x-Inno Radar

EU policy brief

Interreg CENTRAL EUROPE

Co-funded by the European Union

x-Inno Radar

Soft skills

for Europe's industrial strength

Powering transformation and innovation in industrial regions



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Otelo Cooperative (AT) · Leibniz Institute for Regional Geography (DE)
supported by x-Inno Radar project partnership

01 | Powering transformation and innovation in industrial regions

Industrial regions are known for technical advancement and hard skill proficiency. However, having to cope today with multiple transitions, they urgently need soft skills as a complementary strategic capacity. Soft skills such as communication, critical thinking and the ability to work across disciplines drive the realisation of new technological ideas, problem-solving and adaptation to changing environments.



We call upon the EU to foster soft skills as an explicit part of investment and development in industrial regions.

This policy brief argues from the perspective of non-metropolitan industrial regions, areas where the pressure of transformation is particularly intense. Often, these regions face profound industrial restructuring, an ageing population, the departure of skilled people and skill provider networks that are often fragmented or weak.[1] At the same time, they share unique resources to build on, such as an engineering culture, maker spirit, manufacturing experience, or craft knowledge.

This brief sets out key recommendations to the European policy level, informed by regional experiences gathered in Central Europe and intended for adaptation to other non-metropolitan industrial regions in transition.

EU recommendations in a nutshell



ANCHOR

Include soft skills in strategies and investments

Define soft skill development as a strategic objective in support of digital, green and industrial transition. Fund coordination, cross-regional learning and regional soft skill ecosystems.



EDUCATE

Bring soft skills into education and widen participation

Support national and regional efforts to embed soft skills explicitly in education and training ecosystems, and widen access to higher education and lifelong learning.



ENABLE

Grow soft skills where people meet, work and make

Support accessible learning places and time to learn soft skills at work. Combine simple grants for regional experimentation with a route to sustained provision. Connect makers with enterprise support and institutionalised innovators.



MEASURE

Make soft skills visible, recognised and measurable

Make soft skills easier to find in ESCO, the EU's classification of skills and occupations. Support credible pathways to documentation and recognition. Build reliable, robust evidence on soft skill needs and learning outcomes.

Prioritise these areas in the upcoming EU programmes



Use the opportunity of the EU programmes now being developed for 2028–2034, including the proposed national and regional partnership plans, to implement the above-mentioned priorities.[2]

The recommendations are also relevant across EU programmes such as Interreg, Horizon Europe and Erasmus+. Involve the regional level in decisions on funding and delivery at all stages, from programming to rollout.

Build on the Union of Skills, the Commission's 2025 strategy for education, training and skills, by addressing the specific soft skill needs and delivery conditions of industrial regions.[3]

About the origin of this brief

The recommendations presented here sum up major project findings of x-Inno Radar (Interreg CENTRAL EUROPE, 2024–2027), a project that brought together eight non-metropolitan industrial regions. The partners derived these recommendations from regional data, an exploratory expert survey, focus groups, concepts, a comparative report, local actions and regional strategies. A discussion with external experts at a policy lab in November 2026 enriched these recommendations, a presentation to European policy actors in the European Parliament followed in February 2027.

A word on the term 'soft skills'

Soft skills comprise the abilities individuals use to work with others, think critically, adapt and act on ideas. Related terms include 'transversal skills', 'human skills' or 'future skills'. Their scope overlaps, but they are not synonymous.

The closest equivalent to the term 'soft skills' in the European multilingual classification of Skills, Competences and Occupations (ESCO) is 'transversal knowledge, skills and competences'. These skills are relevant to a broad range of occupations and sectors, which ESCO notes 'are often referred to as core skills, basic skills or soft skills'.[4]

Exploring the field from a non-metropolitan industrial regions' point of view, x-Inno Radar decided to work with three soft skill sets: transversal, maker and entrepreneurial skills.[1]



Transversal skills

General intra- and interpersonal abilities needed in transforming environments, such as problem-solving, creativity, critical thinking, empathy, self-regulation, adaptability, communication, collaboration and intercultural competence.



Maker skills

Abilities typical for makers and tinkerers who develop new solutions in workshops, garages, fab labs and the like, such as resourcefulness, iterative design thinking, improvisation and sustainability awareness.



Entrepreneurial skills

Abilities to transform new solutions into entrepreneurial opportunities such as strategic thinking, opportunity recognition, networking and innovativeness.

