





Kainuu action plan

RIS3 opening session

Kajaani, 25 April 2022

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What is the INNO PROVEMENT project?







- 3rd call of the Interreg Europe programme,
- 5 years (3+2) active cooperation
- 1.6.2018 31.5.2023
- 1 767 671,00€
- 8 partners
 - Ministry of Finance, Hungary
 - ICT Association, Hungary
 - Ministry of Industry and Trade, Czech Republic
 - Region of Thessaly, Greece
 - Marche Region, Italy
 - COMPETE 2020 Management Authority for the Competitiveness and Internationality Operational Programme, Portugal
 - Lodzkie Region, Poland
 - Regional Council of Kainuu, Finland

Themes of the INNO PROVEMENT project



- 7 thematic issues
- 6 Regional stakeholder groups
- 1. The Effectiveness of Public Money Used to Support Industrial Research and Development under the I4.0

(Ministry of Industry and Trade, Czech Republic)

2. Introducing I4.0 to traditional industries (Regional Council of Kainuu, Finland)

3. Innovation in software development (Region of Thessaly, Greece)

4. Definition of I4.0 public policy initiatives (Managing Authority COMPETE 2020, Portugal)

5. Definition of an I4.0 maturity evaluation matrix (Lodzkie Region, Poland)

6. Market price assessment (call design, project selection, contracting, monitoring, financial settlement)

(Ministry of Finance, Hungary)

7. Adjusting calls to Industry 4.0 requirements (Marche Region, Italy)

Workshop for finalising the Regional Action Plan (ICT Association, Hungary)



Policy instrument



Project partner information		
Investment for Growth and Jobs programme, name of policy instrument here: Kainuu RIS3 2021 - 2027		X
Type 1: Implementation of new projects Implementation of Industry 4.0 projects when the Kainuu RIS3 2021-2027 will announce the respective calls.	X	
Type 2: Change in the management of the policy instrument (governance) Integration of Industry 4.0 into the Kainuu RIS3 2021-2027	X	
Type 3: Change in the strategic focus of the policy instrument		
Other improvements not corresponding to types 1-3 (please comment)		
European Territorial Cooperation programme		
Other regional development policy instrument, name of policy instrument here		



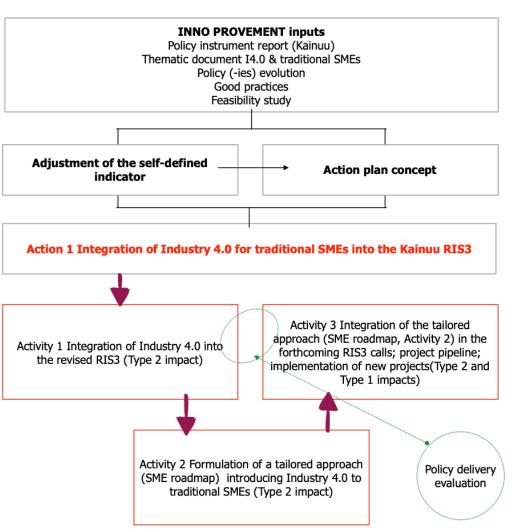
Action plan



 Activity 1 Integration of Industry 4.0 into the revised RIS3.

 Activity 2 Formulation of the I4.0 SME roadmap

 Activity 3 Integration of the I 4.0 roadmap into forthcoming calls and implementation. —> today's meeting is the start of Activity 3 implementation.







Activity 1



~~ process; discovery II) Entrepreneurial Technical assistano (Instrument I nstrument V) involvement; () & financing; Ins nent I) Stakeholder ument IV) Funding 8 instruments: (Instrum III) Monitoring; (Instru Governance in (Instrument)

KAINUUN LIITTO Kainuu RIS3 2021 - 2027

Themes and industries

1: Increasing research and promoting innovation

Theme 1 is planned to reinforce

TEEMA 2: Strengthening and diversifying the specialisation base

An important part of the Theme 2 projects is based on the utilization of applied research results produced in Theme 1.

TEEMA 3: Connectivity and integration, measures for interregional collaboration

Theme 3 is designed as a tool to facilitate themes 1 and 2 of the priority sectors.

DEVELOPMENT OF INNOVATION (APPLIED RESEARCH)

the existing R&D base

- 1. Measurement technology
- Gaming and advanced simulation techniques (3D, VR, AR)
- Big data analytics and high performance computing
- Circular economy in mining and bioeconomy

2A) INDUSTRIES: Bioeconomy, mining, metals and ICT

Promoting industrial modernization through investment

- 1. New product development
- 2. Improve production processes (eg introduction of Industry 4.0)
- Improve the environmental and quality of products

2B) KNOWLEDGE-BASED SERVICE INDUSTRIES

- Professional (winter) sports and sports coaching and training technologies and applications
- 2. Activity tourism
- Social and health services (Innovations using digitalisation will be used to increase the efficiency of service production (especially social services) and to increase the added value of services. Increase international cooperation in RDI activities related to service development).

