

To design open innovation calls

A Policy Learning Platform peer review.
Wednesday 29 and Thursday 30 March 2023

Final Report

Thessaloniki, Greece, March 2023



Presentation of the Region of Central Macedonia, Greece, and the motivation for conducting the Peer Review

Central Macedonia (RCM) is the largest Region in terms of size and second in terms of population and economic activity in Greece. The regional economy is based on traditional labour-intensive sectors, like agriculture, food, textile-clothing, and tourism, as well as on other industries (construction materials, chemicals, ICT). Most companies are family-run SMEs, facing the harsh competition of both the neighbouring and the global markets. As such, they need a decisive transformation, leading to the introduction of innovative business solutions, increased productivity, extroversion, and competitiveness.

The region of Central Macedonia belongs to the Moderate Innovator Regions of the EU27, occupying the 9th place in the 'Top-10 fastest growing regions 2014-2021¹', and the 158th place among the 240 European regions, with its innovation performance increasing during this period by 30%.

Total expenditure on research and development (R&D) in Greece in 2020 increased at a constant rate compared to 2015, resulting in a 1.51% percentage of R&D expenditure on GDP. In the Central Macedonia region, similar growth trends were observed, with expenditure intensity reaching 1.37% in 2020 (a 61% increase from 2015).

In Central Macedonia R&D public & higher education intensity reached 0.65% in 2019² less than the EU average which was 0.76%. Nevertheless, it highlights the state's dominant role in funding and conducting research and development at national and regional levels.

Regarding the regional indicator of R&D Expenditure in the Business Sector, as a percentage of GDP, it doubles every two years, from 0.12% (2017 performance) to 0.21% (2017 performance 2019) and 0.42% (report 2021)³. The indicator is considered particularly important, since it captures the creation of new knowledge within companies, which creates suitable conditions for increasing financial returns, channeling new products to the market, or improving internal processes. Although the contribution of business to total R&D expenditure lags significantly compared to other European regions, the mobilization of the business sector and its momentum for the next programming period are demonstrated.

In Central Macedonia, the number of researchers⁴ was 12.283 in 2020, 15% of the total number in Greece, while 78% were employed in public and 22% in the business sector. The region is home to an impressive and rapidly advancing research ecosystem, with two of its organizations being at the Top-100 of the most

¹ Regional Innovation Scoreboard 2021, page 38, Publications Office of the European Union, <https://ketlib.lib.unipi.gr/xmlui/handle/ket/3728?locale-attribute=en> / <https://ketlib.lib.unipi.gr/xmlui/bitstream/handle/ket/3728/ETBC21001ENN.en.pdf?sequence=1&isAllowed=y>

² European Union Innovation Outcomes reports for 2021.

³ Regional Innovation Scoreboard 2021 <https://ec.europa.eu/docsroom/documents/45951>

⁴ National Documentation Centre, <https://metrics.ekt.gr/datatables/202>

networked and active research centers in all the Framework Programs (1984-2020)⁵: CERTH in 30th place and Aristotle University Thessaloniki in 34th place.

Through ecosystem mapping analysis carried out by the Mechanism of Innovation & Entrepreneurship Ecosystem Support (One Stop Liaison Office), it is found that over 95% of the total revenue to the research organizations, every year in the region comes from EU funding programs⁶.

The region of Central Macedonia has recently attracted a critical mass of FDI investments in the field of research, innovation, and new technologies (Pfizer, Cisco, Telekom IT hub/T-Digital, Microsoft, Deloitte, etc.), due to the presence of notable research centers, and universities, the improvement of infrastructure, marking a shift towards knowledge-intensive investments, combined with the remote working trend.

Background of the regional policy on innovation

To meet the innovative objectives of the Europe 2020 strategy, the Region of Central Macedonia designed in 2015 its RIS3 Strategy, with an estimated of €10,85m, for the priority axis1 of its RoP. The regional policy on innovation and its funding was aimed to promote research and development, education, entrepreneurship, and information and communication technologies.

Due to strong interest, the intervention actions increased the initial budget by 49.5% attracting investment proposals with a total budget of EUR 58,42 million and a considerable impact on the innovation environment, especially on a) the establishment of permanent links between research institutes and the market; b) the stimulation of the demand and support to the production of innovative products and services; c) the support of innovation business clusters, etc.