02 | EU recommendations in detail

ANCHOR

Include soft skills in strategies and investments

In the industrial regions studied, soft skills have been rarely explicit objectives of smart specialisation strategies (RIS3) and only occasionally backed by stable institutional structures.[1] These gaps deserve attention wherever industrial regions plan for transformation. What is not planned, owned and funded remains an idea.

Introduce soft skills as an explicit strategic objective

For successful transformation and thriving innovation, soft skills must go hand in hand with hard skills. Set out dedicated objectives and proportionate indicators for soft skills. Orient EU frameworks accordingly, such as smart specialisation strategies, proposed partnership plans and relevant industrial, education and development strategies.[5]
Make soft skill needs of industrial regions explicit in the implementation of Pact for Skills partnerships and related funding.[3,6]

ILLUSTRATING BOTTOM-UP STRATEGY PRACTICE

Influencing regional policy-making
All 8 partner regions developed individual strategies on how soft skills can be better integrated in their industry-focused skill ecosystems. As part of the adoption process, each of them informed their RIS3 regional management body with the intention to obtain their endorsement.[7]

Explore regional strategies



Pair investment in technology with investment in people

Wherever EU funds technology, research and industrial capacity: Make those soft skills, which are needed to take up and apply the technology, eligible for support alongside these investments, based on identified needs.

ACTIONABLE ADAPTATION OF EU POLICY

Industrial Accelerator Act
Explicitly include soft skills in the industrial manufacturing acceleration areas proposed under the Industrial Accelerator Act when considering skill needs and measures for workforce upskilling and reskilling.[6]

ANCHOR

Include soft skills in strategies and investments

Build lasting regional soft skills ecosystems

Design relevant EU programmes, including the proposed partnership plans, to strengthen regional soft skill ecosystems and fund a coordination role with a clear mandate and resources, connecting formal and non-formal education, civil society, industry, consultancies and business support organisations. Link this role to interregional cooperation and education partnerships that fund peer visits, joint delivery and follow-up, helping regions adapt useful approaches from one another.

ILLUSTRATING LOCAL ACTION PRACTICE

A shared commitment
In Veneto (Italy), 13 soft skill providers formed a network and signed a memorandum committing them to cooperation for at least two years. This illustrates a concrete step towards an agreed mandate; it does not establish secured long-term funding.[7]



Explore the local action in the toolbase

EDUCATE

Bring soft skills into education and widen participation



Soft skills need a place in curricula – in schools, vocational education, universities. Especially in non-metropolitan industrial regions, soft skill learning opportunities are limited and higher education is often less accessible.

Make soft skills explicit learning goals

Incentivise national and regional education authorities to embed relevant soft skills in curricula and learning assessment. Ensure that they address specific skill needs and opportunities of industrial regions. Enable programmes to support teachers and trainers in teaching them – with links between technical and humanities education.

ACTIONABLE ADAPTATION OF EU POLICY

STEM Education Strategic Plan
The existing STEAM approach links STEM (e.g. technical skills) with other fields of study (e.g. creative and art skills) and promotes transversal skills.[8] STEAM is only a minor aspect of the 2025 STEM Education Strategic Plan; give it an explicit place in the plan's implementation.[9]
Going beyond STEAM, consider the SHAPE approach coined by the British Academy, which promotes joint working between STEM and the social sciences, humanities and the arts.[10]

STEM: groups the subjects of Science, Technology, Engineering and Mathematics, while STEAM adds an arts-based approach.
SHAPE: Social Sciences, Humanities, and the Arts for People and the Economy.

Make higher education available

Support tertiary education institutions to cooperate with regional partners, particularly in non-metropolitan regions where they are often missing. Enable the organisation of joint projects with companies, schools and places of non-formal education.

Bring learning within reach of people currently missed

Support local authorities, employment services and adult education providers to identify whom existing offers fail to reach. Enable adaptation of the offers to local needs, including those of young people not in employment, education or training (NEETs) and adults with little access to lifelong learning.[1]

EDUCATE

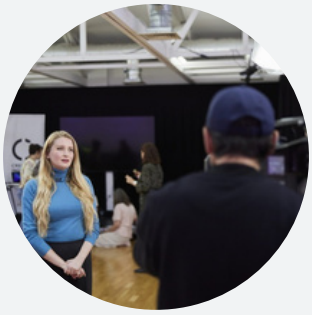
Bring soft skills into education and widen participation

Support regions to stay connected

Design European cooperation programmes to establish and sustain cross-regional relationships and mobility for continued knowledge exchange. Re-involve people who have left their region to contribute as mentors and collaborators, without necessarily requiring them to return.

