁶. The Blueprint implementation was directed by a Steering Board led by the European Automobile Manufacturers' Association (ACEA), the European Association of Automotive Suppliers (CLEPA) and the European Tyre and Rubber Manufacturers' Association (ETRMA). The Steering Board was responsible for overseeing the project's coordination and delivery of each of the six Work Packages. The DRIVES Blueprint involved a mix of 24 full project partners, as well as a wide group of stakeholders supporting the Blueprint by participating in online surveys, workshops and review of outcomes.

Main deliverables

The DRIVES Blueprint produced the following key deliverables.

- Surveys and reports analysing sectoral skills [demand](#) and [offer](#), as well as the [gaps](#) between them.
- A [Sectoral Skills Strategy](#) for the Automotive Sector, including an overview of actions to be taken.
- A [guide](#) for hiring apprentices.
- A [list](#) of 40 emerging Job Roles and related skills was established based on stakeholders' intelligence.
- The [DRIVES Learning Platform](#) providing 28 MOOC courses, accessible for free to individuals, companies or education and training providers.
- The [DRIVES Framework](#) gathering training and education courses available across the EU with the possibility for the Blueprint to issue its own micro credentials.

²⁶ The full list of partners is provided in Annex 1.

- A [Good Practice Resource Tool](#) compiling examples of good and/or innovative practices relating to apprenticeships in the automotive sector.

Furthermore, DRIVES implemented the following dissemination and awareness-raising activities:

- webinars and other online and/or in-person [events](#).

The full list of deliverables is available on the DRIVES [website](#).

Success factors

A key success factor for DRIVES was the active involvement of key stakeholders within the automotive industry, who were represented by umbrella associations. In addition, the strong collaboration between all relevant actors, including industry, vocational education and training providers, social partners and key regions in the sector contributed to the Blueprint's successful implementation and sustainability. Furthermore, ensuring that the Blueprint had a clear direction by implementing activities around four main axes (Skills Intelligence, Job Roles Definition, Training Offer and Skills Recognition, Apprenticeships and Sustainability of future collaboration) ensured efficient project management and internal coherence.

Challenges faced

As the first Blueprint, a challenge faced by DRIVES was explaining the objectives and the potential of the Blueprint initiative to relevant stakeholders. However, this was an opportunity for key actors to develop new collaborations in the automotive sector.

Results and impacts

All DRIVES documents relating to Sectoral Skills Intelligence, Sectoral Skills Strategy and apprenticeship analysis have been widely disseminated and used. MOOC courses on the dedicated DRIVES Learning Platform, used and extended by the Automotive Skills Alliance and later renamed to Learning Platform, reached more than 2,750 enrolments until the end of the Blueprint project. Moreover, more than 3,700 'digital badges' were awarded as part of the DRIVES Framework (later renamed as Skills Hub), certifying 420 people's competences in the automotive sector. The Blueprint's work on creating training curricula, identifying job profiles and corresponding skills and/or learning outcomes has contributed to further supporting the development of European Vocational Core Profiles (EVCPs). DRIVES either organised or participated in more than 115 relevant dissemination events. The evaluation of the dissemination activities carried out by DRIVES highlighted that the Blueprint stakeholders database grew from 300 to 1,500 people and that the Blueprint's number of followers on social media continued to increase throughout the project, reaching 1,071 followers in May 2022 on LinkedIn, Facebook and Twitter combined ²⁷.

²⁷ https://www.project-drives.eu/Media/Publications/220/Publications_220_20220621_191721.pdf

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

DRIVES' legacy lies in the establishment of the Automotive Skills Alliance (ASA), which is the Large-Scale Partnership for the Automotive ecosystem under the Pact for Skills. ASA builds on the work carried out under both DRIVES and the ALBATTs Blueprint, supported by the collaborative network established by DRIVES. Some key stakeholders involved in DRIVES also partake in the governance of the ASA LSP.

Several DRIVES deliverables (e.g. Sectoral Skills Strategy, Sectoral Intelligence, DRIVES Framework and DRIVES Learning Platform) have positively contributed to the Automotive Skills Alliance's work, as they laid the groundwork for solving skills mismatches and rendering the sector future-proof. This is exemplified by the pilot version of the digital competence matrix for the automotive sector, the set of training courses available, and the overview of the needed skills and job roles, as well as concrete actions for sectoral stakeholders within the skills agenda

Furthermore, the lessons learned through the DRIVES Blueprint have been shared with others, for example through the ALBATTs Blueprint. DRIVES' efforts to build synergies both with the Pact for Skills and other Blueprints have ensured the sustainability and long-term impact of project outcomes. More details are presented in the [DRIVES Sustainability and Legacy Plan](#), where for instance the network, overview of needed skills, training courses, and platforms are foreseen to be further extended and used under the Pact for Skills. The plan reflects on how to ensure further collaborations on skills within the overall network after the project's completion.

The DRIVES Blueprint project provided an overview of the sectoral skills agenda (including skills and job roles needs), and a sectoral strategy (including concrete actions to be taken), which provided the basis for further projects and initiatives. The Centre of Vocational Excellence (CoVE) "Auto-Cove 2.0" was created in 2023 to align VET automotive education with the fast-growing green transportation market. Like DRIVES, its activities include research on skills gaps in the sector and the development of training modules. Auto-Cove 2.0 is implemented in eight countries, among which seven that were not covered by the DRIVES Blueprint (Finland, Estonia, Lithuania, Latvia, Germany, France). DRIVES coordinating entity VSB-TUO also coordinates the Forward-Looking project [FLAMENCO](#) (Forward Looking Approaches for Green Mobility Ecosystem Network Collaboration). FLAMENCO aims to explore and test new ways to support sustainable collaboration on skills intelligence in the Automotive-Mobility Ecosystem. It is directly connected with the Pact for Skills as it has been established to support ASA's implementation. The various initiatives within the Automotive-Mobility ecosystem are well-coordinated and work seamlessly together. The ASA LSP unites the DRIVES and ALBATTs Blueprints to create a sustainable skills alliance, while the Forward-Looking project FLAMENCO provides technical support to the alliance. The Automotive Skills Alliance creates the framework for further collaboration on concrete, sustainable, pragmatic actions in the skills agenda of the Automotive-Mobility Ecosystem.

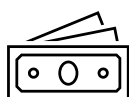
Contact information

- Blueprint coordinator – Dr. Jakub Stolfa, VSB-Technical University of Ostrava (VSB-TUO) – at jakub.stolfa@vsb.cz or at info@project-drives.eu
- Check out the [website](#) of the DRIVES Blueprint, or the [website](#) of Automotive Skills Alliance.

Future-proof skills for the maritime transport sector – SKILLSEA

Overview

The [Future-proof skills for the maritime sector – SKILLSEA](#) Blueprint aimed to make maritime professional education and training future-proof, adaptable and attractive by developing a European skills strategy for the maritime industry. SKILLSEA's ultimate goal was to ensure the industry's sustainability.



EUR 3.99 million



2019-2023

Associated projects:

- [Shipbuilding LSP](#)
- [Skills Beyond the Seas](#)
- [Maritime Education and Training Network \(MET-NET\)](#)
- [SeaAhead](#)

Implementation

Governance structure

The SKILLSEA consortium was led by the Netherlands-based Stichting STC Group (STC-Group) and comprised a total of 24 partners from 16 countries²⁸. The Blueprint brought together social partners, maritime shipping industry, trade unions, research organisations, maritime academies and universities, education and training providers and public authorities.

A clear governance structure was in place. Project management was assured by a general Project Coordinator and a Technical Project Coordinator (STC-Group) supported by a Project Administration Team responsible for the day-to-day administrative and technical management. Moreover, the Project Board, consisting of the European Community Shipowners' Associations (ECSA), the European Transport Workers' Federation (ETF) and STC-Group, was responsible for the overall implementation and approval of different deliverables. Lastly, the Advisory Board, made up of representatives of the maritime shipping sector, Member States, Maritime Education and Training and Maritime Clusters, provided expert feedback on the deliverables and results of the Blueprint.

Main deliverables

The SKILLSEA Blueprint produced the following key deliverables.

- Development of a [methodology](#) to identify skills needs in the maritime transport. [Current](#) and [future](#) skills needs were mapped, as well as [gaps](#) and [mismatches](#).
- A [skills strategy report](#) accompanied by a [Strategy Plan Framework](#) and reports on the [internationalisation](#) and [evaluation](#) of the Maritime Education and Training environment, among others.
- A series of reports and tools, including the [Strategic Evaluation MET Tool](#) to measure and monitor progress towards future-proof strategic goals; the [Strategy Direction Location \(STRA.D.L\)](#) and

²⁸ The full list of partners is provided in Annex 1.

[Transcript International Transfer \(Trans.I.T.\)](#) tools to enable decision-makers to make choices against pre-determined criteria and facilitate strategic planning.

- [Seven educational packages](#) (in the area of digital skills, green skills, leadership, STEM and intrapreneurship and innovation), combined with a train-the-trainer package, a [toolbox](#) for developing custom-made and further educational packages and a guide for their implementation (including [videos](#)).

Furthermore, SKILLSEA implemented the following dissemination and awareness-raising activities:

- publication of a [factsheet](#), seven [newsletters](#), five [press releases](#) and four [presentations](#).

The full list of deliverables is available on the SKILLSEA [website](#).

Success factors

The partners' strong commitment has been instrumental to the Blueprint's success. The consortium demonstrated resilience, continuing their work throughout the pandemic, driven by a steadfast ambition to future-proof the maritime transport sector. Consistent communication and a well-structured governance model, with clearly defined roles and responsibilities, also contributed to SKILLSEA's achievements. During the project's final year, on-site meetings and the closing conference proved crucial for aligning the Blueprint with its strategic goals.

Challenges faced

Since its launch in 2018, the Blueprint faced challenges stemming from global developments, which impacted the maritime transport, such as the COVID-19 pandemic and the war in Ukraine, which forced partners to revise their priorities and adapt to the situation (e.g. by developing and maintaining online education for their students).

Moreover, the consortium's size could at times complicate the collaboration and decision-taking processes. In some cases, the high turnover within partner organisations made it difficult to sustain a working relationship. When it becomes clear that a partner is not actively participating, establishing contact with them has proven to be particularly challenging, especially during the COVID-19 pandemic.

Results and impacts

Blueprint outputs have been widely shared within and greatly appreciated by the maritime industry. The Skills needs assessments produced by SKILLSEA have generated great interest among sectoral stakeholders and are supporting discussions on updating curricula and education packages to match current skills needs. This shows the potential of the Blueprint to help improve the attractiveness of the sector through the implementation of new innovative educational packages in maritime schools. The series of webinars organised as part of the first Educational Package was attended by participants from all over Europe.

The tools developed by SKILLSEA can also help to foster advancements in the sector, as maritime transport professionals have access to tailored support to tackle skills mismatches in the industry. Lastly, at EU level, SKILLSEA has contributed to the revision of the ESCO occupational and skills profiles for the maritime industry by providing input to improve the existing classification system.

The Maritime Education and Training Network (MET-NET) which started at the end conference of the SKILLSEA project with 10 partners, has grown to 20 partners all over Europe. Most of the new partners are from outside the SKILLSEA consortium.

Synergies with the Pact for Skills, Centres of Vocational Excellence and Forward-looking projects

Some SKILLSEA partners, including Blueprint coordinator STC-Group, are part of the Large-Scale Partnership for Shipbuilding and Maritime Technology (Shipbuilding LSP).

For the sustainability and mainstreaming of project results, SKILLSEA partners have kept the Blueprint website active beyond the project's end, ensuring ongoing access for interested stakeholders to all its results. To build synergies with other initiatives and enhance dissemination, the Blueprint collaborated with the [Skills Beyond the Seas](#) project, which also focuses on professional mobility in the maritime sector.

The European Maritime Skills Forum (E-MSF) was introduced at the SKILLSEA final conference. The European Community Shipowners' Associations (ESCA), the European Transport Workers' Federation (ETF) and the Maritime Education and Training Network (MET-NET) are in the process of organising the first meeting. The topics that are planned for this forum are related to the new green fuels and preventing bullying and (sexual) harassment at leadership level.

Currently, ECSA, ETF, and some NET-NET partners are building a maritime transportation Pact for Skills that can eventually take over the E-MSF function.

From MET-NET, some partners joined the SeaAhead project proposal "Sailing Acceleration through Vocational Excellence and Innovation". The SeaAhead project is set to advance the maritime sector by proactively tackling both present and emerging challenges, with a strong commitment to high-quality standards, excellence, and inclusivity. Built on four strategic pillars, the fourth pillar focuses on creating a Joint Educational Framework among maritime academies, aiming to broaden and expand MET-NET.

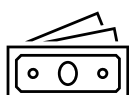
Contact information

- Blueprint coordinator – Job de Groen – at skillsea@stc-r.nl
- Alco Weeke (skillsea@stc-r.nl) as the MET-NET representative
- Check out the [website](#) of the SKILLSEA Blueprint.

Skill Training Alliance for the Future European Rail system – STAFFER

Overview

The [Skill Training Alliance for the Future European Rail system – STAFFER](#) Blueprint aims to develop a sustainable strategy to bridge the gap between supply and demand for a suitably skilled workforce in the rail sector. STAFFER will provide human capital solutions across all levels of the rail value chain, offering a comprehensive perspective of the sector as a system of systems and unifying the European rail landscape. The Blueprint also seeks to contribute to the [Single European Railway Area](#).



EUR 3.99 million



2020-2024

Associated projects:

- [Rail Forum Europe](#)

Implementation

Governance structure

The STAFFER consortium is coordinated by the University of Genoa in Italy and comprises 31 partners and 15 associated partners coming from 12 countries²⁹. STAFFER is organised around nine Work Packages. Furthermore, four governance and management bodies were set up:

- a Steering Committee, which provides strategic direction to the Blueprint;
- an Advisory and Policy Board, which provides feedback and advice on the Blueprint results and includes internal and external experts;
- an Internal Quality Management Board (IQMB), which gathers all the project partners and assesses the quality of the project's outputs;
- an External Quality Management Board (EQMB), which gathers three high-profile experts who evaluate the project milestones.