BETTER FUNCTIONING OF THE REGIONAL INNOVATION SYSTEM

- 1. Innovation infrastructures
- 2. Access to interregional demand-driven innovation processes
- Emerging industries and innovation platforms, incl. interregional value chains, clusters, S3 partnerships
- 4. Platform economy
- 5. Attracting investment in RIS3 industries

Cross-cutting themes and objectives for all RIS3 priorities

THEME 4: Digital transformation

Theme 4 concerns the strengthening of digital change for the industries prioritized in Theme 2. To this end, Theme 4 projects may make use of the interregional options offered in Theme 3 and / or the innovative solutions developed in Theme 1.

- 1 Deployment of Industry 4.0, including robotics and automation applications
- 2. Big data analytics and high power computing (HPC) utilisation

TEEMA 5. Green deal

Theme 5 covers both the application and development of Green Deal solutions, which will effectively lead to an environmentally friendly industrial change in Theme 2. To this end, Theme 5 projects may make use of the interregional options offered in Theme 3 and / or the innovative solutions developed in Theme 1.

- 1. Production and use of clean, affordable and secure energy
- 2. Increasing the circular economy and environmentally sustainable production in industry
- 3. From field to table: a fair, healthy and environmentally friendly food system
- 4. Climate change mitigation and adaptation
- 5. Preservation and restoration of ecosystems and biodiversity
- 6. "Keep everyone involved" (just transition)



Activity 2



Interreg Europe

Digital transformation policy framework updates

roadmap

uptake

Industry 4.0 concept, processes, impact and implications; digital transformation vs digital facilitation

Awareness

Research Industry 4.0 technologies & data analytics

Qualifying education and skills; pool of qualified professionals; qualification curricula and degrees; professional profiles and competences

Diagnosis

Linking value generation to I4.0 interventions; business model analysis

Tailoring of 14.0 expectations

Technological assessments Maturity assessment

Maturity assessment

Transformation plan

- Organisational adjustments
- Skills adjustments
- Capital investments

Technological and organisational

Readiness check

- Organisational adjustments
- Skills adjustments
- Capital investments

Investments realised

- Organisational adjustments
- Skills adjustments
- Capital investments

Technological and organisational adjustment

adjustment plans

Test before invest

VTT

Industry 4.0 roadmap

A model integrating I 4.0 to traditional SMEs, Kainuu action plan



How to improve internal processes?

Efficiency of internal processes Current products and offerings

Smart machines and production.

Novel communication tools (social media)

How to create new value for customers and networks?

Interconnectivity, digital platforms and marketplaces

Novel business models (lifecycle services, remote operations)

Novel manufacturing technologies (3D, robotics, automation)

How to catch an unique position and competitive edge?

Own competitive edge and proactive growth strategies

New technologies as drivers (Augmented Intelligence, BigData, Machine learning, Virtual Reality)

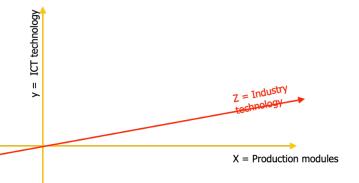
Source: Tiina Apilo. Roadmap for Industry 4.0 Joensuun Tiedepuisto.



Activity 2 I 4.0, SME uptake roadmap



- ADDED VALIUE in comparison to other approaches:
- (1) Three types of maturity assessment: digital, business, technology.
- (2) Digital transformation plan is explicitly linked to quantified cost reduction and / or anticipated profit increase.
- (3) On going monitoring and identification of knowledge gaps lead to complementary actions on research & education.
- (4) Final I4.0 investment step is optional.





Activity 3



Activity 3 is mainstreaming, making permanent, and implementing the ground Activity 2. It follows the experiences and lessons learnt from the first round of projects under Activity 2.

- 1.RIS3 calls and announcement of calls (this is the focus of the meeting today 25.4.2022)
- 2.RIS3 / Activity 2 DELIVERY EVALUATION: The roadmap introduces some innovative aspects to regional calls and projects. Therefore, a more in-depth assessment of how well this new approach has worked, and whether it is retained for the future or modified, is also included. This is on top of the usual SF evaluations.
- 3.STAKEHOLDERS INVOLVEMENT: The roadmap is presented to the regional stakeholders for discussion and comments, improvements are made if needed.
- 4.ROADMAP INTEGRATION into more funding tools.
 - 4.1.ESF project options Preparatory meetings between the Regional Council of Kainuu and ELY Centre, in view of integrating the roadmap into funding instruments; some of them are ERDF (Regional Council of Kainuu), some of them are ESF (ELY Centre).
 - 4.2.ERDF further options, new round of prioritised projects (TOPSU) proposed. INNO PROVEMENT contributed to this list in 2021 for the first time; list was approved on 3.3.2021. The approved list has been included into the REACT EU programme,.
- 5.CALLS: Calls are announced, 2022 onwards

KAINUUN LIIT Next steps, forthcoming initiatives ovement Interreg Europe

Improve, develop further and test:

- (1) Maturity analysis consolidated approaches covering the three dimensions: ICT technology, production processes, industry technology.
- (2) Professionalisation of I4.0 intermediaries.
- (3) Other?



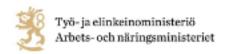
Action plan implementation timetable



Action plan implementation	2019		2019		2019		2019		20	2020		2021		2022		up to 2027
	1	2	1	2	1	2	1	2	1-2	1-2						
Activity 1		DO	ONE													
Activity 2					DON	E										
Activity 3								ON GO	DING							









https://www.interregeurope.eu/innoprovement/