ILLUSTRATING LOCAL ACTION PRACTICE

Expats for home
Košice region (Slovakia) built a database of professionals from the region living elsewhere, sorted by their soft skills and ways to contribute. Two of them led soft skill workshops drawing on their knowledge. This pilot shows the potential of pooling competences from people who left the regions and making them available.[7]



Explore the local action in the toolbase

ENABLE

Grow soft skills where people meet, work and make

Learning in industrial regions often happens outside schools – at workplaces, in makerspaces, incubators and even cultural or hybrid settings.[1]

Fund non-formal learning offers with a route to continuity

Design flexible funding schemes related to soft skills. Support especially places where sectors meet such as fab labs, museums and hybrid venues. Lay out small grants with proportionate reporting for experiments as well as long-term financing for offers with demonstrated benefits. Use simplified cost options where appropriate and clarify how complementary funds can be combined.

ACTIONABLE ADAPTATION OF EU POLICY

ESF+ and Erasmus+
Soft skills are often learned indirectly, e.g. in makerspaces, but also in (post) European Capital of Culture initiatives.[1] Support tapping this hidden resource by directing European Social Fund Plus (ESF+), including its successor programmes, and Erasmus+ support accordingly.[2,11,12] Call for formats that involve guided reflection to make soft skill learning visible.

ILLUSTRATING LOCAL ACTION PRACTICE

Turning public spaces into soft skills labs
In Kranj (Gorenjska, Slovenia), passers-by could participate in free creative workshops without prior registration during public summer events. Learning took place through making, experimentation and collaboration. A dedicated reflection wall invited participants to name soft skills used.[7]



Explore the local action in the toolbase

ENABLE

Grow soft skills where people meet, work and make

Enable employees to learn and apply soft skills

Incentivise employers, social partners and regional business support organisations to provide soft skill learning, time to learn, opportunities to practise and reflection afterwards. Include public employers. Foster shared training across small firms.

ILLUSTRATING LOCAL ACTION PRACTICE

Soft skill training through joint creative challenge
In Silesia (Poland), employees of an IT company developed and painted a mural in a two-day facilitated workshop. They agreed a concept, divided responsibilities and worked together on a visible result. The format gave participants a practical setting for communication and shared decision-making.[7]

Explore the local action in the toolbase



Support makers to become entrepreneurs, connect them with industry and research

Support makerspaces, incubators, craft businesses and business support organisations, so that they can help makers and creatives to turn their ideas into projects, self-employment or start-ups. Pay attention to tinkerers, techies, hobbyists, autodidacts as grassroots communities typical for industrial places and equipped with specific skill sets, but usually not captured by innovation and entrepreneurial radars. Allow for low-threshold advice, mentoring and small grants.

ILLUSTRATING LOCAL ACTION PRACTICE

Connecting makers with innovative companies
In Limburg (Belgium), a one-day bus roadshow connected makers, tinkerers, creatives and tech enthusiasts with R&D staff of six companies. Guided by CEOs and innovation managers, participants discovered the companies and extended their networks; contacts led to new or enhanced cooperation.[7]

Explore the local action in the toolbase



MEASURE

Make soft skills visible, recognised and measurable

What cannot be named is hard to talk about, manage, fund and measure. In workplaces, volunteering, makerspaces and community initiatives, people develop soft skills, e.g. collaboration, initiative, adaptability and problem-solving – yet these skills often remain invisible to learners, employers and statistics.[1,13]

Make soft skills easier to identify in ESCO

Introduce a dedicated soft skills label across the ESCO skills pillar, drawing on the approach used for green and digital skills. Start by asking EU expert bodies such as the Joint Research Centre and Cedefop to propose a working definition of soft skills; their work underpins the digital and green labels.[14,15] Soft skills are currently spread across several ESCO categories; a distinct label would make them easier to find and would give policymakers, education providers and employers a shared reference for programme design and skills analysis.[1,16]

ESCO skills pillar: the part of ESCO that lists all skills and knowledge; ESCO categories: ESCO sorts skills in more than one way, e.g. into groups such as 'knowledge', 'skills' and 'transversal skills', and by how widely a skill is used (from transversal to occupation-specific).[4]
Cedefop: European Centre for the Development of Vocational Training

