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Review of the work of the Team of Specialists on Innovation and Competitiveness Policies since its fourteenth session

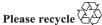
Findings and recommendations from the Interim Subregional Innovation Policy Outlook 2022: Eastern Europe and the South Caucasus

Note by the secretariat1

I. Introduction

- 1. On 1 June 2023, at the sixteenth session of the Committee on Innovation, Competitiveness and Public-Private Partnerships (CICPPP), the ECE secretariat successfully launched the Interim Sub-regional Innovation Policy Outlook (IIPO) for Eastern Europe and the South Caucasus (EESC) sub-region (henceforth referred to as IIPO 2022),² building on and complementing the outcomes and recommendations from the first full-fledged Sub-regional Innovation Policy Outlook (IPO) for the sub-region, launched in 2020 (henceforth referred to as IPO 2020).³ The objective of the IIPO publication was to maintain the momentum for innovation-led growth in EESC countries created by the IPO 2020, strengthen policy dialogue and exchange, as well as examine broader regional trends of innovation.
- 2. Given the success of the pilot IPO 2020, the IIPO 2022 and the positive feedback from beneficiary countries on the project's value, the ECE secretariat aims to repeat full-fledged IPO assessments in EESC countries at regular intervals of three to four years; the next one is planned for 2024, subject to extrabudgetary funding. In response to member States' demand,

The CICPPP endorsed the decision to undertake the IPO 2020 project at its twelfth session, which took place on 26-28 May 2018. It assesses the scope and quality of innovation policies, institutions, and processes across Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine. The project identified strengths and weaknesses in innovation policy governance, enlarged the evidence base for mutual policy learning, and made recommendations on how to improve innovation policies, institutions, and processes, and enhance productivity and competitiveness. It took into account member States' shared features that set them apart from other countries at comparable output levels, such as strong institutional legacies, high levels of educational attainment, and a legacy of frontier research, to guide policy and institutional reform efforts.



¹ This document has not been formally edited.

Findings and recommendations from the Interim Sub-regional Innovation Policy Outlook 2022: Eastern Europe and the South Caucasus, ECE/CECI/2023/INF.2.

the second full-fledged IPO will allow countries to track their own policy progress and benchmark their performance vis-à-vis other EESC countries in a peer-learning context.

- 3. The IIPO 2022 assessment provides an update on sub-regional economic and innovation developments and includes two in-depth chapters on important topics of concern to the sub-region and jointly selected with beneficiary countries, with concrete sub-regional recommendations. The IIPO was developed based on the outcomes of several meetings of the IPO national focal points in March 2021, where national EESC authorities and other stakeholders reflected on the outcomes of the first IPO and agreed on the scope for the IIPO. Two sub-regional priorities were identified for in-depth consideration in the IIPO 2022:
 - (a) enhancing science-business linkages in the EESC sub-region; and
- (b) using innovation-enhancing procurement (IEP) as a tool to foster innovative activity.
- 4. The findings and recommendations of these two in-depth chapters were also based on the results of extensive dialogue and consultations among leading subject matter experts, government officials, academia, the private sector, ECE, and other innovation stakeholders at dedicated IPO policy dialogue sessions from September 2021 to June 2022.
- 5. The chapter on IEP also draws on the international good policy practices on "Innovation-enhancing Procurement for Sustainable Development" adopted by the CICPPP at its fourteenth session in 2021 (ECE/CECI/2021/5).

II. Methodology and project steps

- 6. The IIPO 2022 included a desk review process that lasted from January 2021 to October 2022. The desk review process also made use of discussions and exchanges at dedicated IPO policy dialogues attended by more than 100 public and private stakeholders and follow-up bilateral interviews with EESC policymakers. The findings and recommendations were also endorsed by the EESC governments at the seventh meeting of the IPO national focal points and other ECE member States at the 14th session of the Team of Specialists on Innovation and Competitiveness Policies in November 2022. The final text reflects the outcome of bilateral and multilateral discussions over the course of the project as well as other comments and suggestions from various stakeholders.
- 7. ECE member States and beneficiaries highlighted the timeliness and relevance of the IIPO in their efforts to strengthening sustainable development towards the Sustainable Development Goals (SDGs), green and digital transformations and long-term, inclusive growth. Georgia emphasised, that "the (...) IPO initiative provides an opportunity to create complementarities with other national and international innovation policy support initiatives and share best practices and knowledge throughout the evaluation process of the project." Ukraine indicated, that "the sub-regional component of the IPO project greatly facilitates the exchange of experiences between the beneficiary countries. The resulting analysis contributes to the formation of the best management practices in the region (...)." This feedback was also mirrored by international partner organisations, such as the European Commission, the Organisation for Economic Co-operation and Development and the World Intellectual Property Organisation.
- 8. The ECE secretariat would like to thank the government of Sweden for its generous extra-budgetary funding for the project and the national focal points of EESC countries for their continuous support during the project implementation. The positive feedback from beneficiary countries and international partners showcased the significant value provided by the IPO and IIPO assessment and related policy dialogue exchanges, creating demand for the continuation of support and technical assistance in this area.