The ecosystem developed remarkable effectiveness in cooperation actions such as the 159 submitted “Innovation investment plans of Central Macedonia” that due to the huge amount of interest, increased the budget from EUR 6 to EUR 45.80 million.

Furthermore, the One-Stop Liaison Office was considered an emblematic project, contributing to the monitoring and evaluation of the implementation of RIS3 interventions. It has a critical role in informing, mobilizing, and engaging the representatives of the triple helix in entrepreneurial discovery processes, promoting strong collaborations between the members of the research-innovation-entrepreneurship ecosystem, and contributing to their introduction into international value chains. It’s effective operation, so far, has resulted in a)10 strategic collaborations, b) supporting 120 entrepreneurs, and c) interaction with 811 ecosystem participants in several actions such as EDP workshops, working sessions, and living labs.

⁵ diaNEOsis., <https://www.dianeosis.org/2021/02/erevna-kai-kainotomia-stin-ellada/>

⁶ RIS3 2021 – 2027, Region of Central Macedonia, One Stop Liaison Office, 2022

For the next programming period (2021-2027), the Regional S3 constitutes part of the National Strategy promoting the transition to a new development model, socially, economically, and environmentally sustainable, based on knowledge and its utilization through the production of high-added value products and services, with an integration perspective in International Value Chains. The ROP of Central Macedonia 2021-2027 provides support to innovative entrepreneurship through Priority Axis 01 - “Productive, competitive transformation of the RCM”, and more specifically through RSO1.1. Developing and enhancing research and innovation capacities and the uptake of advanced technologies, RSO1.2. Reaping the benefits of digitization for citizens, companies, research organizations, and public authorities, RSO1.3. Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments.

Policy challenge: Difficulties encountered in the implementation of this policy during the last years.

Despite the improved position in relation to the performance of previous years, overall, it can be observed that the region is transforming into a "knowledge economy" at a pace that could be much faster. The main challenge is found in the efficiency of the innovation value chain, as the key innovation outputs (IPs, startups, scaleups) have huge increase potential.

The main identified and assessed challenges in our 21-27 RIS3 Strategy include:

- The attractiveness and efficiency of the research sector is mainly influenced by the employment of the majority of researchers in public research organizations (HES & GOV) and its overwhelming funding from EU funding sources.
- Despite the continues investments in entrepreneurial programs and activities, the new knowledge produced in HESs and R&D centers, is not transforming in commercial applications, filling of patents, and creating of spin-off companies.
- Although the situation has improved, women are still under-represented in entrepreneurship.
- During the continues EDP procedure (2015 – 2022) a common major challenge regarding the digital & green skills in the RIS3 priority sectors was highlighted.
- The development and sustainability of vertical and horizontal collaborations (e.g., clusters) in selected critical RIS3 priority sectors, has been and still is a major challenge for the whole ecosystem.
- Future Covid or other types of crises could divert the strategic innovation focus, as it happened during Covid-19, where a planned RoP call of €30m to support the creation of startups in the region, was canceled and the funding headed to support SMEs with cash flow difficulties.
- The acceptance of collaboration type calls such as "Research-Create-Innovate", Horizon2020, Horizon Europe and Innovation Investment Plans, highlight the
 - demand for open innovation actions, that could boost total regional innovation output faster, and

- medium and high-budget programs, combined with moderate or low administrative costs, and
- improved state and regional coordination.

List of participants

In the context of the peer review meeting, key stakeholders of the region's ecosystem were invited and participated. Below is the list of participants.