Main deliverables

The STAFFER Blueprint produced the following key deliverables.

- A project [glossary](#).
- A [document](#) to identify current and future skills and competence needs.
- Two reports on the [future vision of the rail sector from the point of view of rail operators and infrastructure managers](#), and from the [point of view of the rail supply industry](#).
- Two reports on the [identification of skill needs and occupational profiles from the point of view of rail operators and infrastructure managers](#), and [from the point of view of suppliers](#).

²⁹ The full list of partners is provided in Annex 1.

- A [document](#) to identify qualifications standards.
- A [benchmarking of the existing programmes and catalogue of best practices](#).
- A list of [employability and career opportunity criteria and indicators, and a methodology to assess employability and career opportunities in rail sector](#).
- A [document](#) on the development of new training contents and modules reflecting new needs in the field of cross-border railways, communication and language.
- A report on the [development of mobility and training programmes](#) for the occupational profiles affected by skills mismatching.
- Two reports on the [assessment of employability and career opportunities from the point of view of rail operators and infrastructure managers](#) and from the [point of view of the rail supply industry](#).
- The development of a [continuous programmes monitoring methodology](#), based on results-based management and theory of change, for the programme monitoring and evaluation.
- The [sectoral skills strategy](#) (available soon).
- An [analysis of the attractiveness of the rail sector](#) (available soon).
- The validation of the developed training and education programmes from the point of view of employability and career opportunities (available soon).
- Three reports on the mobility programmes for [students](#), [apprentice](#) and [staff](#) (available soon).
- Three documents on the implementation of VET [at EQF levels 3 to 5](#) and [at EQF levels 6 to 8](#) and on the [implementation of mobility and training programmes in the field of cross-border railways, communication and language](#) (available soon).
- A set of [policy recommendations](#) (available soon).

Furthermore, STAFFER implemented the following dissemination and awareness-raising activities:

- a [communication, dissemination and exploitation plan](#) ;
- a STAFFER [brochure](#) and [video](#).

The full list of deliverables is available on the STAFFER [website](#).

Success factors

The project has greatly benefited from the strong commitment from all the Blueprint consortium partners.

Challenges faced

Bringing together the key rail sector stakeholders has been the main challenge faced by the Blueprint. Stakeholders need to cooperate closely to anticipate skills needs, understand skills mismatches, and find ways to improve the connection between education and labour market realities. STAFFER has worked on defining a common perspective to overcome the sector's fragmentation.

Results and impacts

The main goal of this Blueprint is the establishment of a strong skills alliance for the rail sector, covering all stages of the value chain and setting up the Blueprint for an industry-driven, proactive skills strategy.

This strategy has contributed to overcoming the fragmentation of the rail sector and helped the rail industry and VET institutions take concrete actions to support the sector's transformation.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

While STAFFER has not formally joined a Large-Scale Partnership yet, it has sought to build synergies with the Pact for Skills, particularly during the 2023 European Year of Skills when it hosted a [WP6 Meeting in Paris](#).

The Blueprint has been working on a long-term strategy and action plan to ensure that the European rail sector continues to be a world leader in transport technologies, providing quality jobs and allowing citizens and goods to be transported safely and responsibly. STAFFER results are being rolled out at the national and regional level. Ongoing efforts are being made to coordinate with other Blueprints (DRIVES, SKILLSEA) and industry associations also working in the Mobility ecosystem (e.g. the European Automobile Manufacturers' Association (ACEA), and Sea Europe). Synergies are also expected with other policy frameworks, such as [regional Smart Specialisation strategies](#), industrial clusters or Centres of Vocational Excellence. Other networking efforts include organising the [European Rail Skills Alliance partners meeting](#) to assess the project and address skill shortages in the rail sector and participating in the [Rail Forum Europe](#) at the European Parliament in June 2023. The STAFFER final conference will take place on 24 October 2024 in Brussels.

Contact information

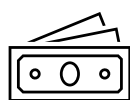
- Blueprint coordinator Professor Angela Di Febraro, University of Genoa at staffer.coordination@unige.it
- Check out the [website](#) of the STAFFER Blueprint.

Proximity and Social Economy

Blueprint for advanced skills and trainings in the social economy - baSE

Overview

The [Blueprint for advanced skills and trainings in the social economy - baSE](#) aims to strengthen the social economy and its workforce. This alliance focuses on addressing skills gaps by upskilling and reskilling social economy practitioners. The goal is to create a strategic approach to sectoral cooperation, enhancing the skills needed for new or evolving roles within the social economy. The baSE project primarily targets employees, managers, social entrepreneurs, HR professionals in social economy organisations, VET providers, support organisations, and anyone interested in getting involved in the social economy.



EUR 4 million



2022-2026

Associated projects:

- [Proximity & Social Economy](#) LSP
- [B-WISE](#) Blueprint
- [ESIC](#) Blueprint
- [SETS](#) project
- [DIMCARE](#) project

Implementation

Governance structure

The baSE consortium is composed of 25 partners from 10 different EU countries³⁰. The Faculty of Engineering of Mondragon University, the DIESIS Network and Social Economy Europe coordinate the partnership. The Faculty of Engineering of Mondragon University is the project's Lead Partner. Key stakeholders include the Social Economy Federation and support structures at the national and EU levels, research institutions, vocational education and training institutions and experts. The quality assurance component of the project is steered by the company BK-Consult. There is a Steering Committee and a Coordination and Management Team, both of which hold regular meetings to ensure the project's successful implementation.

Main deliverables

The baSE Blueprint produced the following key deliverables.

- A [focus group](#) held at EU level with consortium partners and social economy organisations to discuss their perspectives on skills related to digitalisation, sustainability, and inclusivity.
- An [academic paper](#) ("Bridging the skills gap to empower the social economy and to boost circular economy") drawing on findings from the Blueprint.
- A series of [infocards](#) reporting on the state of Social Economy Organisations (SEOs) in each partner country.

³⁰ The full list of partners is provided in Annex 1.

- A [synthesis report](#) identifying the competence and skill needs of SEOs to effectively face the twin transition and the inclusiveness challenge.
- An [interactive map](#) presenting vocational education and training (VET) providers for Social Economy across various countries.
- A new competency framework for the social economy sector (“SocioComp”), which is now in the final stages of development, with national workshops being conducted to gather suggestions from Social Economy experts.
- Extensive training materials made available on the website through a [MOOC Platform](#).

Furthermore, baSE implemented the following dissemination and awareness-raising activities:

- two [issues](#) of a magazine and two [newsletters](#) sharing the progress of the project;
- participation in a [webinar](#) focused on advancing social economy and promoting the digital transition by fostering digital inclusion and green reskilling within the framework of the ALL DIGITAL Weeks campaign.

The full list of deliverables is available on the baSE Blueprint’s [website](#).

Success factors

Despite facing various challenges in its initial years, the baSE Blueprint has achieved many of its goals. This success is largely due to the emphasis on constant and transparent communication. By implementing an effective monitoring and reporting system, awareness among partners has increased, and activities are more closely supervised, allowing for the early identification of issues or potential risks.

Even with changes in key personnel within coordinating organisations, the commitments made between organisations, rather than individuals, have ensured smooth transitions and the continued achievement of goals.

Challenges faced

The baSE Blueprint has encountered a range of challenges during its implementation, leading to minor delays. These delays in the first year resulted in the project's timeline requiring adaptation to ensure fair distribution of tasks and effective cooperation among partners. Despite these delays and deviations, in the second year the project has largely kept to schedule. Other challenges faced have been changes within the consortium, with directors and project managers leaving key partners such as Social Economy Europe, and BK Consult. These challenges were overcome by the commitment of the wider organisations to the goals of the Blueprint.

A further challenge has been seen in the broadness of the scope of the project, particularly in terms of social economy in different national contexts, whereby different solutions are required in different countries. To overcome this, the Blueprint has adopted a “marriage approach” aiming to bring together energy and care and enable national flexibility.

Results and impacts

A series of recommendations was developed following the project’s Synthesis Report to reinforce the capacities of Social Economy and its human capital. Within a year of its implementation, the Blueprint allowed to identify, validate and prioritise competence gaps in the social economy related to the green,

Power-up skills: developing Europe’s workforce

digital, inclusion and day-to-day challenges. Relying on a large-scale survey directly involving social economy workers, the project has identified the competences needed, priorities, and training gaps within the social economy ecosystem across the 10 countries participating in the consortium, as well as at an overarching level. A statistical analysis of the social economy landscape in each partner country was also carried out. The Blueprint project has worked to act upon this research, generating a range of training resources available online. To improve the dissemination and reach of these resources the Blueprint has launched a LinkedIn account and aims to increase its reach.

As the Blueprint is still going, results will need to be reviewed following the end of the project.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

Under the Pact for Skills, baSE and B-WISE (the Blueprint for Sectoral Cooperation on Skills in Work Integration Social Enterprises) work towards the objectives of the Large-Scale Partnership for the Proximity & Social Economy ecosystem (P&SE LSP).

Results of the two Blueprints will be used to achieve the objectives of the P&SE LSP. For example, baSE outcomes such as the interactive map of training providers will feed Action 2 and Action 3 of Pillar 2: Map the state of the art of skills of the LSP. On the other hand, the P&SE LSP will help annually monitor the Blueprints. These two Blueprints have held several meetings and have identified the possibility of hosting common public events. Joint events have also been held with the SETS (Social Economy Transition Skills) project on Digital Skills for SEOs in the [All Digital Weeks](#) event.

BaSE has sought synergies with other Blueprints, for example by participating in a conversation with CYANOTYPES (Blueprint for the Cultural and Creative Industries) on the topic of entrepreneurial competences development in the cultural and creative sector and in social economy, and ESIC (European Social Innovation Campus Alliance) Erasmus+ Blueprint in conjunction with B-WISE. A meeting has also been held with the DIMCARE (Digital Missions for Care Social Economy's Resilience) project, that works in the same enquiry area (care and digital skills), which identified a digital skill gap as an area for input from baSE.

Correlations have also been developed between the SocioComp framework and other existing European Competence frameworks such as EntreComp, DigiComp, GreenComp.

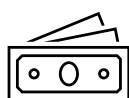
Contact information

- Blueprint coordinators – Alaine Garmendia Ochoantesana, Urtzi Uribetxebarria and Unai Elorza (Mondragon University) – at baseproject4skills@gmail.com
- Check out the [website](#) of the baSE Blueprint

Blueprint for Sectoral Cooperation on Skills in Work Integration Social Enterprises – B-WISE

Overview

The [Blueprint for Sectoral Cooperation on Skills in Work Integration Social Enterprises – B-WISE](#) aimed to develop a European strategy that addressed skills needs with a focus on digital skills in Work Integration Social Enterprises (WISEs). B-WISE targeted the skills needs of workers, as well as of guidance and training providers (e.g. job coaches, trainers) and enablers (e.g. managers, developers), and promoted the attractiveness of the WISEs sector as a career choice and its value to support labour market integration of vulnerable groups. In doing so, B-WISE raised awareness of the importance of the use of digital technologies to support vulnerable workers in work integration trajectories.



EUR 3.9 million



2021-2024

Associated projects:

- [Proximity & Social Economy](#) LSP
- [baSE](#) Blueprint
- [ESIC](#) Blueprint
- [SETS](#) project

Implementation

Governance structure

The B-WISE consortium is coordinated by the European Association of Service Providers for Persons with Disabilities (EASPD) and the European Network for Social Integration Enterprises (ENSIE). It is composed of 30 partners from 13 different countries³¹. These partners include European networks, WISEs sector representatives, VET providers and European research institutes. The partners are supported by an Advisory Board, which gathers seven umbrella organisations, one international organisation and eight representatives of national and regional authorities. The governance structure is further complemented by a General Assembly and a Steering Committee.

Main deliverables

The B-WISE Blueprint produced the following key deliverables.

- The '[Trends and challenges for Work Integration Social Enterprises \(WISEs\) in Europe. Current situation of skills gaps, especially in the digital area](#)' report, which aims to contribute to the development of a strategic approach to sectoral cooperation and to sustainably tackle the digitalisation challenges faced by WISEs and their workers. This report also provides a picture of the presence of WISEs across Europe as well as a typology of WISEs.
- A [report on understanding user \(digital\) skills needs in WISEs](#). This identifies the skills-building actions needed by WISEs based on their characteristics, the directions of their development, their corporate culture and their strengths and weaknesses. It also identifies the characteristics

³¹ The full list of partners is available in Annex 1.

of the workers (enablers, supporters, Workers with Support Needs (WSN)) to whom B-WISE sought to propose a competence-building pathway.

- [‘Occupational Profiles](#) in WISEs sector – Capacity building needs in WISEs’, aiming to identify and analyse capacity-building needs, and identify and describe those that are of priority.
- A [learning outcome statement](#), identifying and analysing WISEs' competence needs fulfilled through research in the framework of B-WISE.
- A [universal training curricula for the WISE sector](#), aimed at Enablers, Supporters, and Workers with Support Needs.
- [MOOC for WISEs sector](#), for Enablers, Supporters and Workers with Support needs.
- [Tutorial toolkits for educators](#) to be used in conjunction with the universal training curricula.
- An [evaluation of the pilot implementation of the EU curriculum report](#), analysing the pilot courses - Curriculum - in 13 countries, and describing both the course delivery experience and the course itself from the trainers' and participants' perspectives.
- A [report from national certification authorities](#) summarising the national reports submitted by VET providers on the state of play of the national certification process of B-WISE Training Curricula at national level.
- Promotional plan for WISEs, providing a proposal for a promotion plan and implementing possible promotional activities to be taken into consideration during stakeholder meetings and communication activities during the project.
- A [Roadmap to the sectoral skills strategy \(Blueprint\) for WISEs in Europe report](#), which provides an overview of the steps to be taken by the B-WISE Consortium and the WISE sector stakeholders to deliver an overall sectoral skills strategy (Blueprint) for WISEs sector in the EU.
- A [‘Paper on funding opportunities - Funding work integration social enterprises and work integration of workers with support needs in Europe - state of play and proposals’](#), which provide an extensive overview of the types of funding opportunities available for social enterprises, particularly those focusing on the work integration of Workers with Support Needs.