III. Findings

9. The IIPO highlights EESC countries' need to reinforce their efforts towards achieving innovation-led sustainable development. While countries in the EESC region have made

significant progress towards strengthening sustainable growth in line with the United Nations Agenda 2030, they, as most of ECE member States, are not on track to reach the targets outlined in the SDGs. Despite previous efforts to facilitate digitalisation, encourage green growth initiatives and introduce additional support for start-ups and entrepreneurship, more can be done to ensure that provided support has a more catalytic effect on innovative activity, finding new ways of doing more with less available resources and creating spill over effects to transform production and consumption patterns. Recent crises, such as the COVID-19 pandemic and conflicts, have had a serious impact on economic development, health, and security, highlighting remaining structural weaknesses of their economies, such as low levels of productivity and diversification and lack of competitiveness in more knowledge-intensive sectors.

10. The IIPO emphasizes that fostering innovation will require effective innovation policymaking, governance, and coordination. EESC countries have a strong foundation for innovation-led growth, including a rich research legacy, a well-educated workforce, and pockets of innovation excellence in sectors such as ICT services exports. However, there is a significant untapped potential for innovation in the EESC sub-region, as innovation is not yet happening systematically across these economies. Many small and medium-sized enterprises (SMEs) lack the organizational and managerial capacities to absorb external knowledge and to identify opportunities for innovation. Strengthening innovation policies and support mechanisms within national innovation systems is imperative to create a conducive environment for business and innovation activity.

Building relationships and knowledge linkages between science and business in the EESC

- 11. Science-business linkages (SBLs) play a crucial role in an effective national innovation system, promoting dynamic knowledge exchange and fostering experimentation and commercialization. In the EESC sub-region, a key challenge lies in aligning the public sector's capacities and resources with the private sector's requirements. Therefore, SBLs should shift their focus from solely commercializing public research and development (R&D) outcomes to also emphasizing the adaptation of public research to local innovators' needs. This approach will support ongoing technological upgrading and innovation in the sub-region. To achieve this, EESC policymakers should enhance the adaptability of public research institutions to meet industry demands, boost the private sector's absorptive capacity, and implement policies that stimulate innovation demand.
- 12. The strength of SBLs also influences the effectiveness of technology transfer organizations. All EESC countries have either built or supported organizations engaged in promoting SBLs, but their success varies widely. The challenge in all cases is to couple the support in physical infrastructure with funding and support in soft services, which can facilitate the upscaling of newly incubated ventures. The commercialization of science and technology (S&T) potential is often institutionally supported by technology transfer offices (TTOs); however, these face numerous problems of relevance and impact. Promoting SBLs requires a better understanding of contexts and trends through analysis of data on specific forms of collaboration.
- 13. To boost SBL, targeted action is required on the demand side (firms), the supply side (academic R&D sector and education system), and in terms of intermediary institutions between them. The IIPO recommends the following steps to facilitate SBLs:
- (a) From the point of view of innovation demand, the IIPO finds that few initiatives exist to support business R&D, and recommends introducing innovation vouchers, exploring innovation-enhancing procurement mechanisms, and providing private firms with access to government funding for R&D. To leverage the potential of foreign direct investment (FDI) to spur innovation, member States should negotiate cost-sharing partnerships with investors, implement a strategic approach to linkages between higher education and the IT sector, and internationalise public research organizations (PROs) and universities to enhance their linkages with FDI and local firms.
- (b) On the supply side, member States should enhance the R&D capabilities of domestic universities and public research organisations (PROs) to meet the technology upgrading needs of the local economy. The IIPO recommends differentiating between research-based and vocational education-based universities and assess which PROs can be

engaged in short- and medium-term research, as well as long-term research to achieve the SDGs. PROs should be incentivized to have closer relationships with industry by making income and induced investment from industry part of their key performance indicators.

(c) The IIPO further recommends enhancing technology transfer by strengthening intermediary institutions through a multifaceted approach, including creating licensing rules, developing R&D centres of excellence, enhancing TTOs at PROs, initiating co-investment risk capital funds, evaluating financing mechanisms, and adopting the European Commission guidelines for improving SBL.

