

#S3CONFERENCE2024

2–3 | December | 2024

Skills Development for Smart Specialization

Budapest

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Starter Kit

**practical guide for overviewing the landscape
of European smart skills development initiatives**

The “Skills Development for Smart Specialisation” conference, taking place on December 2-3, 2024, in Budapest, serves as a landmark event organized by Hungary’s National Research, Development, and Innovation Office (NRDIO) under the Hungarian EU presidency, with support from the European Commission. Hosted at the esteemed National University of Public Service, the conference focuses on the vital intersection of education, skills training, and regional development strategies.

The European Union established several initiatives for the period of 2021-2027 that include the topic of skills development and the Smart Specialization concept, such as the European Skills Agenda, the Horizon Europe Strategic Plan, and the EC’s Cohesion Policy’s objective 1. Within the program, the topic of skills development will be discussed together with addressing relevant incentives at EU and national levels.

Through the contribution of speakers from Commission level, as well as national, regional, and local professionals, project success stories and lessons learnt can be examined in the context of European competitiveness.

Panel discussions and keynote speeches provided insights into the EU’s smart specialisation strategy (S3) implementation, with contributions from experts like Richard Tuffs, the member of the Friends of Smart Specialisation policy group. The conference also featured in-depth sessions on various topics, including intellectual property management, metrics, monitoring, and evaluation, which are essential for the successful implementation of S3 strategies.

The discussions on bridging the gap between S3 and available skills are timely, coinciding with the new European Commission’s focus on research, innovation, science, and technology. The appointment of key figures like Ekaterina Zaharieva as Commissioner for Start-Ups, Research and Innovation, and Roxana Mînzatu as Executive Vice President for skills and preparedness, underscores the EU’s commitment to these areas.

01

Support structures

A representative from Poland emphasized the importance of aligning education with industry needs, suggesting that curricula should be developed by the industry itself to ensure they are relevant and lead to greater success.

Similarly, a government official highlighted the necessity of identifying the right skills for current challenges, particularly in fostering effective international cooperation and sharing best practices. He pointed out that schools must not only serve as places of education but also become key stakeholders in future technological advancements, ensuring they play an active role in shaping the innovations of tomorrow.

The Head of the Hungarian S3 Project Management Office addressed the concept of Smart Specialization strategy implementation in Hungary. She explained that three public policy strategies—R&D innovation, SME development, and digitalization—each have distinct goals but should work together within the framework of the S3 strategy to strengthen their impact.

Finally, a stakeholder representative discussed the space sector and the transferable skills it requires. He emphasized that space is not solely about research; it encompasses a wide range of activities that demand diverse talents. His insights underscored the need for a broad skill set to support the growth and challenges within the space industry.



02

Training programs

Representative from NET4Society highlighted the important role of National Contact Points (NCPs) in guiding stakeholders through the Horizon Europe process. She shared a successful example of the augMENTOR project, which focuses on influencing pedagogical frameworks and valorizing a specific product. Her work with NCPs, particularly within Cluster 2, underscores the value of international networks in supporting innovation and education in Europe.



A panel discussion centred on the interdependence between economic growth, innovation, and skills in the digital and green transition from a regional perspective. The speakers emphasized the importance of education in this context, pointing to initiatives such as training researchers, reskilling for digital skills, and supporting start-ups. A stakeholder representative further elaborated on the role of digital training in this process, noting various programs designed to enhance not only technical skills but also soft skills like leadership and conflict resolution. Members of the conference all agreed that there is too much separation among disciplines, making it hard for skills to be transferable. Curricula are outdated, and training needs to occur on the job.

A Hungarian government representative provided insight into Hungary's vocational educational training system, specifically the VET 4.0 Strategy. He underscored the importance of strategic partnerships and shared national success stories in supporting Smart Specialization Strategies. The updated VET 4.0 Strategy aims to equip students with fundamental skills that will guide them in making informed career choices, all while fostering closer cooperation between education and the economy.

A stakeholder representative addressed the challenges of human capital development in European Neighbourhood countries. She highlighted the ETF's role in supporting vocational education and training (VET) and pointed out the historical underinvestment in human capital, compounded by data gaps in many regions. Her work emphasizes the importance of a skills-based approach to support sustainable growth.

Representative of the European Commission emphasized the need to address rigidities in the education system, advocating for better communication between universities and vocational education. He also stressed the pivotal role of local training providers in aligning education with the needs of companies, thus supporting regional economic development and Smart Specialization.

Head of Operations from the European Institute of Innovation and Technology (EIT) presented EIT's approach to skills intelligence, mapping, and large-scale training programs, specifically for the space sector. The skills required in space-related industries are vast and varied, and EIT's methodologies aim to equip individuals with the necessary expertise to support the sector's growth.