Furthermore, B-WISE has implemented the following dissemination and awareness-raising activities:

- an information [leaflet](#) on the B-WISE project;
- several [press releases](#) announcing the publication of deliverables.

The full list of deliverables is available on the B-WISE [website](#).

Success factors

A key success factor for the work of the B-WISE Blueprint was its diverse membership that brought together different actors, each of whom contributed to the project with their rich expertise and commitment to the social field. Another success factor was B-WISE's well-established and structured governance structure. Efforts to ensure ongoing communication between the Blueprint coordinator, the General Assembly, the Steering Committee, the Advisory Board and the European Commission were beneficial to the implementation of the Blueprint deliverables. In addition, thanks to the extensive research phase on the whole WISE sector and the needs of its worker on all level across Europe, the

Power-up skills: developing Europe's workforce

project provides outcomes, universal tools (occupational profiles, learning outcomes, training curricula, MOOC, tutorial toolkit, Sectoral Skills Strategy, etc.) that can be used and implemented in such a diverse sector, ensuring that the perspectives and needs of each target group (enablers, supporters, workers with support needs) were thoroughly considered.

Challenges faced

Analysing national data from 13 different countries and 30 different partners represented a challenge for B-WISE. However, this wealth of information also represented an important added value for the work of the Blueprint and the Social Economy sector more broadly. Furthermore, another challenge can be identified in the different regulations in the Member States represented in the B-WISE consortium, which made the certification of training curricula in the 13 participating countries more complex.

The COVID-19 pandemic affected communication within the Blueprint consortium as it became increasingly difficult to coordinate since most meetings were moved online during the first year and a half of the project implementation.

The Certification of the B-WISE Training Curricula in each participating country was also a challenge due to the following reasons:

Collaboration with external stakeholders

All VET providers rely on outside institutions, government bodies and other stakeholders outside of the B-WISE consortium to certify the B-WISE Curricula. These bodies usually do not work in line with the project timeframe and often require additional procedures or steps that demand additional tasks in the project implementation. This thus makes the whole process longer. Although most partners mapped out the process at earlier stage, they needed a finalised curricula to be able to start the process at the national level.

Timeline of the certification process

Some countries (e.g. Slovenia, Croatia, France, Romania, Italy, and Poland) reported scheduling challenges in terms of the timeframe of their local certification progress (based on the national rules, the recognition process took longer than expected). Therefore, they estimate that the process might take longer than the proposed deadline of June 2024.

Legal form of the local VET partner

Two partners also reported specific challenges regarding their legal form related to the local certification rules (Austria, Croatia). These must acquire specific certifications to be able to certify the B-WISE Curricula developed during the project.

Results and impacts

The B-WISE consortium's project has significantly impacted its target groups—Workers with Support Needs, supporters, and enablers within the WISE sector—by mapping the institutional context of the sector, identifying skill gaps and creating tailored training curricula. Through extensive research and analysis, the consortium examined technical, soft, and digital skills within the sector, identifying current and future needs. This led to the development of strategic approaches, “scenarios” (type of WISEs), and “personas” (characteristics of the workers in WISEs), which informed the creation of comprehensive training programmes (B-WISE Curricula) aimed at reskilling and upskilling workers, supporters, and enablers. These three curricula focus on both digital and soft skills, promoting innovation and change within organisations. The project also addresses indirect stakeholders, such as VET providers and

policy makers, offering insights into sectoral challenges and advocating for improved labour policies. The project's findings and training tools are expected to foster career progression, organisational growth, and a more sustainable WISE sector. Furthermore, the consortium engages stakeholders at national and EU levels to enhance the impact of its work and shape future skills strategies across Europe.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

B-WISE has been involved in the Pact for Skills through its strong collaboration with the Large-Scale Partnership for the Proximity & Social Economy (P&SE LSP). Several B-WISE consortium partners are also members of the P&SE LSP. This close link ensured that the two initiatives could mutually reinforce each other and that the results and deliverables of the B-WISE Blueprint could be further disseminated through the LSP. EASPD (coordinator of B-WISE) and ENSIE (co-coordinator) are actively participating in meetings organised as part of the Pact for Skills.

EASPD, ENSIE and the European Research Institute on Cooperative and Social Enterprises (EURICSE) are signatories of the Pact for Skills and have already joined several meetings organised by Social Economy Europe and EVPA in collaboration with the European Commission for the Declaration of the P&SE LSP. B-WISE has been introduced several times during these meetings to provide examples of how to contribute to the Pact for Skills in concrete terms, by showcasing project results relevant for other stakeholders involved in the Declaration of the Pact for Skills for the Proximity and Social Economy ecosystem.

Furthermore, some of the Pact for Skills commitments elaborated by the three above-mentioned organisations are directly linked to the results of the B-WISE project in order to ensure sustainability and harmonisation of skill development within the ecosystem.

The B-WISE coordinators are in contact with the coordinators of the baSE Blueprint who represent the same ecosystem. They have collaborated to showcase findings of the two projects - notably in terms of the identified skill needs and skills gaps in the Proximity & Social Economy ecosystem - during several events.

Contact information

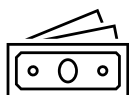
- Blueprint coordinator – Nóra Györke, Project Officer at EASPD – at nora.gyorke@easpd.eu or [here](#)
- Check out the [website](#) of the B-WISE Blueprint.

Renewable Energy

Education for Digitalisation of Energy - EDDIE

Overview

The [Education for Digitalisation of Energy - EDDIE](#) Blueprint aims to develop a skills strategy for the digitalisation of the energy sector. The Blueprint seeks to align the skills supplied by training providers (VET, universities and others) with the current and future skills needs in the energy sector labour market.



EUR 3.99 million



2020-2023

Associated projects:

- [Digitalisation of the Energy System](#) LSP

Implementation of the Blueprint for sectoral cooperation on skills

Governance structure

The EDDIE consortium was led by the Comillas Pontifical University in Spain alongside 15 partners from ten EU countries³². The project was implemented through eight Work Packages.

The Project Management Board was the top decision-making body of the consortium, composed of representatives of all the partners. The Project Technical Committee was the decision body in charge of the day-to-day management of the Blueprint, which comprised of the Work Package leaders. Finally, the International Advisory Board provided quality control and feedback.

Main deliverables

The EDDIE Blueprint produced the following key deliverables.

- A [Sector Skills Strategy](#) outlining examples of national and regional level policies and initiatives addressing skill shortages and mismatches as well as fostering multi-stakeholder partnerships.
- Reports addressing [current skills gaps](#) of professionals and students and identifying [current and future skills needs](#) in the energy sector.
- A [database](#) of relevant stakeholders in the energy value chain; this includes classification criteria and descriptors of the types of stakeholders.
- A [comparative analysis](#) of VET systems in five European countries.
- [Draft templates](#) for educational programmes (both initial and continuous training activities) and an [e-learning platform](#) including the pilot activities and relevant online courses.
- Reports on best practices for [university education](#), [continuous learning](#) and [VET systems](#).

³² The full list of partners is provided in Annex 1.

- Establishment and creation of a [Large-Scale Partnership \(LSP\)](#) to advance the digitalisation of the energy system and a non-profit legal association, the “EDDIE” entity, as the way to allow the follow-up of the strategy in the future.
- Implementation of the prototype version of a Training Programmes Marketplace specialised in the digitalisation of the Energy System.

The full list of deliverables is available on the EDDIE [website](#).

Success factors

The strong collaboration between the Blueprint partners and other relevant stakeholders (such as the International Advisory Board members and other institutions) represents a key success factor as it allowed EDDIE to better identify different gaps and needs for education in the energy sector, and work on a skills strategy for the sector. The partners’ expertise in comparable European projects has created an efficient working environment.

The work done and the adopted strategy was instrumental to establish a Large-Scale Partnership, within the EU Pact for Skills, as requested in the EC Action Plan for the Digitalisation of the Energy System.

Challenges faced

A fundamental challenge is the scope of the energy sector itself, as it covers multiple sub-sectors and a wide range of stakeholders. Furthermore, it has been challenging for the EDDIE Blueprint to find its place within other flagship EU-level initiatives focused on skills development, upskilling and reskilling, including the Pact for Skills since the Blueprint covers more than one industrial ecosystem (renewable energy and digital). However, this challenge is being overcome by building stronger synergies between EDDIE and the Pact for Skills, including establishing a large-scale partnership in the renewable energy ecosystem, and cooperating with the existing Large-Scale Partnership in the Digital ecosystem.

Results and impacts

The results of project EDDIE included the creation of a Large-Scale Partnership (LSP) and a non-profit association to coordinate the LSP, each one with its own governance structure.

The Blueprint has so far highlighted the main challenges the industry faces due to the digitalisation of the energy system and has identified the new skills required in the sector. Through the mapping of skill demand and skill offer addressed via surveys and reviews, skill mismatches (and skill gaps) were identified that reflect the skills needed in the industry to advance digitalisation³³. By developing a common approach for assessing the current situation and anticipating needs, progress towards closing the skills gap can be monitored efficiently. Thanks to the work done by the EDDIE Blueprint to compile best practices in VET, university education and continuous learning, stakeholders across the sector have access to inspiring examples that they can apply to their own work. Furthermore, through its efforts to identify skills needs and gaps in the sector, EDDIE has been involved in revising the energy sector in the context of the update of the ESCO classification system.

A key result that is expected to have a relevant impact is the design and implementation of the Training Programmes Marketplace, specialised in the digitalisation of the Energy System. It is expected to

³³ Cedefop. (n.d.). Education in digitalisation of energy (EDDIE). Retrieved from <https://www.cedefop.europa.eu/en/project-fiches/education-digitalisation-energy-eddie>

become a European showcase of relevant training opportunities and a promotor of flagship programmes in critical training areas, setting quality and content standards.

Lastly, the Blueprint has managed to achieve high visibility and online engagement thanks to its rich offer of online activities for targeted stakeholders.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The EDDIE Blueprint has paved the way towards building the Large-Scale Partnership on Digitalisation of the Energy System (Digitalisation of the Energy System LSP) in 2023. The EDDIE Entity - envisioned in the EDDIE Blueprint as the practical way to ensure the continuity of the EDDIE project's activities - coordinates the LSP. The Digitalisation of the Energy System LSP builds notably on EDDIE's networking database and knowledge-sharing work. The LSP aims to contribute to building a digitally skilled workforce by fostering collaboration between training providers, energy sector companies, and digital technology firms. To further implement the Action Plan, synergies are sought with [key actions for digitalising energy](#) such as the 'Gathering Energy and Digital Innovators' platform.

The Sector Skills Strategy currently developed by the EDDIE Blueprint will be piloted and later integrated in existing educational/training frameworks (e.g. university-school curricula, industrial training programmes) to guarantee long-term impact. An entity is set up for managing a wide range of online services after the end of the project ([e-learning platform](#), project website, social media channels, event reports), to ensure the sustainability of the strategy and streamline results. These services aim to connect stakeholders; provide useful information related to skills gaps, training, validation, certification, monitoring and research; promote available training programmes and employment opportunities; and disseminate sector-related tools and systems.

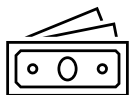
Contact information

- Blueprint coordinator – Dr. Fernando de Cuadra, Professor at ETSI-ICAI and ITT – Institute for Research in Technology, Universidad Pontificia Comillas – at cuadra@comillas.edu or at info@eddie-erasmus.eu
- Check out the [website](#) of the EDDIE Blueprint.

The European Hydrogen Skills Alliance - GreenSkills4H2

Overview

[The Green Skills for Hydrogen Project](#) (GreenSkills4H2) Blueprint is contributing to the development of a skilled workforce in Europe for the emerging hydrogen economy by addressing the skills gap and providing training to boost the industry. GreenSkillsforH2 will help meet the REPowerEU 2030 targets for the Green Transition³⁴.



EUR 3,8 million



2022-2026

Associated projects:

- [Digitalisation of the Energy System](#) LSP
- [Renewable Energy](#) LSP

Implementation

Governance structure

The consortium managing GreenSkills4H2 is led by the Karlsruhe Institute of Technology and has a total of 27 full project partners and 6 associated partners from 16 Member States³⁵. The activities can be broken down into six Work Packages (WPs), with a focus on interactions with the industry. This involves queries regarding thematic and content-related training needs, the development of corresponding course curricula and associated training materials. A separate WP focuses on the implementation and application of the training materials on a broad scale in training courses called “pilot training”.

To guarantee the successful implementation of all tasks, an overall management team was established. This management team monitors the ongoing activities of the Blueprint and steers the consortium through a steering committee built on WP leaders and the management team. A quality assurance plan was developed, and the management team reviews all deliverables supported by specific experts. The general assembly, formed by the project partners and an advisory board of associated partners, serves as an additional instrument for democratic advising and steering. Internal workshops held during and beyond the general assembly ensure collaborative efforts and successful outcomes across various tasks.

Main deliverables

Several successful deliverables have already been developed and made available on the project website. In the second half of GreenSkills4H2, the focus shifted to conducting pilot trainings across Europe and testing the educational materials. As a result, most deliverables have either been initiated or are scheduled to be rolled out in the remainder of the project.

Some key deliverables developed in the first half of the project are:

³⁴ REPowerEU (europa.eu)

³⁵ The full list of partners is provided in Annex 1.

- the design and implementation of a [Hydrogen Skills Strategy](#) to meet the current and future skills needs of the Hydrogen value chain and providing the backbone for the growth of the renewable energy sector in Europe;
- the development, testing and rollout of Vocational and Educational Training (VET) programmes, as well as [the Core VET Curriculum](#) and the [Green Skills for hydrogen Lab Series](#) across Europe according to the latest market needs to empower workers and technical professionals.

The full list of deliverables is available on the GreenSkills4H2 [website](#).

Success factors

Key success factors include active participation in and invitation to prominent events. Additionally, the number of educational events conducted and the participant count are published on the project website and social media. All public deliverables are made available on the website and promoted through the mailing list to generate interest and appeal. Effective and direct communication, coordinated by the management board and WP leaders, is essential to ensure that each partner remains engaged in the project activities.