Using the large potential of public procurement to create demand for and incentivize innovation

- 14. The IIPO highlights the potential of innovation-enhancing public procurement (IEP) in driving innovation in the private sector, given the large share of Gross Domestic Product (GDP) represented by public procurement. IEP can play a crucial role in promoting sustainable and long-term growth and development in several areas, such as e-health, pharmaceuticals, energy, environmental sustainability, circular economy, transport and logistics, security and digital content. In the EESC region, the public sector's large purchasing power and central role in mitigating societal grand challenges provide an appropriate context for implementing IEP and stimulating innovation demand.
- 15. IEP is not yet fully integrated into procurement practices in the EESC countries. There are still obstacles hindering the implementation of IEP in the EESC, such as the absence of appropriate legal frameworks, inadequate connections between science and business, and the incapacity to recognize and transform needs into procurement tenders. To help member States address this challenge, the IIPO proposes an IEP Road Map, a benchmarking and training tool, that member States could use to implement a comprehensive IEP policy in the sub-region. The Road Map presents a set of steps to follow, including consolidating the use of pre-commercial procurement, adopting IEP as a combination of pre-commercial procurement and regular procurement, and adopting a functional and circular approach to IEP. The tool expands the understanding of public procurement beyond innovation to other areas such as the circular economy and sustainable development. Some of these steps include the following recommendations:
- (a) IEP requires coordinating policies across several areas. Yet, only a few EESC economies have introduced EIP as a strategic policy instrument. To promote the strategic integration of IEP, the IIPO recommends including the tool in the political agenda, making it a strategic priority in all public sector domains, creating a policy framework and legal basis for IEP, improving professionalization and expertise of public buyers, creating a national competence centre for innovation-enhancing procurement, and facilitating mutual learning and exchange of experiences.
- (b) To overcome the limitations of regular procurement procedures, which prioritize short-term cost-effectiveness over addressing current and future needs, the IIPO proposes using regular procurement to encourage the diffusion of existing best-in-class solutions. This can be done by coordinating and bundling existing demand through e-procurement platforms and increasing the participation of universities, SMEs, and start-ups, while centralizing standard purchases to benefit from economies of scale.
- (c) Current procurement methods focus on technical specifications and short-term costs, missing opportunities to specify challenges or needs in functional terms. The IIPO recommends that the governments focus on the targets and challenges to be overcome and seek value according to the functional requirements as opposed to setting up rigid bid criteria.
- (d) Pre-commercial procurement (PCP) could also be a useful tool to steer the development of new innovative solutions and enhancing IEP. The IIPO suggests developing a phased approach to issuing PCP calls for different stages of the process from research to prototyping, allowing additional bidders to enter at different stages and sharing knowledge created at prior stages with new entrants. IEP can be established as a combination of PCP, innovation partnerships, and regular procurement, with governments acting as intelligent customers and engaging bidders in early-stage dialogue while supporting public-private partnerships, including with SMEs and start-ups.

IV. Next Steps

- 16. Next steps for the IIPO include the continued dissemination of the findings and recommendations to EESC stakeholders, including policymakers and practitioners in the innovation ecosystem. The IIPO can serve as an updated source of policy analysis and recommendations for national governments and sub-national organisations to monitor changes in innovation, identify strengths and weaknesses in institutions and policies, and implement changes. The findings and recommendations of the IIPO will also feed into the second full-fledged IPO of the sub-region, planned for 2024.
- 17. ECE stands ready to continue to support innovation policy in the sub-region through national Innovation for Sustainable Development Reviews (I4SDR) and subsequent national capacity building activities to assist with the implementation of the recommendations emerging from the IPO, IIPO and I4SDRs.
- 18. Based on expressions of interest from governments, the ECE secretariat is exploring options, including for raising additional extra-budgetary funding, to carry out IPOs in other country groupings or sub-regions with common characteristics, such as the Western Balkans, where such assessments would complement existing innovation policy support.⁴
- 19. ECE Transformative Innovation Network (ETIN), together with the Regional Cooperation Council (RCC), organised a technical meeting on the Role of Transformative Innovation in Supporting the Green and Digital Transition of the Western Balkans⁵ in Pržno, Montenegro in September 2023. The aim of this meeting was to promote collaboration and accelerate transformative innovation for sustainable development in the Western Balkans, focusing on innovation ecosystems, stakeholder cooperation, and explore ways on how to best adapt the IPO methodology to the region. Based on the work done under ETIN, ECE is currently in the process of updating the IPO methodology, adding an additional dimension to include transformative innovation policies in the assessment. The updated methodology with the transformative innovation dimension was presented and discussed with stakeholders from the Western Balkans.
- 20. The implementation of the IIPO's recommendations and potential follow-up research and capacity-building efforts will play a crucial role in addressing the identified challenges and driving further innovation-led sustainable development in the EESC sub-region. The aim is not only to address current challenges but also to build robust innovation ecosystems that can adapt and thrive in the face of future changes and opportunities. ECE stands ready to work hand-in-hand with EESC economies on these issues and calls on ECE member States, development partners, and other donors to provide extrabudgetary funding to support this collaboration effort.

⁴ Supporting ECE member States in promoting innovation and public-private partnerships for sustainable development: an overview of fundraising needs and opportunities, ECE/CECI/2023/INF.8, ECE/CECI/2021/6 (unece.org).

⁵ Five Western Balkan economies have expressed support for national-level analytical work and a subregional publication at the 16th session of CICPPP in 2023. Representatives from these economies noted that our work would support their transition to knowledge-based economies, towards intraregional integration and reconciliation, and to adopt the SDGs.