03

National, regional and local best practices

The minister from Spain highlighted the importance of understanding what industries and local ecosystems – including companies, universities, and research centres – need in order to develop effective strategies for smart specialization. To address this challenge, Spain formed nine working groups focused on creating a better understanding of regional dynamics. By developing a comprehensive strategy, the regional government was able to foster sectoral growth while also simplifying regulatory processes, managing financing, and adjusting taxation policies to support success.



During an interactive discussion, one presenter emphasized that a shift in mind-set is needed among schools and employers, with greater collaboration between industry and universities. More internships should be integrated into curricula. This is a significant challenge, but there are interesting incentives for example from the Hungarian government. SMEs themselves lack the capacity to develop these initiatives, highlighting the crucial role of the government.

Representative from Belgium, shared Wallonia's approach to smart specialization, which is driven by four core principles: fostering innovative ecosystems, ensuring clear governance, enhancing competitiveness and attractiveness, and aligning with European ambitions. These principles guide the region's efforts to create a sustainable and competitive innovation landscape.

Government official from Latvia discussed her country's experience with smart specialization, emphasizing the importance of having a "common language" between policymakers, academia, and industry. Latvia's smart specialization strategy, which Bekasova referred to as their "Bible," has been crucial in fostering collaboration and was

influential in shaping similar strategies across the EU. The shared understanding this strategy provides has allowed for better cooperation and has set a benchmark for other nations.

Representative from the Hungarian Ministry of Culture and Innovation provided a detailed look at the country's renewed VET 4.0 Strategy. This strategy, which aims to equip students with well-grounded basic skills, is designed to enhance career choices and better align vocational education with the needs of the economy. The VET 4.0 strategy is built on four pillars: creating an attractive environment, providing career opportunities, ensuring teachers have up-to-date skills, and compensating for disadvantages. These pillars are intended to enhance the effectiveness of Hungary's vocational education and training system and better prepare students for the workforce.

Conference members during group-work activities also highlighted there are mismatches between labor supply and demand, and SMEs are hard to engage with. While Europe is seeing national level policies, local focus and capacity building are also necessary.

04

European initiatives

Horizon Europe is the European Union's flagship research and innovation program, aimed at strengthening Europe's scientific and technological base. It has a budget of around €95.5 billion for the period 2021-2027 and focuses on addressing global challenges through innovation and collaboration. The program supports a wide range of projects in areas such as climate change, digital transformation, health, and security. Horizon Europe fosters international cooperation, promotes interdisciplinary research, and seeks to drive sustainable economic growth and job creation. It is designed to enhance Europe's global competitiveness and contribute to solving pressing societal issues.



Both Horizon Europe and the Smart Specialisation Strategy (S3) aim to enhance innovation and economic development across Europe. The S3 focuses on helping regions identify their unique strengths and areas of expertise, guiding investments in research and innovation to maximize regional potential. Horizon Europe complements S3 by providing funding opportunities for collaborative projects that align with the regions' smart specialisation priorities. Through Horizon Europe, regions can access resources to support research and innovation activities that leverage their distinctive advantages, promoting sustainable growth and strengthening regional innovation ecosystems. The synergy between the two encourages a more cohesive and inclusive European innovation landscape, driving both regional and continental development.

The conference featured key discussions on fostering sustainable growth and innovation in the European Union. Deputy Director for DG Employment, Social Affairs, and Inclusion at the European Commission delivered an opening keynote that emphasized the need for the EU to focus on sustainable and fair competitiveness, economic security, and open strategic autonomy.

A scientific officer focused in her panel discussion on the creation of inclusive, innovative, and reflective societies. She outlined how to maximize the impact of successful Cluster 2 projects in achieving Smart Specialization Strategy (S3) goals, with a particular focus on the vital role National Contact Points (NCPs) play in knowledge valorisation. Through her involvement in NET4Society, an EU-funded international network of NCPs, she underscored the importance of these points in supporting stakeholders through the Horizon Europe process.

Finally, the Head of the Entrepreneurship and Education Section at the European Institute of Innovation and Technology (EIT), shared insights on the types of skills needed to address contemporary challenges. He highlighted the EIT's initiative to support Higher Education Institutions in becoming leaders within their local innovation ecosystems, illustrating the vital connection between education, entrepreneurship, and innovation.

05

Professional organizations, events

One coordinator of an EU-funded project discussed particularly the NET4Society project. She emphasized the importance of National Contact Points (NCPs) in guiding stakeholders through the Horizon Europe process. Her involvement in NET4Society, an international network of NCPs coordinated by the German Aerospace Agency, aims to strengthen NCP services and assist communities in writing successful proposals. Additionally, the project supports the integration of Social Sciences and Humanities into research.



The Professor of Sociology then presented the KIDS4ALLL project, which was part of Horizon 2020. The project focuses on developing skills from an early age, with an emphasis on education as the foundation for the future. As an Innovation Action, KIDS4ALLL aims to create new, specific learning methods and expand its network, including offering learning units in Ukraine.