Challenges faced

The primary challenge has been structuring and managing the large consortium, keeping track of all partners, and monitoring and guiding activities. Additionally, a two-month delay at the start of GreenSkills4H2, due to summer vacations, needed to be addressed. Another significant challenge was collecting detailed information about industry demands through interviews and questionnaires. Additionally, identifying potential industry and individual candidates for urgent training in specific regions also proved to be time-consuming.

Results and impacts

One of the key objectives of this Blueprint is to develop and promote the Hydrogen Skills Strategy, the VET Programme, project results, and best practice guides throughout the project lifecycle. This includes designing and producing promotional tools and establishing online and offline communication channels. Meanwhile, several urgent training sessions have been delivered to different stakeholders across Europe. Pilot training based on the Core VET Curriculum is already planned and scheduled for execution during the second half of the project.

In addition to the practical aspects of the Blueprint, GreenSkills4H2 aims to create a [European Hydrogen Skills Community \(Alliance\)](#), encompassing a broader group of key European stakeholders in an online community centred around the [European Hydrogen Skills Platform](#). The Alliance will represent a lasting partnership between industry and education. Therefore, GreenSkills4H2 seeks to connect and interact with past and ongoing EU projects focused on hydrogen skills in various ways.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

GreenSkills4H2 joined the Large-Scale Partnership for the renewable energy sector, which complements existing skills partnerships in the renewable energy industrial ecosystem and in the digital ecosystem.

As part of the [Action Plan for the Digitalisation of the Energy System](#) adopted in 2022, GreenSkills4H2 will help meet REPowerEU2030 targets by accelerating the upskilling and reskilling of the European

Power-up skills: developing Europe's workforce

workforce and student body. While developing the European Hydrogen Skills Strategy deliverable, the GreenSkills4H2 consortium has collaborated closely with hydrogen stakeholders across the EU to identify occupational profiles in high demand in the sector and analyse the required level of “hydrogen knowledge” of these profiles.

Moreover, GreenSkills4H2 has participated in events organised by its partners around the topic of renewable hydrogen such as the [European Energy Transition Conference](#), the [Renewable Hydrogen Summit](#) and the [European Hydrogen Week](#) (the latter organised by project partners [Hydrogen Europe](#) and [Hydrogen Europe Research](#)). The team dedicated to dissemination and organisation of events will oversee the organisation of the ‘European Hydrogen Skills Stakeholder Conference’ to secure high-level adoption of the VET curricula and programmes by EU and national education policymakers and to encourage integration into national skills strategies and VET curricula

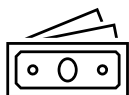
Contact information

- Blueprint coordinator – Olaf Jedicke – at olaf.jedicke@kit.edu or info@greenskillsforhydrogen.eu
- Check out the Blueprint’s [website](#)

Maritime Alliance for fostering the European Blue Economy through a Marine Technology Skilling Strategy - MATES

Overview

[The Maritime Alliance for fostering the European Blue Economy through a Marine Technology Skilling Strategy – MATES](#) Blueprint aimed to develop a skills strategy for the maritime technologies sector, particularly for shipbuilding and offshore renewable energy generation. It also aimed to better align training/educational opportunities with labour market needs in all European sea basins, with a view to making careers in the sector more attractive, highlighting the prospect of concrete, fulfilling job opportunities.



EUR 4.9 million



2018-2022

Associated projects:

- [Offshore Renewable Energy](#) LSP
- [Shipbuilding](#) LSO
- [FLORES](#) Forward-looking project
- [SHOREWINNER](#)
- [GREEN - GreeneR European VET Network Project](#)

Implementation

Governance structure

The MATES consortium was led by the Spanish Centro Tecnológico del Mar (Fundación CETMAR) and comprised 17 partners from eight countries³⁶. The consortium was made up of eight industry partners, five education providers, two administrations, and two research organisations. The implementation of this Blueprint relied on the work of a Steering Board, composed of a representative of each partner. The Board was responsible for overall governance, discussing and deciding strategic orientation and adopting the main decisions. The Project Secretariat was responsible for day-to-day management related to funding, legal affairs and the overall administration of the project. Partners were also involved through financial or administrative representatives in this secretariat. Furthermore, the Management Committee was responsible for the overall technical performance and for the internal risk and quality control management of the MATES Blueprint. Lastly, eight Thematic Groups supported the work of the Blueprint through the work of experts from the partnership and of external stakeholders.

Main deliverables

The MATES Blueprint produced the following key deliverables.

- A European [network of experts](#) in the maritime technologies sector, which gathered over 200 stakeholders from the industry, academia and research. This network of experts provided regular feedback and advice during the development of Blueprint documents and reports.

³⁶ The full list of partners is provided in Annex 1.

- A detailed [skills analysis](#) with more than 900 training offers mapped, including an analysis of existing gaps and future trends and their impact on skills needs. This analysis formed the basis for other work streams under the project.
- A [Maritime Technology Skills Strategy](#) to address the main drivers of change in the maritime industry.
- 11 [Pilot Experiences](#) – a series of activities aligning the Blueprint priorities with identified training needs and tested new educational resources and methodologies reaching 1,405 participants across 24 countries (students, teachers, trainers, skilled workers and those who have recently joined the workforce). All MATES educational resources developed and tested through the Pilot Experiences are available on the [Marine Training Platform](#).
- Populating the [ESCO](#) database – some 14 new skills and five new occupations in the sectors concerned were identified and added into the ESCO database. In addition, the 46 occupational profiles in the shipbuilding and offshore renewable energy production industry considered as the most affected by emerging trends were matched with 100 new, future-looking skills considered to be essential, with a particular focus on green and digital skills.

The full list of deliverables is available on the MATES [website](#).

Success factors

The creation of a project handbook, consisting of common protocols and templates provided a solid, unified and coherent structure for all activities and tasks implemented within the scope of the Blueprint. These templates were easily accessible, user-friendly and proved to be an invaluable tool for all partners throughout the entire lifetime of the project. This ensured compliance with set quality standards and contributed to the achievements of the Blueprint. Moreover, the strong sense of teamwork developed by partners was also a key success factor of the initiative.

Challenges faced

The Blueprint involved a high number of partners from a diverse range of organisations and sectors. Although a strength of the Blueprint, this diversity required efforts to develop a common understanding of and a shared framework for quality standards. Collaboration between the industry and the education/training communities also required significant effort due to their different natures and working styles.

Lastly, as the MATES project represented one of the first Blueprints, it could not rely on the experience and lessons learned from well-established practices.

Results and impacts

Training courses, curricula and programmes developed by the Blueprint have been applied and used in many countries across Europe. As a result of a fruitful collaboration between education institutions and stakeholders, the Sustainable Ship and Shipping 4.0 Master's Degree (SEAS 4.0) was developed and launched jointly by the University of Napoli Federico II, the University of A. Coruna and the University of Zagreb. Moreover, the Escola do Mar das Azores plans to run the Ocean Pro.Tec Lab course (one of the Pilot Experiences) again. In Greece, the development of the 'Training Seminar on Additive Manufacturing and Risk Management in the Shipbuilding and Ship Repair Sectors' enabled

the testing and implementation of an effective method for addressing the identified current and future skills gaps and shortages in this sector.

As reported above, MATES contributed to updating the ESCO classification system.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

MATES coordinated the creation of a Large-Scale Partnership for offshore renewable energy under the Pact for Skills (ORE LSP). MATES partners are also connected to the Shipbuilding LSP. The MATES coordinating entity, Fundación CETMAR, is also coordinating [the FLORES project](#), a Forward-Looking project aiming to promote the activity of the ORE LSP and the Offshore Renewable Energies sector. All the lessons learned in MATES are being applied to FLORES, as well as the Database of Experts or the Analysis of Skills Gaps recommendations and long term action plans are being considered in FLORES and in [SHOREWINNER](#). As part of the activity of this project, several meetings have been established with the T-Shore project, which has been invited to join the ORE LSP.

MATES partners have agreed to carry out future actions showcasing the sustainability of the Maritime Technologies Skills Strategy and ensuring the use and exploitation of the relevant project outcomes for the next five years after the end of the project. For example, the Galician Regional government has relied on the training needs identified under the MATES Blueprint to implement its “Skills Agenda for Employment”. Furthermore, MATES social media as well as dissemination and transfer activities remain active, and the MATES training materials and facilities are being used in the VET centres and companies.

As an example, CETMAR and CT are exploiting the results of the MATES project to analyse the green skills needs of the maritime technologies and provide recommendations to accelerate the Green transition. This is being done in the context of the Forward-Looking project GREEN - Greener EuropEan VET Network, which is addressing this process across sectors, relying on the results of the Blueprints developed in additive manufacturing, automotive, batteries, defence, energy and maritime technologies.

Finally, CETMAR, and certain MATES partners, such as UdC Aquatera and the Xunta de Galicia Regional Ministry for Education, are collaborating in the Cove Shorewinner project. This project aims to set up and develop a Southern European offshore wind energy Community of Practice (CoP) to foster excellent education and training based on cooperation among five Centres of Vocational Excellence (CoVEs) in Portugal, Spain, Italy, Greece and Cyprus.

Contact information

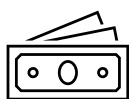
- Blueprint coordinators – Lucía Fraga Lago, Amaya Soto Rey and Rosa Fernandez Otero, Centro Tecnológico del Mar – Fundación CETMAR – at mates@cetmar.org
- Check out the [website](#) of the MATES Blueprint.

Textiles

Skills for Smart Textile, Clothing, Leather and Footwear Industries - Development of a sustainable upskilling and reskilling strategy – Skills4Smart TCLF 2030

Overview

The [Skills for Smart Textile, Clothing, Leather and Footwear Industries 2030 – SKILLS4SMART TCLF 2030](#) Blueprint aimed to advance the modernisation and competitiveness of the EU Textile, Clothing, Leather and Footwear (TCLF) sectors by developing a sustainable upskilling and reskilling strategy.



EUR 3.98 million



2018-2022

Associated projects:

- [TCLF LSP](#) (TCLF Skills Alliance)
- [METASKILLS4TCLF](#) Blueprint
- [AEQUALIS4TCLF](#) Blueprint

Implementation

Governance structure

The SKILLS4SMART TCLF 2030 consortium was led by EURATEX and composed of 22 partners from nine different countries³⁷. A Steering Committee was set up to define the working rules and ensure smooth implementation of the Blueprint activities. Collaboration tools and an e-management platform were also set up with the same objective. The governance structure was strengthened by quality assurance mechanisms, such as a Quality Plan, as well as internal and external evaluations of the quality of the results.

Main deliverables

The SKILLS4SMART TCLF 2030 Blueprint produced the following key deliverables.

- A [Sectoral Skills Strategy for the TCLF](#) sectors, alongside nine national strategies (covering consortium member countries: [BE](#), [BG](#), [ES](#), [FR](#), [EL](#), [IT](#), [PL](#), [PT](#), [RO](#)).
- Development of new curricula or the updating of existing ones for a selection of [8 profiles for the TCLF industries](#), namely: 1) Textile Technologist; 2) Clothing CAD Pattern Maker; 3) Footwear CAD Designer and Pattern Maker; 4) Leather Technologist; 5) Sustainability Technician; 6) (Digital) Supply Chain Analyst; 7) Digital Marketing Professional; 8) Process and Production Timeline Analyst.
- The set up of a European-wide Network of VET providers and a Network of Regional Authorities with strong presence of TCLF – to be further developed under the Pact for Skills initiative.

³⁷ The full list of partners is provided in Annex 1.

- The [European Fashion Campus](#) is an online platform aiming to collect all the relevant information on education and training in the TCLF industries in Europe. Numerous trainings devised by the partnership are available on the website after creation of a free account.
- Definition of [VET Quality Label](#) for TCLF curricula.
- Materials that the TCLF community across Europe can use to increase the attractiveness of careers in the TCLF sectors were created (e.g. a [short video documentary](#), a set of tools and guidelines for the organisation of School Orientation Days with students).

The full list of deliverables is available on the SKILLS4SMART TCLF 2030 [website](#).

Success factors

The Skills4Smart TCLF 2030 Blueprint project has been a critical driver in modernising the skills landscape across the textile, clothing, leather, and footwear sectors in Europe. Success factors contributing to its effectiveness include a strong focus on aligning training and curricula with industry needs, creating attractive career pathways for younger generations, and fostering a pan-European network of stakeholders committed to skills development. The project's ability to engage private and public actors across regions has been key in advancing a unified EU-wide skills strategy. In Prato, for example, the integration of national strategies into regional policies enabled a successful transition to a circular economy with a focus on sustainable practices in textiles. Additionally, innovative training methods have been designed to support digital and green transitions, which have led to enhanced collaboration among local stakeholders.

Challenges faced

The COVID-19 pandemic hindered the piloting of the new curricula developed by the Blueprint, as it did not allow for face-to-face or work-based learning approaches and required constant adaptation to rapidly changing national and regional healthcare measures. Engaging students and new VET centres became increasingly difficult, particularly as the latter were already overwhelmed by the emergency of the situation and were thus reluctant to engage in new activities.

Results and impacts

One of the key achievements has been the development of eight new qualification profiles that align with the sector's evolving needs, particularly in digitalisation and sustainability. These profiles have been integrated into free, accessible MOOCs, which have engaged 1,882 participants during the pilot phase, including both students and active workers. This training innovation, coupled with a database of over 160 vocational education and training (VET) providers, and the creation of 51 training units, ensures that the sector has access to future-oriented and industry-relevant education.

At the regional level, the project's success is exemplified by the establishment of regional skills agreements, particularly in Prato, where national strategies were successfully localised to support the city's transition to a circular economy. This led to the creation of 18 sector-specific training courses and new higher education pathways focused on digital and green skills. The Prato initiative, supported by the project, also resulted in the implementation of technology-enhanced learning environments, further strengthening the region's ability to upskill its workforce.