Build credible pathways to documentation and recognition

Support the development and testing of quality-assured micro-credentials for soft skills, including those gained through non-formal learning. Build on the European approach to micro-credentials. Define learning outcomes, transparent assessment criteria and quality assurance. Involve education providers, employers and social partners.[17]

ACTIONABLE ADAPTATION OF EU POLICY

A Europass for soft skills
Develop and test ways to document soft skills in Europass, the EU's online tool for CVs and skills profiles, using clear descriptors and supporting evidence. Draw on its language self-assessment model, while distinguishing self-assessment from assessed credentials.[13]

MEASURE

Make soft skills visible, recognised and measurable

Measure soft skills for better regional decisions

Include soft skills as a distinct part of EU skills (and labour market) intelligence, so that regions receive comparable data on soft skill needs and strengths over time. Develop common principles and practical tools to assess soft skills and learning outcomes, make them available to programmes and let regions adapt them to their contexts.
Fund research and evaluation proportionate to each intervention, including more detailed impact studies where scale and design allow credible conclusions.

ACTIONABLE ADAPTATION OF EU POLICY

Skills-OVATE and European Skills Intelligence Observatory
Cedefop's Skills-OVATE shows which skills employers request in online job advertisements by NUTS 2 region, including ESCO's transversal skills and competences. Once soft skills are labelled in ESCO, ask Cedefop to report regional demand for soft skills in Skills-OVATE, as it already does for green and digital skills.[18] Complement such demand data with evidence on the soft skills people have, e.g. drawing on the self-reported social and emotional skills measured in the OECD Survey of Adult Skills 2023.[19] Consider demand/offer matching of soft skills in the European Skills Intelligence Observatory.[3,20]

Skills-OVATE: Skills Online Vacancy Analysis Tool for Europe
European Skills Intelligence Observatory: a centralised platform to provide real-time, granular data on skills, helping to give early warning of shortages in critical or strategic sectors.[3]

ILLUSTRATING BOTTOM-UP SURVEY PRACTICE

Connecting regional evidence with action
The x-Inno Radar toolbase provides, among other contents, tested surveys to support regional screening. Another tool, the x-Inno app, is designed to connect analysis with stakeholder dialogue, pilot actions and strategy development. Survey results and process tools inform regional decisions.[7]



Explore the survey tool

Explore local actions in the toolbase

Explore the x-Inno app

03 | Turn the recommendations into EU programme decisions

It needs all policy levels – European, national, regional – and their effective interaction to put these priorities into practice.

The recommendations in this brief are targeted at the European level: they specifically address Members of the European Parliament, the Commission and European networks. This EU policy brief is accompanied by a regional practice brief as a separate document.

Members of the European Parliament

Use the European Parliament's role as co-legislator on relevant programme rules, its budgetary powers and its consent to the next multiannual financial framework (the EU's long-term budget for 2028–2034) to advance the priorities of this brief.[2] Seek explicit provision for relevant soft skill development, accessible participation by small providers and meaningful regional involvement. Ask the Commission to explain how delivery will be monitored and how results will inform future support.

European Commission

Turn these priorities into clear eligibility rules, application guidance and proportionate monitoring. Encourage Member States to involve regional authorities and skills actors from industrial regions and to include soft skills in the partnership plans' objectives and indicators. Coordinate support for investment, learning and cooperation so that regional partners can assemble a coherent offer. Support voluntary regional pilots for documenting learning and assessing outcomes, with shared expertise from the Joint Research Centre and Cedefop, where appropriate.

04 | Our contribution as x-Inno Radar regions

The x-Inno Radar partners intend to continue their cooperation on soft skills as an x-Inno community, open to other industrial regions. Otelo Cooperative will keep the x-Inno Radar toolbase, with tested surveys and documented local actions, publicly available as the hub for the project's knowledge.

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The academic literature underpinning this brief is documented in the bibliography of the Comparative Report [1], Section G.





Colophon

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Toolbase descriptions and European policy sources consulted 15 November 2026. References to future programmes and legislative initiatives concern proposals and recommendations; they do not presume final funding rules.



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x-Inno Radar (2024–2027)
brings together ten partner organisations from eight industrial regions in eight EU member states

Partner institutions

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