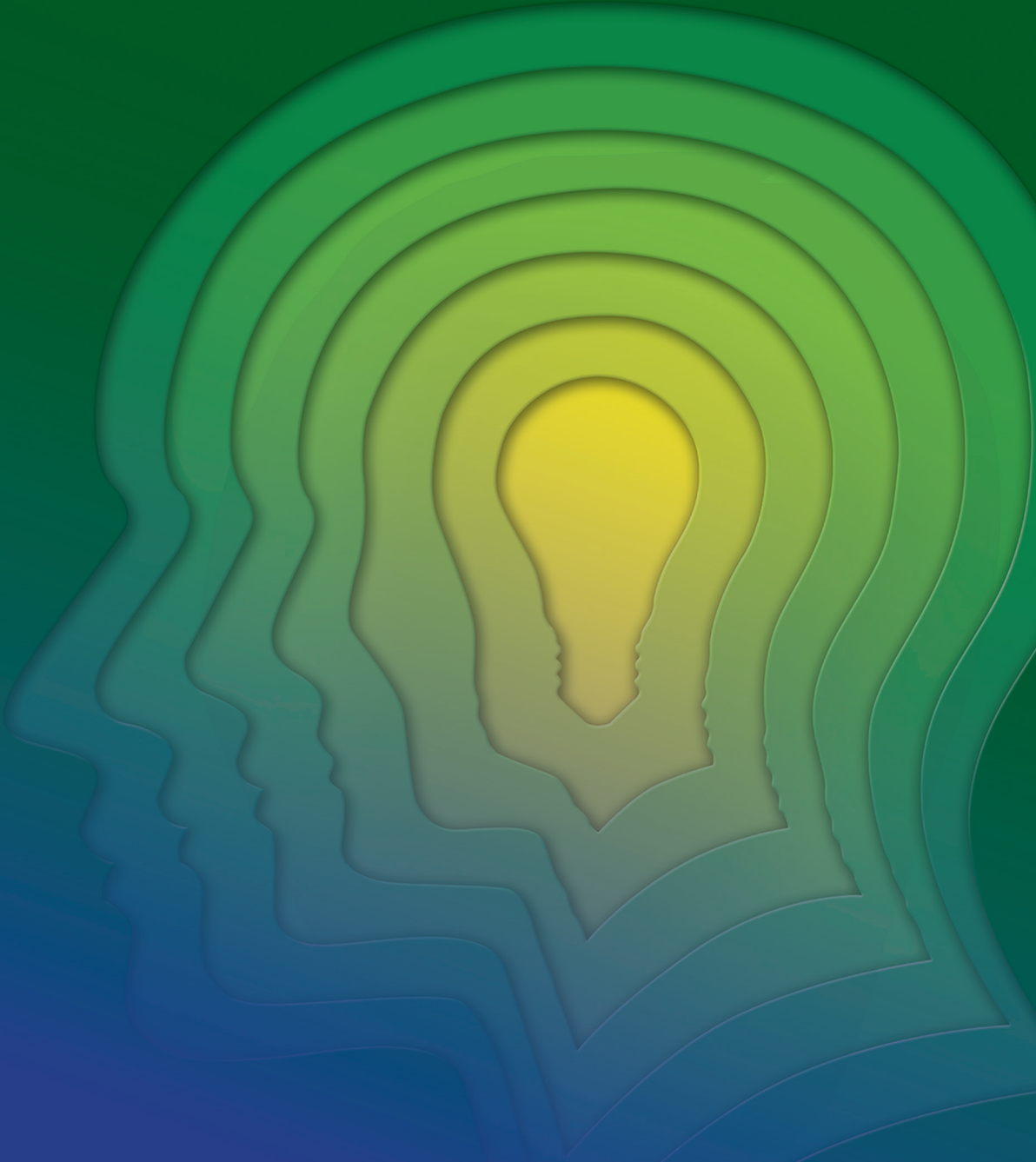
Representative from the EU3DRES2 University Alliance discussed the importance of identifying the types of skills needed to address contemporary challenges. Focusing on non-traditional regions near strong centres, he highlighted that smart specialization is all about synergy. He emphasized the need for productive relationships between fields like Vocational Education and Training (VET) and smart specialization.

Deputy Head of Unit at DG RTD further underscored the critical role Horizon Europe plays in driving research and innovation, stressing its potential to generate significant social and

economic outcomes. She also highlighted the vital support provided by NCPs in guiding project proposals and aligning them with Horizon Europe's objectives.

An expert from the European Institute of Innovation and Technology (EIT) discussed the organization's role in fostering innovation and skills development, particularly in the space sector. As an ecosystem builder and orchestrator, EIT supports around 10,000 start-ups, focusing on the integration of education, business creation, and innovation. EIT's unique features include a strong focus on entrepreneurship and the transformation of know-how into pioneering educational programs.

Lastly, Secretary General of the European Association of Remote Sensing Companies (EARSC) discussed transferable skills for the space sector. EARSC, a membership-based, non-profit organization representing 27 countries, creates networks between industry, decision-makers, and users, covering the entire Earth Observation (EO) value chain.



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