In terms of broader impact, the SKILLS4SMART TCLF 2030 Blueprint project has enhanced the visibility and attractiveness of careers in the TCLF sectors. The "Inside Fashion" documentary and School Orientation Days, which reached over 1,000 students, have been incredible tools in introducing young

Power-up skills: developing Europe's workforce

talent to the wide range of career opportunities within the industry, particularly in technical, sustainable, and digital roles. These initiatives, along with the creation of new networks of VET providers and regional authorities, are expected to have a lasting impact by addressing skills gaps, promoting innovation, and ensuring the long-term growth and competitiveness of the TCLF sectors in Europe.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

Blueprint coordinator (EURATEX) and two SKILLS4SMART TCLF 2030 consortium partners (CEC and COTANCE, umbrella associations) now coordinate the Large-Scale Partnership for the TCLF sectors (called “[TCLF Skills Alliance](#)”), effectively making SKILLS4SMART TCLF 2030 the precursor of the TCLF industries’ initiative.

Since the adoption of the new EU Skills Agenda in 2020, the SKILLS4SMART TCLF 2030 consortium expressed an interest in engaging with the Pact for Skills and issued a position paper outlining the key priorities to be addressed under the initiative. This Alliance aims to unify all relevant stakeholders from the TCLF industries, not only those involved in the original Blueprint but also those engaged through new initiatives. These include the [METASKILLS4TCLF](#) Blueprint project, launched in 2023 as a direct follow-up to the SKILLS4SMART TCLF 2030 Blueprint, targeting 12 countries, including new additions such as Germany, Ukraine, and Sweden. The [AEQUALIS4TCLF](#) Blueprint project, launched in 2024, focuses on seven additional countries in Central, Eastern and Northern Europe, while the TCLF SkillBridge project is specifically designed to develop regional skills partnerships across Europe.

These initiatives collectively build upon the success of the first Blueprint, addressing critical industry needs by fostering collaboration at both regional and European levels. Through these synergies, the TCLF sectors are better positioned to meet the growing demand for green and digital skills, relevant to their future sustainability and competitiveness.

Contact information

- Blueprint coordinator – Pedro Gonçalves, Policy Officer, EURATEX – at pedro.goncalves@euratex.eu
- Check out the Blueprint’s [website](#).

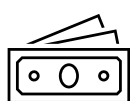
Tourism

Next Tourism Generation Alliance – NTG³⁸

Overview

Main aims and objectives

The [Next Tourism Generation Alliance – NTG Blueprint](#) aimed to respond to the fast-changing and increasing skills gaps in the tourism sector and challenges related to the green and digital transitions. NTG aspired to develop and implement a structural mechanism to bridge current and future skills shortages by providing tools to facilitate transformational collaboration between the industry, education systems and public authorities.



EUR 4 million



2018-2021

Associated projects:

- [Tourism LSP](#)
- [PANTOUR Blueprint](#)
- [PANTOUR/NTG Skills Lab](#)

Implementation

Governance structure

The NTG consortium was led by Federturismo Confindustria (Italian Tourism Trade Association) alongside 14 partners from eight countries³⁹. From the outset, the Blueprint aimed to involve the broadest range of sectoral stakeholders. To this end, National/Regional Skills Partnerships⁴⁰ were established in each of the partner countries to bring together local stakeholders. The Blueprint's [Collaborative Governance Framework](#) outlines NTG's governance structure and supports the activities of the National/Regional Skills Partnerships.

Main deliverables

The NTG Blueprint produced the following key deliverables.

- A research-based [Skills Assessment Methodology \(SAM\)](#) to support the tourism industry, education and training providers, as well as government bodies to systematically identify, assess, and monitor digital, green, and social skills needs.
- An [Online Skills Matrix](#) to provide a competency and career skills database listing skills and competencies based on the requirements in tourism related industries across Europe.
- A [Tourism Sector Skills Toolkit](#) to provide a wide set of resources (e.g. mapping documents, sample session plans, examples for developing curriculum, a human resource framework, occupational profiles and guidance documents, case studies, and examples of best practice).

³⁸ There is no separate website of the NTG project since it has been integrated into the website of follow-up Blueprint PANTOUR.

³⁹ The full list of partners is provided in Annex 1.

⁴⁰ These are to be distinguished from the Regional Skills Partnerships established under the Pact for Skills: https://pact-for-skills.ec.europa.eu/about/regional-skills-partnerships_en

- A [Quality Skills Standards Framework](#) to illustrate how new skills are integrated into training curricula to help sectoral stakeholders identify the key factors that influence skills content and delivery.
- A user-friendly digital [Tourism Skills Lab](#) to offer individuals and organisations a series of skills instruments and tools to address skills gaps, future skills needs (skills assessment) and job reviews.
- A [Collaborative Framework](#) for sectoral skills development in tourism, which was developed based on an extensive review of best practices from across the world, and adaptable to different national and regional contexts to support the work of National/Regional Skills Partnerships.
- A [Blueprint Strategy and Action Plan](#) to provide a roadmap for the scalability and transferability of the actions implemented (i.e. the Blueprint's outputs). The Blueprint incorporates all NTG tools and indicates how they form a cohesive framework for identifying and addressing tourism skills needs at both operational and strategic levels.

The full list of deliverables is available on the NTG [website](#).

Success factors

The NTG Blueprint strove to establish a common language and approach to strategically assess the skills gap, fostering collaboration between education, industry, social, and government actors. This objective was supported through multifaceted tools that provided an overall coherence to the Blueprint's actions. Aside from the design of targeted tools, the adoption of a bottom-up approach, organising national and regional dissemination events such as public conferences, webinars and workshops and setting up National/Regional Skills Partnerships was a key factor for the Blueprint's success. Lastly, ensuring close collaboration with the European Commission and building synergies with the Pact for Skills contributed to the project's sustainability, as it resulted in the continuation of the work of the Blueprint through the follow-up Pantour project (Pact for Next Tourism Generation Skills).

Challenges faced

The joint action of all relevant sector stakeholders is critical to meet Europe's skills needs and ensure skills can play their pivotal role in supporting the recovery from the pandemic crisis and mastering the digital and green transitions. Throughout its four-and-a-half-year duration, NTG has sought to influence the tourism sector by transferring its methodological approach to the various stakeholders and by raising awareness about the need to pave the way for innovation and transformational change through the development of digital, social and green skills. However, while other key industrial ecosystems are characterised by the presence of large companies that can provide significant references for skills development policies, tourism is a sector dominated by the presence of small and micro enterprises. This demographic was therefore a challenge, as it required a specific approach to effectively and engage with stakeholders in such a large and fragmented sector. Participation in the Pact for Skills helped by allowing a larger consultation with representatives not only of tourism, businesses, and education and training institutions, but also with public bodies.

Results and impacts

The NTG Blueprint set a precedent by establishing EU tourism education quality standards for digital, green and social skills sets and encouraging collaboration between education providers and the industry at an unprecedented scale, and at different levels. This was done by developing best practices and

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actively raising awareness on the benefits of linking business with education organisations as well as reaching out to the widest range of stakeholders through a bottom-up approach and involving key actors at the local and regional level. Moreover, several of the tools developed by NTG had a concrete impact. For example, educational partners revised the content of their tourism learning offer based on the NTG Tourism Sector Skills Toolkit. The NTG Skills Matrix, by providing a detailed explanation for each of the eight standard EQF levels⁴¹, improved the delivery of skills-based training and education.

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

The NTG Blueprint team has been instrumental in launching and implementing the Pact for Skills in the tourism sector. Indeed, the Coordinator of the Large-Scale Partnership for tourism under the Pact for Skills (Tourism LSP) was one of the Work Package leaders in the NTG Blueprint. By sharing its advanced stakeholder engagement tools with the European Commission, the Blueprint provided additional material and inspiration for the Large-Scale Partnership's launch, and helped it define its key performance indicators. Finally, the National/Regional Skills Partnerships established by NTG in each of the consortium partner countries continue to operate despite the ending of the Blueprint project, further demonstrating the sustainability of its results and their ability to produce tangible benefits in the medium to long term.

Contact information

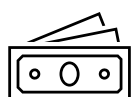
- Blueprint coordinators – Ms Silvia Barbone – at s.barbone@federturismo.it
- Check out the [website](#) of the NTG Blueprint (now PANTOUR)

⁴¹ <https://europa.eu/europass/en/description-eight-efq-levels>

Pact for Next Tourism Generation Skills - PANTOUR

Overview

The [Pact for Next Tourism Generation Skills \(PANTOUR\)](#) Blueprint is a follow-up project of NTG (Next Tourism Generation Skills Alliance) and builds on its previous work. The Blueprint aims to create tools and methods to foster strategic, sustainable cooperation among tourism stakeholders and boost innovation in Europe.



EUR 3.8 million



2022-2026

Associated projects:

- [Tourism LSP](#)
- [NTG Blueprint](#)
- [PANTOUR/NTG Skills Lab](#)

Implementation of the Blueprint for sectoral cooperation on skills

Governance structure

PANTOUR is a multi-disciplinary consortium led by the Spanish Confederation of Hotels and Tourist Accommodation (CEHAT) alongside 13 partners from 10 EU countries⁴². Similarly to NTG, the project aims to build strong skills partnerships with the creation of National/Regional Skills Groups at local level, in partnership with SMEs and following the European Skills Agenda. The Project Board has one senior representative from each partner. The Project Quality Assurance team comprises members from both the management and quality partners. The Quality Plan gives indications on steps that must be followed by all partners across tasks.

Main deliverables

The PANTOUR Blueprint has produced the following key deliverables.

- The [PANTOUR European Skills Survey Report](#), which includes data on tourism as well as insights into the current state of digital, green and social skills training provision for various education/training providers.
- The [PANTOUR Country Skills Profile Reports](#) provide an overview of each consortium country's tourism sector, presenting facts and figures, key characteristics, employment contributions, national tourism strategies, challenges, and developments.

As the PANTOUR Blueprint is a continuation of previous work, it is important to point out previous deliverables conducted under the NTG Blueprint which can be found [here](#) and the NTG Toolkit resources which can be found [here](#).

The main deliverables to come include:

- a handbook on how to tackle inequality;
- a handbook on new occupational profiles;
- the Sectoral Skills Intelligence Monitor;

⁴² The full list of partners is provided in Annex 1.

- the Skills Lab;
- a Resource Books for Trainers;
- the implementation of the National/Regional Skills Groups;
- a Skills Strategy Plan for 2026-2036.

Success factors

The Blueprint project has effectively managed the withdrawal of two of its partners, without impacting its deliverables or their quality. All partners have consistently attended meetings, ensuring full participation and no disappointments. The implementation of a robust quality plan has been successful, and communication and dissemination goals have been fully achieved.

Challenges faced

The project has encountered a few challenges. Firstly, it faced the withdrawal of two partners, but these issues were resolved successfully. Additionally, there was a delay in closing a survey to gather more data from Northern European countries, ensuring balanced results with those from the South.

Results and impacts

With the expected resources and results, PANTOUR seeks to benefit job seekers, the unemployed, and employed workers, as well as employers and SMEs by dedicating attention to reskilling and upskilling the workforce in future skills needs. Over 10 million people working in the tourism industry in Europe are expected to benefit from this project.

Some of the expected short-term results include:

- a study to address new needs for the future in digital, green and social skills and to create modules and educational solutions to address these needs;
- a mapping study for upskilling and reskilling support available within the ecosystem;
- a strategy plan to identify and define occupations and related skills that will emerge in the ecosystem;
- a strategy plan and actions to build resilience and reskill and upskill the workforce after COVID-19.

Some of the expected long-term results include:

- cooperation on skills development through the National/Regional Skills Groups that will include partners in all sectors, on a national and regional level;
- practical tools and solutions that are user-friendly for end-users from all the target groups (businesses, workforce, training institutions, and governments) to implement project results;
- innovative approaches and content reflecting the skills needs for nano-enterprises and in the "collaborative economy";
- improved partnerships between VET and HE institutions, including exchange of knowledge, practices and delivery of modules in an easy, flexible and accessible way, available for students and educators.

For all the expected results please refer to the website [here](#).

Synergies with the Pact for Skills, Centres of Vocational Excellence (CoVEs) and Forward-Looking projects

Following the work of the NTG Blueprint, which has been instrumental in launching and implementing the Pact for Skills in the tourism sector, the PANTOUR Blueprint continues to collaborate with the Pact for Skills. The Blueprint will develop resources to enhance collaboration with the Pact for Skills. These resources include a Strategy Plan that identifies and defines emerging occupations and related skills within the ecosystem. This plan will provide a comprehensive overview of activities, stakeholder involvement, and partnership-building efforts under the Pact for Skills. The consortium will also continue to expand partnerships and exchanges of information between VET and HE institutions and will include partners in all sectors on a national and regional level. Moreover, the Pact for Skills is using the [PANTOUR Skills Lab](#) as a basis for its network.

Contact information

- Blueprint coordinator - Ana Maria Camps, CEHAT – at anamaria@cehat.com
- Check out the [website](#) of the PANTOUR Blueprint.