| Peers | | |
|----------------------|---|--|
| Alba Quer | ACCIÓ, Spain | Enterprise Europe Network Coordinator |
| Américo Veloso Bento | ANI, Portugal | Capacity Building of the National Innovation System |
| Joep Hoveling | SNN – Northern Netherlands Alliance | Project Manager |
| Juan Carlos Martinez | CEEI-Burgos, Spain | Director of Projects Development Department, Project Manager |
| Sevdalina Voynova | Sofia Development Association, Bulgaria | Director of programmes |
| William Gilles | IMODEV | CEO |

| Region of Central Macedonia | | |
|-----------------------------|-----------------------------|--|
| First and last name | Organisation | Position |
| Konstantinos Michailidis | Region of Central Macedonia | Head of Directorate of Innovation and Entrepreneurship Support |
| Maria Goulaptsi | Region of Central Macedonia | Head of the Department of Innovation Support |
| Christina Lagkani | One-Stop Liaison Office | Technical Expert, Senior |
| Stavros Mantzanakis | One-Stop Liaison Office | Technical Expert, Lead |
| Eleni Tsamoura | One-Stop Liaison Office | Technical Expert |
| Stefanos Fotiadis | One-Stop Liaison Office | Technical Expert |

| Regional stakeholders | | |
|-------------------------|---|--|
| First and last name | Organisation | Position |
| Nikos Katsiadakis | Centre for Research & Technology Hellas | Innovation & Technology Transfer Facilitator |
| Eri Toka | Aristotle University of Thessaloniki | Head of Technology Transfer Office |
| Eleftheria Papanikolaou | Aristotle University of Thessaloniki | Tech Transfer Office |

| | | |
|-------------------------|---|---|
| Christina Kakderi | Aristotle University of Thessaloniki | Assistant Professor of Spatial Development and RTDI Policies in the EU |
| Emmanouil Vlachogiannis | Thessaloniki Chamber of Commerce & Industry | 1st Vice-President of the TCCI |
| Katerina Tzitzinou | Federation of Industries of Greece | Director of International Affairs |
| Aggeliki Barakli | Business and Cultural Development Centre | Head of EU Projects Department and Brussels Bureau |
| Georgios Kostaras | Region of Central Macedonia RoP Managing Authority | Officer at Program Planning & Evaluation Unit |
| Christina Edippidi | Region of Central Macedonia RoP Managing Authority | Officer at Operations Planning & Evaluation Unit |
| Konstantinos Tramantzas | Alexander Innovation Zone | General Manager |
| Antonis Ilias | Innovation Hub OKThess | OK!Thess Coordinator |
| Konstantinos Fouskas | University of Macedonia | Associate Professor of Digital Entrepreneurship and Technological Innovation Head of Technology Transfer Office |
| Theofilos Milonas | Association of Information Technology Companies of Northern Greece (SEPVE) | Chairman of the Board |
| Kosmas Vamvalis | Technology Forum | Manager |
| Eleni Vouchara | International Hellenic University Research Committee – Special Account for Research Funds | Head of the Research Committee – Special Account for Research Funds |
| Stamatios Aggelopoulos | International Hellenic University | University Vice-Chancellor for Research and Lifelong Learning |
| Vasilios Kechagias | Greek Exporters Association | Executive Member Board of Directors |

| State stakeholders - Greece | | |
|------------------------------------|--|------------------------------|
| First and last name | Organisation | Position |
| Vassilis Gongolidis | General Secretariat of Research & Innovation | Officer |
| Maria Chrisaiti | Special Unit for the Management of programmes “Competitiveness and Entrepreneurship” | Officer |
| Panagiotis Papageorgiou | Hellenic Development Bank of Investments | Business Innovation Director |

| Interreg Europe | | |
|------------------------|--------------------------|--|
| Magdalini Anagnostou | Interreg Europe | Coordinator - Policy Learning Platform |
| Marc Pattinson | Policy Learning Platform | Thematic Expert in Research and Innovation |

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| Arnault Morisson | Policy Learning Platform | Thematic Expert in Research and Innovation |
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Recommendations

After the stakeholders' presentations, an extensive discussion followed. The Peer Review meeting continued with the recommendations of the peers which are recorded below, into 2 categories:

Designing and delivering regional open innovation calls

- Use Open Innovation Calls in the region's policy mix and be tailored to the needs of the regional ecosystem, for instance, SMEs' competitiveness, having more startups, bridging research and commercialization, or facilitating university–industry collaboration.
- Find a field where the region of Central Macedonia can make a unique value proposition and offer a strong value to the regional ecosystem and beyond.
- Create value-added and valorise the R&D at universities, support scale-ups, entrepreneurship, etc.
- Mapping the research ecosystem: Use existing tools and methodologies - OSLO data, and social network analysis (SNA). Define open innovation challenges and the place-based societal challenges that need to be addressed and that matter to stakeholders. Discuss with the research ecosystem to engage in open innovation calls.
- Find a challenge to engage civil servants, empower them to think outside the box, and provide a non-monetary prize to promote a culture of innovation and experimentation among public sector workers.
- Communication – key to initiating the process.
 - Build a common vision around common regional place-based challenges that motivate quadruple helix stakeholders – to solve a problem.
 - Empower major stakeholders—CERTH and AUTH, Chamber of Commerce—to co-create a pilot open innovation call.
 - Make your initiative open to all stakeholders – beyond technological innovations.
 - Use existing regional business events to cross-fertilize ideas and motivate widely different stakeholders - Technology Forum, beyond - (see World Mobile Congress led by ACCIO, Barcelona, fashion industry, or electronic music fairs in Portugal). Provide brokerage and matchmaking events and follow-up!
- Governance - Innovation Leadership
 - Have a co-leadership – public and private - and provide visibility to place-based leaders.
 - Foster more interactions and connections within the regional innovation ecosystems—Thessaloniki and outside.
 - Adapt an open-door policy so the stakeholders could know who is out there and willing to collaborate.

- Use of anticipatory innovation governance and adaptive governance methodologies to reflect what was done to fill gaps.
- Flexible innovation strategy
- Leverage good practices from peer reviewer regions, and well-known schemes such as challenge.gov, Singapore, etc.
- Starting with a pilot open innovation call and scale-up.
- Use or complement open innovation calls with other policy tools such as public procurement process, innovation vouchers, Proof of concept, micro-financing/micro-loans, cascade funding, etc.
- Experiment with new policy tools
- Focused open innovation challenges to respond to place-based societal challenges. An effective way to motivate different regional stakeholders (adds a strong emotional component).
- Participation in existing European ecosystem prizes and awards to get visibility for the region and to learn the process—EIC prizes, European Capital of Innovation Awards, Horizon Europe Prizes, REGIOSTARS.
- Provide also non-monetary awards, for instance, access to networks, participating in international trade missions, and connecting to services in the region - incubators, accelerators, business support services, technology parks, mentorship - Identify what the ecosystem can offer such as incentives coming from the ‘cooperation of the willing’ (companies or place-based leaders).
- Use structural funds to design follow-up policy tools such as innovation vouchers—to create a policy intervention continuum and an integrated regional policy mix.
- Promote knowledge sharing and good practice exchanges at programme management level with peer regions and others, for example on co-funding, interregional open innovation calls, and investment instruments.
- Pursue capacity building amongst the public sector and the broader innovation ecosystem.

How to favour multi-level coordination with national innovation calls

- Find the gaps and complementarities.
 - If the national government works with startups, work with scale-ups. Use the existing knowledge and mapping tools to develop complementary actions.
 - There are national programmes—for instance, Hellenic Development Bank guarantee loans. Map who is receiving the guarantee loans in the region. Design complementary actions for private companies receiving HDB guarantee loans. Work with the “leading” companies to deliver other programmes or design incentives.
 - Identify private companies in national programmes or EIC winners (label it like a Seal of Excellence for companies) and provide scale-up opportunities (it can be additional guarantees -letter of credits- for sectoral and challenge priorities—creative industries,

deep tech, women entrepreneurs, see the examples of private matching fund/co-funding/grants in Barcelona and Sofia).

- Have the right regional key performance indicators (KPIs). With the right KPI you can design the most tailored policy mix and have more flexibility for policy experimentation.
 - Prioritise the right KPIs as you have limited resources.
 - Use quantitative indicators but also qualitative ones.
- Take advantage of cross-border/interregional/transnational and European calls.
- Build policy alignment - Anticipation, foresight, and megatrends.
 - Identify calls that are aligned with the regional innovation ecosystem priorities (alignment).
 - Anticipate and prepare to seize institutional windows of opportunity that will be opened in the national/European regulatory and legislative framework.
 - Anticipate national/European innovation calls in megatrends (Green just transition, digital just transition, societal challenges, climate change, biodiversity, young, women, senior) and prepare for them before calls are even launched to be the natural recipient for future national/European opportunities. Build enough legitimacy to become the natural recipient of potential/future innovation calls.
 - Scan and prepare for European policy directionalities.