Annex 1: Lists of partners

Additive Manufacturing

Table 3 SAM Blueprint - List of partners

Name of the partner	Country
European Welding Foundation (Coordinator)	EU-level (PT)
Aitiip	ES
Brunel University	UK
Cecimo	EU-level (BE)
EPMA	EU-level (FR)
Ansys	UK
Idonial	ES
LORTEK	ES
ISQ	PT
LMS	GR
IMR	IE
LZH Laser Akademie	DE
Materialise	BE
MTC	UK
Politecnico di Milano	IT
FavoriteAnswer	PT
École Centrale de Nantes	FR

Aerospace and Defence

Table 4 ASSETs+ - List of partners

Name of the partner	Country
University of Pisa (Coordinator)	IT
Aalborg University	DK
University of Bordeaux	FR
Centrale Supélec	FR
Rzeszow University of Technology	PL
University of Cadiz	ES
University of Seville	ES
Polytechnic University of Madrid	ES

University Charles III of Madrid	ES
Royal Military Academy	BE
Mercantec	DK
AEROCAMPUS Aquitaine	FR
LEONARDO	IT
HENSOLDT	DE
AIRBUS	FR
ROLLS-ROYCE	International
Navantia	ES
Safran	International
SAAB	International
CenSec	DK
Distretto Tecnologico Aerospaziale della Campania	IT
CATEC ES	ES
Andalucía Aerospace	ES
SEA Europe	EU-level (BE)
GICAN	FR
Fondazione Giacomo Brodolini srl	IT
EFW	EU-level (BE)
CIMEA	IT

Table 5 EO4GEO - List of partners

Partner	Country
GISIG (Coordinator)	IT
KU Leuven	BE
Paris-Lodron-Universität Salzburg	AT
Universitat Jaume I (UJI)	ES
University of Zagreb (GEOF)	HR
Univeristy of Patras (UPAT)	GR
Friedrich-Schiller University Jena (FSU-EO)	DE
University of Twente (UT-ITC)	NL
University of Basilicata (UNIBAS)	IT
Institute of Geodesy and Cartography (IGiK)	PL
Planetek Italia	IT
IGEA	SI
Epsilon Italia	IT

NOVOGIT	SE
GIB	SE
Spatial Services Gmbh	AT
EIT CLIMATE-KIC	NL
EARSC	EU-level (BE)
Romanian Space Agency (ROSA)	RO
UNEP-GRID	PL
NEREUS	EU-level (BE)
VITO	BE
CNR-IREA	IT
Institute of Environmental Solutions (VRI IES)	LV
ISPRA	IT

Agri-food

Table 6 FIELDS - List of partners

Partner	Country
UNITO (Coordinator)	IT
CONFAGRI	IT
WUR	NL
ISEKI	AT
ICOS	IE
AERES	NL
AP	AT
UHOH	DE
CERTH	GR
ACTIA	FR
GAIA	GR
CONFAGRI	PT
SCOOP	ES
GZS	SI
LVA	AT
ULCM	ES
AC3A	FR
FIAB	ES
FDE	EU level
FENACORE	ES

INFOR	IT
SEVT	GR
LLL-P	EU level
ANIA	FR
PLANT ETP	EU level

Table 7 I-RESTART - List of partners

Partner	Country
UNITO (Coordinator)	IT
CONFAGRI	IT
WUR	NL
ISEKI	AT
ACEEU	DE
AERES	NL
AKMI	GR
UHOH	DE
AU	DK
CLITRAVI	EU level
COPA-COGECA	EU level
CONFAGRI PT	PT
SCOOP	ES
GZS	SI
LVA	AT
CTAEX	ES
EBVS	NL
FIAB	ES
FDE	EU level
EIT-FOOD	EU level
INFOR	IT
SEVT	GR
FEDER	IT
ANIA	FR
UMU	ES
UNITE	IT
EfVET	EU level

Construction

Table 8 Construction Blueprint - List of partners

Partner	Country
Fundación Laboral de la Construcción (FLC) (Coordinator)	ES
European Construction Industry Federation (FIEC)	EU-level (BE)
European Federation of Building and Woodworkers (EFBWW)	EU-level (BE)
European Builders Confederation (EBC)	EU-level (BE)
Associazione Nazionale Costruttori Edili (Ance)	IT
Confédération Construction (CC)	BE
Confederación Nacional de la Construcción (CNC)	ES
Fédération Française du Bâtiment (FFB)	FR
Gospodarska Zbornica Slovenije (CCIS)	SI
Lithuanian Builders Association (LSA)	LT
Panhellenic Association of Engineers Contractor of Public Works (PEDMEDE)	GR
Zentralverband des Deutschen Baugewerbes (ZDB)	DE
Budowlani	PL
Institute of Vocational Training (AKMI)	GR
Berufsförderungswerk der Bauindustrie NRW gGmbH (BFW-NRW)	DE
Bildungszentren des Baugewerbes e.V. (BZB)	DE
Comité de Concertation et de Coordination de l'Apprentissage du Bâtiment et des Travaux Publics	FR
Centre IFAPME Liège-Huy-Verviers	BE
Centro de Formação Profissional da Indústria da Construção Civil e Obras Públicas do Sul (Cenfic)	PT
Ente per la Formazione e l'addestramento professionale nell'edilizia (Formedil)	IT
Limerick Institute of Technology (LIT)	IE
Satakunnan Koulutuskuntayhtymä (Sataedu)	FI
Šolski center Kranj (SCKR)	SI
Viesoji istaiga Vilniaus statybininku rengimo centras (VSRC)	LT

Creative and Cultural Industries

Table 9 CHARTER Blueprint - List of partners

Partner	Country
Universitat de Barcelona (Coordinator)	ES
Eusko Jaurlaritzaren	ES

Akademie der bildenden Künste Wien	AT
Erasmus Universiteit Rotterdam	NL
Fondazione Scuola dei Beni e delle Attività Culturali	IT
Università degli studi di Genova	IT
Veneranda Fabbrica del Duomo	IT
Regione Toscana	IT
Göteborgs Universiteit	SE
Västra Götalands Läns Landsting	SE
Université Sorbonne Paris 13 Nord	FR
Department of Housing, Local Government and Heritage	IE
An Chomhairle Oidhreachta - The Heritage Council HC	IE
FARO. Vlaams steunpunt voor cultureel erfgoed	BE
Institutul National al Patrimoniului	RO
Kultur und Arbeit	DE
MUSEOVIRASTO - Finnish Heritage Agency	FI
Nacionālā kultūras mantojuma pārvalde	LV
Freie Hansestadt Bremen	DE
Verband der Restauratoren	DE
Zavod za varstvo kulturne dediščine Slovenije	SI
E.C.C.O. – European Confederation of Conservator-Restorers' Organisations	EU-level (BE)
ENCATC – European Network for Cultural Management and Policy	EU level (BE)
European Historic Houses	EU-level (BE)
ERRIN - European Regions Research and Innovation Network	EU-level (BE)
ICOMOS - International Council on Monuments and Sites	International
NEMO – Network of European Museums Organisations	EU-level (DE)
ADRAL – Agência de Desenvolvimento Regional de Alentejo	PT

Table 10 CYANOTYPES - List of partners

Partner	Country
University of the Arts Utrecht (Coordinator)	NL
Hochschule der Bildenden Künste Saar	DE
Lusófona University	PT
Norwegian University of Science and Technology (NTNU)	NO
University of Applied Arts Vienna	AT
All Digital	EU level
Creative FED	NL

European Creative Hubs Network	EU level
EfVET	EU level
ELIA	NL
MyData	FI
Fashion Innovation Center	SE
MediarTE	BE
Dataspelsbranschen	SE
Yrkesnämnden för Film och TV	SE
Creative Industry Košice	SK
Materahub	IT
Wirtschaftsförderung Region Stuttgart	DE
EQ-Arts	NL
WIFI ÖSTERREICH	AT

Digital

Table 11 ARISA Blueprint - List of partners

Partner	Country
DIGITALEUROPE (Coordinator)	EU level (BE)
THE ADECCO GROUP	IT
European DIGITAL SME Alliance	EU level (BE)
Digital Technology Skills	IE
EXELIA	GR
University of Applied Sciences Utrecht	NL
Skillsoft global knowledge	NL
Budapest University of Technology and Economics	HU
Chamber of Commerce and Industry of Slovenia	SI
ASIIN CONSULT	DE
IVSZ	HU
Warsaw School of Computer Science	PL
BCS Koolitus	EE
UNIR La Universidad	ES
University of Ljubljana	SI
CIMEA	IT
Kharkiv National University of Radioelectronics	UA

Table 12 CHAISE Blueprint - List of partners

Partner	Country
Université Claude Bernard Lyon 1 (Coordinator)	FR
Crypto4all	FR
Fujitsu	BE
INATBA - International Association for Trusted Blockchain Applications	EU-level (BE)
DIGITALEUROPE	EU-level (BE)
DIGITAL SME	EU-level (BE)
The Ministry of Education and Religious Affairs (YPAITH)	GR
EXELIA	GR
ECQA Gmbh	AT
IOTA Foundation	DE
DHBW	DE
ACQUIN	DE
BerChain	DE
Universitat Politècnica de Catalunya	ES
CIMEA	IT
Italia4Blockchain	IT
INTRASOFT International	International
CPI	SI
University of Ljubljana, Faculty of Electrical Engineering, Laboratory for Telecommunications	SI
University of Tartu	EE
ANC	RO
INDUSTRIA	BG
Economic and Social Research Institute	IE

Table 13 ESSA Blueprint - List of partners

Partner	Country
DIGITALEUROPE (Coordinator)	EU-level (BE)
Adecco Formazione	IT
AICA	IT
MODIS	IT
UNINFO	IT
AKMI	GR

AMETIC	ES
ASIIN Consult	DE
BCS Training	EE
Budapest University of Technology and Economics	HU
Codecool	HU
IVSZ	HU
Digital Technology Skills	IE
Irish Computer Society	IE
Global Knowledge France	FR
Global Knowledge Netherlands	NL
Chamber of Commerce and Industry of Slovenia	SI
University of Ljubljana	SI
Hellenic Open University	GR
HU University of Applied Sciences Utrecht	NL
Warsaw School of Computer Science	PL

Table 14 REWIRE Blueprint - List of partners

Partner	Country
Mykolas Romeris University (Coordinator)	LT
EKT	LT
NRD Cybersecurity	LT
Infobalt	LT
TUV	AT
Apiroplus Solutions	CY
European University Cyprus	CY
Cyprus Certification Company	CY
Brno University of Technology	CZ
Masaryk University	CZ
EC-Council	UK
EfVET	EU level (BE)
EVTA	EU level (BE)
Telecom SudParis	FR
Université de Lorraine – Telecom Nancy	FR
Technical University of Crete	GR
Metropolitan College	GR
ReadLab	GR

Lloyd's register	GR
BME	HU
Técnico Lisboa	PT

Electronics

Table 15 METIS Blueprint - List of partners

Partner	Country
SEMI Europe (Coordinator)	EU level
Infineon Technologies	AT
Technical University of Graz	AT
Imec	BE
European Association of Career Guidance	CY
Summa Semiconductor Oy	FI
X-FAB France	FR
DECISION	FR
Bosch	DE
Silicon Saxony	DE
Dresden Chip Academy	DE
Budapest University of Technology and Economics	HU
IAL-FVG	IT
CIMEA	IT
University of South-Eastern Norway	NO
Graphenea	ES
WiTEC	SE
Arcelik	TR

Energy-Intensive Industries

Table 16 ESSA Blueprint - List of partners

Partner	Country
TU Dortmund University (Coordinator)	DE
Thyssenkrup Steel Europe	DE
ArcelorMittal Poland	PL
ArcelorMittal Spain	ES
Salzgitter AG	DE

Sidenor	ES
Celsa Group/Barna Steel	ES
Tata Steel	NL
Steel Institute VDeh	DE
IMZ	PL
Scuola Superiore Sant'Anna	IT
Worldsteel Steel University	EU-level (BE)
DEUSTO	ES
Cardiff University	UK
ThyssenKruppSteel Europe Training Centre	DE
ArcelorMittal Spain Training Centre	ES
EUROFER	EU-level (BE)
World Steel Association	EU-level (BE)
UNESID Spanish Steel Association	ES
Belgium Steel Platform	BE
Wirtschaftsvereinigung Stahl - German Steel Federation	DE
Federacciai – Italian Steel Federation	IT
CIELFFA European Cold Rolled Steel Association	DE
Association of Finish Steel and Metal Producers	FI
OS KOVO	CZ
RINA/CSM	IT
Visionary Analytics VA	LT

Table 17 SPIRE-SAIS Blueprint - List of partners

Partner	Country
A.SPIRE	EU-level (BE)
AGBAR	ES
ArcelorMittal Global	ES
ARGO	IT
ART-ER	IT
Carbon Market Watch	EU-level (BE)
Cefic	EU-level (BE)
CEMBUREAU	EU-level (BE)
Cerame-Unie	EU-level (BE)
CIRCE	ES
Circle Economy	NL
Covestro Deutschland	DE
ECEG	EU-level (BE)
EIT Raw Materials	EU-level (DE)
ESTEP	EU-level (BE)
European Aluminium	EU-level (BE)
Ferriere Nord Spa	IT
H2O People	EU-level (NL)
IMA Europe	EU-level (BE)
IndustriALL	EU-level (BE)
Instituto de Tecnología Química	ES
Institutul National de Cercetare-Dezvoltare pentru Metale Neferoase si Rare (IMNR)	RO
International Synergies	UK
ISQ	International
ITC	ES
Lukasiewicz-IMN	PL
Mytilineos	GR
RINA	International
Scuola Superiore Sant'Anna	IT
SIDENOR ACEROS ESPECIALES, S.L	ES
Skillman	International
TU Dortmund	DE
ThyssenKrupp Steel Europe	DE

University of Deusto	ES
Visionary Analytics	LT
Water Europe	EU-level (BE)

Health

Table 18 BeWELL Blueprint - List of partners

Partner	Country
European Health Management Association (EHMA) (Coordinator)	EU-level (BE)
European Regional and Local Health Authorities (EUREGHA)	EU-level (BE)
Biomedical Alliance Europe (BAE)	EU-level (BE)
Pharmaceutical Group of European Union (PGEU)	EU-level (BE)
European Confederation of Independent Trade Unions (CESI)	EU-level (BE)
European Specialist Nurses Organisation (ESNO)	EU-level (NL)
INNLANDET FYLKESKOMMUNE (FagInn)	NO
European Forum for Primary Care (EFPC)	NL
Medical University – Varna (MU-Varna)	BG
Viennese Institute for Labour Market and Education Research (WIAB)	AT
DATEY Eyrich GmbH (DATEY)	DE
Babeş-Bolyai University (UBB)	RO
University of Bergamo (UniBG)	IT
EUROMASC AS	NO
European Federation of Nurses Associations (EFN)	EU-level (BE)
European Health Telematics Association (EHTEL)	EU-level (BE)
University of Thessaly (UTH)	GR
European Institute of Innovation and Technology – EIT Health (EIT Health)	EU-level (DE)
European Coordination Committee of the Radiological, Electromedical and Healthcare Information Technology (IT) Industry (COCIR)	EU-level (BE)
Istituto Tecnico Superiore per le Nuove Tecnologie della Vita (ITS Vita)	IT
EuroHealthNet (EHN)	EU-level (BE)
European Connected Health Alliance (ECHAAlliance Group)	EU-level (IE)
Netherlands Institute for Health Services Research (NIVEL)	NL
European Observatory on Health Systems and Policies (EOHSP) WORLD HEALTH ORGANISATION (WHO)	EU-level (BE)

Mobility-Transport-Automotive

Table 19 ALBATTIS Blueprint - List of partners

Power-up skills: developing Europe's workforce

Partner	Country
Skellefteå Municipality (Coordinator)	SE
ACEA	EU-Level (BE)
AIA – Automotive Industry Association	CZ
ATEC	PT
Corvus Energy	NO
EFACEC Energia, Máquinas e Equipamentos Eléctricos	PT
Eupportunity	PT
HE3DA	CZ
InterTradeCard	RO
ISCN GesmbH	AT
MERINOVA Technology Centre	FI
Northvolt	SE
Realizeit (CCKF Limited)	IE
SPIN360	IT
Universidade do Porto	PT
University of Maribor	SI
University of Vaasa	FI
VAMIA	FI
Vestland County	NO
VŠB – Technical University of Ostrava	CZ

Table 20 DRIVES Blueprint - List of partners

Partner	Country
VSB-TUO (Coordinator)	CZ
ISCN	AT
TU Graz	AT
FH Joanneum	AT
ETRMA	EU-level (BE)
ACEA	EU-level (BE)
CLEPA	EU-level (BE)
Efvet	EU-level (BE)
Budapest University of Technology and Economics	HU
SPIN 360	IT
Confindustria	IT
University of Twente	NL

Symbol Business Improvement	NL
East Automotive Alliance	PL
APIA	RO
SERNAUTO	ES
Mondragon University	ES
AIC	ES
GESTAMP	ES
IPV	PT
IDESCOM	PT
Universidade do Minho	PT
Eupportunity	PT
Enginuity (former SEMTA)	UK

Table 21 SKILLSEA Blueprint - List of partners

Partner	Country
Stichting STC Group (STC-Group) (Coordinator)	NL
European Community Shipowners' Association (ECSA)	EU-level
European Transport Workers Federation (ETF)	EU-level
Universitatea Maritimă din Constanța	RO
Danish Maritime Authority	DK
Danish Shipping	DK
Enterprise Shipping Agency	IT
TalTech	EE
Eugenides Foundation	GR
B&FC	UK
École Nationale Supérieure Maritime	FR
HSBA Hamburg School of Business Administration	DE
Liverpool John Moores University	UK
National Maritime College of Ireland	IE
Nautilus	UK
NTNU	NO
SEA Europe	EU-level
Secrétariat général de la Mer	FR
SIMAC	DK
Sindicatul Liber al Navigatorilor	RO
Stena Line	SE

University of the Aegean	GR
University of Cadiz	ES
Faculty of Maritime Studies	HR

Table 22 STAFFER Blueprint - List of partners

Partner	Country
UNIVERSITA DEGLI STUDI DI GENOVA (Coordinator)	IT
FACHHOCHSCHULE ST. POLTEN GMBH	AT
Höhere technische Bundeslehranstalt Wien 3 Rennweg	AT
HTL Mödling	AT
ÖBB Technische Services GmbH	AT
ALSTOM BELGIUM SA	BE
Community of European Railway and Infrastructure Companies	EU-level (BE)
UNION DES INDUSTRIES FERROVIAIRES EUROPEENNES - UNIFE	EU-level (BE)
CESKE VYSOKE UCENI TECHNICKE V PRAZE	CZ
Alstom Transportation Germany	DE
DEUTSCHE BAHN AG	DE
FACHHOCHSCHULE ERFURT	DE
SIEMENS MOBILITY GMBH	DE
TECHNISCHE UNIVERSITAET DRESDEN	DE
wmp consult - Wilke Maack GmbH	DE
Construcciones y Auxiliar de Ferrocarriles, S.A.	ES
MAFEX- ASOCIACION ESPANOLA DE FABRICANTES EXPORTADORES DE MATERIAL, EQUIPOS Y SERVICIOS FERROVIARIOS	ES
CESI	FR
CONSERVATOIRE NATIONAL DES ARTS ET METIERS	FR
Ecole Supérieure des Techniques Aéronautiques et de Construction Automobile	FR
Fédération des industries ferroviaires	FR
SNCF	FR
ARISTOTELIO PANEPISTIMIO THESSALONIKIS	GR
FERROVIE DELLO STATO ITALIANE SOA	IT
For.Fer Srl	IT
HITACHI RAIL STS SPA	IT
UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
Société Nationale des Chemins de Fer Luxembourgeois	LU
SZKOLA GLOWNA HANDLOWA W WARSZAWIE	PL

"Infrastructure of Serbian Railways" JSCRSUNIVERZITET U BEOGRADU	RS
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Proximity and Social Economy

Table 23 baSE Blueprint - List of partners

Partner	Country
MONDRAGON UNIVERSITY	ES
DIESIS NETWORK	EU-level
ROTHA	IE
CONCERTATION DES ORGANISATIONS REPRESENTATIVES DE L'ECONOMIE SOCIALE	BE
AKMI ANONIMI EKPAIDEFTIKI ETAIRIA	EL
EUROPAISCHER VERBAND BERUFLICHER BILDUNGSTRAGER (EVBB) EV	DE
LEGACOOPSOCIALI ASSOCIAZIONE NAZIONALE DELLE COOPERATIVE SOCIALI	IT
ENAI NET IMPRESA SOCIALE SOCIETA CONSORTILE SRL	IT
ASSOCIAZIONE ITALIANA PER LA PROMOZIONE DELLA CULTURA DELLA COOPERAZIONE E DEL NON PROFIT	IT
CHAMBRE FRANCAISE DE L'ECONOMIE SOCIALE ET SOLIDAIRE	FR
FUNDACJA INICJATYW SPOLECZNO-EKONOMICZNYCH	PL
SOCIAL ECONOMY EUROPE ASBL	EU-level
ASOCIATIA CENTRUL PENTRU LEGISLATIE NONPROFIT	RO
SYMPLEXIS	EL
MONDRAGON CORPORACION COOPERATIVA SCOOP	ES
KOSZALINSKA AGENCJA ROZWOJU REGIONALNEGO SPOLKA AKCYJNA	PL
INNOVA EG	DE
GR EUROCERT SRL	RO
STIFTUNG UNIVERSITAT HILDESHEIM	DE
UNIVERSITE DE LIEGE	BE
FUNDATIA ALATURI DE VOI ROMANIA	RO

DOBA FAKULTETA ZA UPORABNE POSLOVNEIN DRUŽBENE STUDIJE MARIBOR	SI
ASSOCIATION EUROPEENNE POUR LA FORMATION PROFESSIONNELLE	EU-level
INSTITUT NATIONAL DES SCIENCES ET INDUSTRIES DU VIVANT ET DE L'ENVIRONNEMENT - AGROPARISTECH	FR
BK CONSULT GMBH	DE

Table 24 B-WISE Blueprint - List of partners

Partner	Country
EASPD - European Association of Service Providers for Persons with Disabilities (Coordinator)	EU-level (BE)
ENSIE - European Network of Social Integration Enterprises	EU-level (BE)
Arbeit plus	AT
Johannes Kepler Universitat Linz	AT
Lichtwerk	BE
RES - Réseau d'entreprises sociales	BE
La fédération des entreprises d'insertion	FR
AFPA	FR
De Omslag	NL
ROC van Amsterdam	NL
NASOR - National Association of the Socially Responsible Employers	BG
Excellia	BG
Social Entrepreneurship Association of Latvia	LV
Samaritan Association of Latvia	LV
Stowarzyszenie Współpracy Regionalnej	PL
CERTES	PL
ACT Group	HR
Faculty of Law in Zagreb University	HR
Margarita	GR
Ev Zin	GR
AIAS Bologna onlus	IT
Idee In Rete	IT
EURISCE - European Research Institute on Cooperative and Social Enterprises	IT
Scuola Centrale Formazione	IT
SENT	SI

Cene Štupar	SI
CESUR	ES
Fundacion ONCE	ES
RISE Romania	RO
Fundatia „Alaturi de Voi”	RO

Renewable Energy

Table 25 EDDIE Blueprint - List of partners

Partner	Country
Comillas Pontifical University (Coordinator)	ES
National Technical University of Athens (NTU)	GR
Rheinisch Westfaelische Technische Hochschule Aachen (RWTH)	DE
Research Centre for Sustainable Energy – University of Cyprus (FOSS)	CY
Politecnico di Milano (PoliMI) – METID	IT
Kungliga Tekniska högskolan (KTH)	SE
Escuelas Profesionales Padre Piquer (PIQUER)	ES
Centrul Roman al Energiei (CRE)	RO
Repsol SA International	International
Iberdrola España SA	ES
NTT DATA	International
E.DSO for Smart Grids (E.DSO)	EU-level (BE)
Novel Group	LU
University of Cologne Business School GmbH (COLOGNE-UCBS)	DE
Institute of Energy Economics at the University of Cologne (COLOGNE-EWI)	DE

Table 26 GreenSkills4H2 - List of partners

Partner	Country
ADECCO FORMAZIONE SRL - ADECCO TRAINING SRL	IT
NUOVO PIGNONE TECNOLOGIE SRL - Nuovo Pignone Technologie s.r.l.	IT
ADVANCED ENERGY TECHNOLOGIES AE EREUNAS & ANAPTYXIS YLIKON & PROIONTONANANEOSIMON PIGON ENERGEIAS & SYNAFON SYMVOULEFTIKON Y PIRESION – ADVENT	GR
AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH - AIT	AT
REGION AUVERGNE RHONE ALPES - CONSEIL REGIONAL AUVERGNE RHONE ALPES	FR

CLUSTER VIOOIKONOMIAS KAI PERIVALLONTOS DYTIKIS MAKEDONIAS – CLUBE	GR
COMMUNICATION PACKAGE - CP EUROPE	EU-level (BE)
STICHTING REGIONAAL OPLEIDINGEN CENTRUM DRENTHE	NL
DANMARKS TEKNISKE UNIVERSITET - TECHNICAL UNIVERSITY OF DENMARK DTU	DK
ENERDATA SAS	FR
UNIVERSITA DEGLI STUDI DI PERUGIA – UNIPG	IT
TARTU LINN - TARTU CITY	EE
TALLINNA TEHNIKAÜLIKOOL - TALLINN UNIVERSITY OF TECHNOLOGY	EE
FUNDACION PARA EL DESARROLLO DE LAS NUEVAS TECNOLOGIAS DEL HIDROGENO EN ARAGON – FHA	ES
HYDROGEN EUROPE	EU-level (BE)
HYDROGEN EUROPE RESEARCH	EU-level (BE)
HOWDEN THOMASSEN COMPRESSORS BV	NL
NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR CRYOGENICS AND ISOTOPIIC TECHNOLOGIES ICSI RM VALCEA - INCDTCI ICSI	RO
INSTITUTE OF ELECTROCHEMISTRY AND ENERGY SYSTEMS - IEES	BG
KARLSRUHER INSTITUT FUER TECHNOLOGIE – KIT	DE
STICHTING NHL STENDEN HOGESCHOOL	NL
UNIVERSITY OF GALWAY - OLLSCOIL NA GAILLIMHE	IE
POLITECNICO DI TORINO – POLITICO	IT
REGIONALNA IZBA GOSPODARCZA POMORZA – RIGP	PL
THE DANISH INSTITUTE OF FIRE AND SECURITY TECHNOLOGY - DBI	DK
SKILLNET IRELAND COMPANY LIMITED BY GUARANTEE	IE
SNAM S.P.A.	IT

Table 27 MATES Blueprint - List of partners

Partner	Country
CETMAR (Coordinator)	ES
AMC (AQUALEX Multimedia Consortium)	IE
AQUATERA Ltd.	UK
AquaTT – AquaTT UETP Ltd	IE
ASIME – Asociacion de Industriales Metalurgicos De Galicia	ES
CERTH – Ethniko Kentro Erevnas kai Technologikis Anaptyxis	GR
COSNAV Engineering	IT
CT Ingenieros	ES

Forum Oceano - - Associação de Economia do Mar	PT
FRCT – Fundo Regional Para a Ciencia e Tecnología	PT
Indigo-Med	GR
Strathclyde University – NAOME	UK
UDC – Universidade da Coruña	ES
Ugent – Universiteit Gent	BE
UVA – Universiteit Van Amsterdam	NL
WEGEMT – Foundation Wegemt – a European Association of Universities in Marine Technology and Related Sciences	NL
Xunta de Galicia – Conselleria de Cultura, Educación e Universidade	ES

Textiles

Table 28 S4TCFL - List of partners

Partner	Country
The European Apparel and Textile Confederation (EURATEX) (Coordinator)	EU-level (BE)
European Confederation of the Footwear Industry (CEC)	EU-level (BE)
Confederation of National Associations of Tanners and Dressers of the European Community (COTANCE)	EU-level (BE)
Italian National Centre for Permanent Learning (CIAPE)	IT
Centro Tecnológico das Indústrias Têxtil e do Vestuário de Portugal (CITEVE)	PT
Centrul National de Dezvoltare a Invatamantului Profesional si Tehnic (CNDIPT)	RO
Sectoral Training Centre for the Belgian Textile Industry (COBOT)	BE
Centro Tecnológico do Calçado de Portugal (CTCP)	PT
Hellenic Management Association (HCIA)	GR
State Foundation for Training in Employment (Fundación Estatal para la Formación en el Empleo, Fundae)	ES
Training Centre for the Belgian Ready-Made Clothing & Upholstery Companies (IVOC)	BE
Centre for Technology and Innovation (INESCOP)	ES
UNITEX	FR
PIN – Servizi Didattici e Scientifici per l'Università di Firenze	IT
Politecnico Calzaturiero	IT
SPIN360	IT
Universitatea Tehnica Gheorghe Asachi din Iasi (TUIASI)	RO
Lodz University of Technology (TUL)	PL
Universitat Politècnica de Catalunya (UPC)	ES

PIRIN-TEX EOOD	BG
Universitat de Lleida (UdL)	ES
Virtual Campus	PT

Tourism

Table 29 NTG Blueprint - List of partners

Partner	Country
Federturismo Confindustria (Coordinator)	IT
Unioncamere	IT
CEHAT	ES
VIMOSZ	HU
DSFT	DE
People 1st International	UK
Ruraltour	EU level
Technological University Dublin	IE
University of Sopron	HU
Cardiff Metropolitan University	UK
Alicante University	ES
Breda University of Applied Sciences	NL
Varna University of Management	BG
ATLAS – Association for Tourism and Leisure Education and Research	International

Table 30 PANTOUR Blueprint - List of partners

Partner	Country
CEHAT (Coordinator)	ES
Breda University of Applied Sciences	NL
University of the Aegean	EL
ETOA	EU-level (BE)
Federturismo Confindustria	IT
gestlabor	ES
Ruraltour	EU-level (BE)
samk	FI
TU Dublin	IE
Turismo de Portugal	PT
VIMOSZ	HU
ZANGADOR	BG

Annex 2: Governance bodies as reported by Blueprint coordinators

The table below presents Blueprints' governance structures as reported by Blueprint coordinators. Please note that the accuracy of this information cannot be fully guaranteed. For more information, please visit the Blueprints' website.