Possible calendar of implementation

| To design open innovation calls | | | | | | | | | | | | | | |
|---|--|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|--------------------------|--|
| Dates: 29 & 30 March 2023, Venue: Room Dimitra Iordanidou - Ground floor at the Alexander Innovation Zone, Filikis Etaireias 12 & I.Tsimiski, 54621, Thessaloniki | | | | | | | | | | | | | | |
| Applicability [1] | Recommendations | month 1 (04.2023) | month 2 | month 3 | month 4 | month 5 | month 6 | month 7 | month 8 | month 9 | month 10 | month 11 | month 12 | Comments |
| Very likely to be applied | Find a field where the region can make a unique value proposition and offer a strong value to the regional ecosystem and beyond. | | | | | | | | | | | | | Brand our initiative as a long-term policy action (branding discussions have already began) |
| Very likely to be applied | Create value-added and valorise the R&D at universities etc. | | | | | | | | | | | | | Include RTDOs in the previous initiative |
| Very likely to be applied | Mapping the research ecosystem. Define open innovation challenges and the place-based societal challenges. Discuss with the research ecosystem to engage in open innovation calls. | | | | | | | | | | | | | Researching and finding several regional place-based challenges that could become the first call. (Initial discussions pointing Accessibility) |
| Rather seen as not applicable at the moment | Find a challenge to engage civil servants | | | | | | | | | | | | | Will try to engage them in social innovation thematic areas |
| Very likely to be applied | Communication - Build a common vision around common regional place-based challenges that motivate quadruple helix stakeholders – to solve a problem. | | | | | | | | | | | | | Networking with the existing Technology Forum team to add Innovation 4 society in their thematic areas |
| Depends on specific political decisions/conditions | Governance - Innovation Leadership | | | | | | | | | | | | | Developing an open innovation alliance – ecosystem stakeholders |
| Very likely to be applied | Starting with a pilot open innovation call | Preparation and implementation has already started / meetings with stakeholders | | | | | | | | | | | Design a pilot open call | |
| Depends on specific political decisions/conditions | Use or complement open innovation calls with other policy tools such as public procurement process etc. | | | | | | | | | | | | | This is a great idea to be included in our policies portfolio in the medium run |
| Depends on specific political decisions/conditions | Experiment with new policy tools | | | | | | | | | | | | | |
| Very likely to be applied | Focused open innovation challenges to respond to place-based societal challenges | | | | | | | | | | | | | Networking with the existing Technology Forum team to add our new Open Innovation initiative in their thematic areas - perform primary research to support ideas |
| Very likely to be applied | Participation in existing European ecosystem prizes | | | | | | | | | | | | | OSLO team will be searching the horizon for such opportunities |
| Very likely to be applied | Provide also non-monetary awards | | | | | | | | | | | | | In our initial call we are designing 3 – 5 different prize categories (monetary and non) |
| Depends on specific political decisions/conditions | Use structural funds to design follow-up policy tools | | | | | | | | | | | | | |
| Depends on specific political decisions/conditions | Flexible innovation strategy | | | | | | | | | | | | | |
| Very likely to be applied | Promote knowledge sharing and good practice exchanges | | | | | | | | | | | | | C&D strategy will be in the heart of open innovation policies |

Conclusions

The peer review meeting turned out to be particularly enlightening and fertile in ideas, recommendations, and networking since many key stakeholders of the region's ecosystem involved and participated.

The adequate team of the peers showed particular interest and did their best to propose solutions suitable for our region regarding the current challenges.

Also, the support from the team of the Policy Learning Platform was considerable and provided many recommendations and solutions too.

In general, the peer review meeting stood up our expectations and provide the Region of Central Macedonia the right tracks and approaches to overcome difficulties and challenges.

We have identified it as a strategic platform that several issues can be addressed in an open and friendly context that is parallel high professional.

We will stand close to Policy Learning Platform to bring and add value to our citizens and offer our competences to European citizens as well.

Thessaloniki, Region of Central Macedonia, Greece, 5th May 2023