Ecosystem	Blueprint	Management Body	Advisory Body	Quality Assurance Body
Additive Manufacturing	SAM			
Aerospace & Defence	ASSETs+	Steering committee	External experts board	Quality Assurance Manager
		Project Coordinator		
	EO4GEO	<u>Steering Committee, including:</u> General Project Coordinator Scientific and Technical Coordinator Education and Training Coordinator Exploitation Coordinator	Advisory Board of individual experts	
Agri-Food	FIELDS	High Steering Committee	High Advisory Board	High Steering Committee
	I-RESTART	High Steering Committee		High Steering Committee
		UNITO Project Management Team		

Ecosystem	Blueprint	Management Body	Advisory Body	Quality Assurance Body
Construction	Construction Blueprint	Lead Project Manager	National Advisory Groups	
		Work Package Leaders		
		Project Leaders		
Creative & Cultural Industries	CHARTER	<u>Steering Committee, including:</u> Project Coordinator Leaders and co-leaders of each WP		
	CYANOTYPES	Steering committee	External Advisory Board	
Digital	CHAISE		Expert Advisory Board	
	ESSA	Project Steering Committee		
	REWIRE		Expert Advisory Board	
	ARISA	Steering committee	Advisory board of experts	EXELIA
Electronics	METIS	-		
Energy-intensive Industries	ESSA	European Steel Technology and Skills Foresight Observatory		
	SPIRE-SAIS	Project Executive Team		
Health	BeWELL		Advisory Board	

Ecosystem	Blueprint	Management Body	Advisory Body	Quality Assurance Body
Mobility- Transport- Automotive	ALBATTS	Steering Board Leader		
		Steering Board		
	DRIVES	Steering Board		
	SKILLSEA	Project Coordinator	Advisory Board	Project Board
		Technical Project Coordinator		
		Project Administration Team		
	STAFFER	Steering Committee	Advisory and Policy Board	Internal Quality Management Board
				External Quality Management Board
Proximity & Social Economy	B-WISE	General Assembly	Advisory Board	
		Steering Committee		
	baSE	Steering Committee		BK-Consult
		Coordination and Management Team		
Renewable Energy	EDDIE	Project Management Board	International Advisory Board	International Advisory Board
		Project Technical Committee		
	MATES	Steering Board	Thematic Groups	Management Committee

Ecosystem	Blueprint	Management Body	Advisory Body	Quality Assurance Body
		Project Secretariat		
	GreenSkillsforH2	Steering Committee	General Assembly	Quality Assurance Plan executed by the Overall Management Team
		Overall Management Team		
Textiles	SKILLS4SMART TCLF 2030	Steering Committee		Quality Plan
Tourism	NTG		National/Regional Skills Partnerships	
	PANTOUR	Project Board	National/Regional Skills Groups	Project Quality Assurance Team
				Quality Plan

Annex 3: Types of outputs for each Blueprint

The table below lists Blueprints' outputs based on the following categories: Training Products, Job Profiles, Competence Framework, Skills Intelligence and Forecasts. Please note that the accuracy of this information cannot be fully guaranteed. For more information, please visit the Blueprints' website.

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts	
Additive Manufacturing	SAM	4	13 (individual modules)		5	
Aerospace & Defence	ASSETS+	1	35 (individual modules)		Series of fiches highlighting best practices to address skills shortages and mismatches in the sector related to	
		1 (tool)	1 (Training catalogue)	1 (tool)	1 (Body of Knowledge)	
	EO4GEO	1 (profiles prioritisation document)	2 (one database providing information on existing curricular/courses, one methodology definition document) 2 (same as FIELDS)		1 (report on lines of competence emerging from skills intelligence and scenario analysis)	1 (trend and scenario analysis report) 2 (one trend and scenario analysis report, one report on urgent skills needs per country and per sector)
		13 (reports on the modernisation of occupational profiles - 1 EU level + 12 national)	1 (Moodle platform) 2 (one report benchmarking innovative/emerging curricula, one			5 (4 reports, 1 Observatory)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
		1 (report of proposal of eight VET, HE and lifelong learning guidelines for innovative/emerging occupations in Europe in Cultural Heritage areas).	literature collection on education and training including a comprehensive overview of the existing approaches and possible on-going development)	1 (set of factsheets)	2 (one report identifying the gaps and needs in educational and training programmes in relation to the needs of the Cultural Heritage professional market, one preliminary analysis report)
		Job profiles	Training Products	Competence Framework	Skills intelligence and forecasts
Agri-Food	FIELDS	4	13 (individual modules)		5
	I-RESTART	1	35 (individual modules)		Series of fiches highlighting best practices to address skills shortages and mismatches in the sector related to
		1 (tool)	1 (Training catalogue)	1 (tool)	1 (Body of Knowledge)
Construction	Construction Blueprint	1 (profiles prioritisation document)	2 (one database providing information on existing curricular/courses, one methodology definition document)		1 (trend and scenario analysis report)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
			2 (same as FIELDS)	1 (report on lines of competence emerging from skills intelligence and scenario analysis)	2 (one trend and scenario analysis report, one report on urgent skills needs per country and per sector)
		13 (reports on the modernisation of occupational profiles - 1 EU level + 12 national)	1 (Moodle platform)		5 (4 reports, 1 Observatory)
Creative & Cultural Industries	CHARTER	1 (report of proposal of eight VET, HE and lifelong learning guidelines for innovative/emerging occupations in Europe in Cultural Heritage areas).	2 (one report benchmarking innovative/emerging curricula, one literature collection on education and training including a comprehensive overview of the existing approaches and possible on-going development) Training Products 13 (individual modules)	1 (set of factsheets)	2 (one report identifying the gaps and needs in educational and training programmes in relation to the needs of the Cultural Heritage professional market, one preliminary analysis report)
		Job profiles		Competence Framework	Skills intelligence and forecasts
		4			5

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
	CYANOTYPES	1	35 (individual modules)		Series of fiches highlighting best practices to address skills shortages and mismatches in the sector related to
Digital	CHAISE	1 (Validation Methodology that specifies the procedure of how the competence of persons is certified by ECQA GmbH, through the CHAISE examination portal).	1 (online course on Mastering Blockchain and Distributed Ledger Technologies)	11 (4 reports on Study on Blockchain labour market characteristics; the Study on Blockchain skills demand; the Study on Blockchain skills supply; the Study on skills mismatches in the European Blockchain sector, 1 report on Blockchain Skills Forecasting Model, 3 factsheets on Blockchain Skills Forecasts, 3 reports on Annual Blockchain Skills Forecasts)	3 (reports on European Blockchain Skills strategy updated yearly)
	ESSA		5 (reports to help teachers and educators implement the ESSA Learning		1 (report analysing the most needed software roles and skills in Europe)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
			Programmes, design software professionals' curricula, implement and evaluate the ESSA leaning programmes pilots...)		
	REWIRE	1 (report Cybersecurity Skills Framework)	5 (deliverables including course materials and reports)	1 (report Cybersecurity Skills Framework)	1 (report on Cybersecurity Skills Needs Analysis)
	ARISA		2 (workshops)		1 (report AI Skills Needs Analysis)
Electronics	METIS	1 (report on Skills and Occupational Profiles for Microelectronics)	1 (training divided into 88 courses)		1 (report on Skills and Occupational Profiles for Microelectronics)
Energy-intensive Industries	ESSA	2 (database and video)		1 (Sector Skills Matrix)	1 (report on the piloting and sustainable implementation of the Blueprint framework/strategy, tools)
	SPIRE-SAIS		1 (Training platform)		2 (one report on Company Skills Requirements and Foresight, one factsheet on skills requirement)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
Health	BeWELL	1 (Skills Monitor, web-based tool)	11 (10 training programmes and one Pilot Training for Urgent Needs for Digital Skills)	1 (Skills Strategy for the digital & green upskilling and reskilling of the health and care workforce',)	
Mobility-Transport-Automotive	ALBATTIS	1 (set of Skills Cards, web-based tool)			4 (reports)
		1 (list of 40 emerging Job Roles)	29 (28 MOOC courses, one DRIVES Framework gathering training and education courses available across the EU with the possibility for the Blueprint to issue its own micro credentials)		3 (reports)
	DRIVES	1 (report on Impact on Occupational Profiles)	8 (seven educational packages, one toolbox for developing custom-made and further educational packages)		6 (deliverables including reports on current and future skills needs, gaps...)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
	SKILLSEA	2 (reports on the future vision of the rail sector from the point of view of rail operators and infrastructure managers, and from the point of view of the rail supply industry)	2 (one list of employability and career opportunity criteria and indicators, and a methodology to assess employability and career opportunities in rail sector; one document on the development of new training contents and modules reflecting new needs in the field of cross-border railways, communication and language).		1 (document on the identification of current and future skills and competence needs)
		1 (report)	2 (one MOOC platform, one report on universal training curricula for the WISE sector)		2 (reports)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
			1 (MOOC platform)	1 (new competency framework for the social economy sector ("SocioComp"), which is currently in the final stages of development)	1 (synthesis report identifying the competence and skill needs of SEOs)
	STAFFER		4 (one comparative analysis of VET systems, one set of draft templates, one e-learning platform, one prototype version of a Training Programmes Marketplace specialised in the digitalisation of the Energy System)		2 (two reports addressing current skills gaps of professionals and students and identifying current and future skills needs in the energy sector)
		1 (matching exercise of 46 occupational profiles in the shipbuilding and offshore renewable energy production industry considered)	11 ('pilot experiences' aligning the Blueprint priorities with identified training needs and tested new educational	1 (population of the ESCO database)	1 (report on Skills Analysis)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
		as the most affected by emerging trends were matched with 100 new, future-looking skills considered to be essential with a particular focus on green and digital skills)	resources and methodologies)		
Proximity & Social Economy	B-WISE		3 (VET programmes)		
		1 (report on Qualification Profiles for TCLF Smart Industries)	9 (8 new or updated curricula; one training online platform)		1 (report on Future needed skills and trends for the TCLF sectors)
	baSE	1 (Online Skills Matrix)	2 (one Quality Skills Standards Framework to illustrate how new skills are integrated into training curricula to help sectoral stakeholders identify the key factors that influence skills	1 (Skills Assessment Methodology,	1 (report on Blueprint Strategy and Action Plan)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
			content and delivery; one digital Tourism Skills Lab to offer individuals and organisations a series of skills instruments and tools to address skills gaps, future skills needs (skills assessment) and job reviews)		
		1 (expected handbook on new occupational profiles)	1 (expected resource book for trainers)		1 (expected Sectoral Skills Intelligence Monitor)
Renewable Energy	EDDIE	1 (Validation Methodology that specifies the procedure of how the competence of persons is certified by ECQA GmbH, through the CHAISE examination portal).	1 (online course on Mastering Blockchain and Distributed Ledger Technologies)	11 (4 reports on Study on Blockchain labour market characteristics; the Study on Blockchain skills demand; the Study on Blockchain skills supply; the Study on skills mismatches in the European	3 (reports on European Blockchain Skills strategy updated yearly)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
				Blockchain sector, 1 report on Blockchain Skills Forecasting Model, 3 factsheets on Blockchain Skills Forecasts, 3 reports on Annual Blockchain Skills Forecasts)	
			5 (reports to help teachers and educators implement the ESSA Learning Programmes, design software professionals' curricula, implement and evaluate the ESSA leaning programmes pilots...)		1 (report analysing the most needed software roles and skills in Europe)
	MATES	1 (report Cybersecurity Skills Framework)	5 (deliverables including course materials and reports)	1 (report Cybersecurity Skills Framework)	1 (report on Cybersecurity Skills Needs Analysis)
			2 (workshops)		1 (report AI Skills Needs Analysis)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
	GreenSkillsforH2	1 (report on Skills and Occupational Profiles for Microelectronics)	1 (training divided into 88 courses)		1 (report on Skills and Occupational Profiles for Microelectronics)
		2 (database and video)		1 (Sector Skills Matrix)	1 (report on the piloting and sustainable implementation of the Blueprint framework/strategy, tools)
Textiles	SKILLS4SMART TCLF 2030		1 (Training platform)		2 (one report on Company Skills Requirements and Foresight, one factsheet on skills requirement)
Tourism	NTG	1 (Skills Monitor, web-based tool)	11 (10 training programmes and one Pilot Training for Urgent Needs for Digital Skills)	1 (Skills Strategy for the digital & green upskilling and reskilling of the health and care workforce',)	
	PANTOUR	1 (set of Skills Cards, web-based tool)			4 (reports)
		1 (list of 40 emerging Job Roles)	29 (28 MOOC courses, one DRIVES Framework gathering training and education courses available across the EU with		3 (reports)

Ecosystem	Blueprint	Job Profiles	Training Products	Competence Framework	Skills Intelligence and Forecasts
			the possibility for the Blueprint to issue its own micro credentials)		

