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Progress report on the Innovation for Sustainable Development Review of Moldova

Note by the secretariat

I. Background

- 1. UNECE began a programme of Innovation Performance Reviews (henceforth Reviews)¹ in 2010. Armenia, Belarus, Kazakhstan, Tajikistan and Ukraine underwent such Reviews, released as official UN publications. In 2015, the methodology was updated to reflect the Sustainable Development Goals (SDGs) by mainstreaming sustainable development more fully into the reviews and including lessons learned from past Reviews to incorporate recent advances in thinking about innovation policy. UNECE plans to continuously reform, upgrade and streamline the review process by further aligning it with other relevant work streams, such as the UNECE Sub-regional Innovation Policy Outlook (IPO).
- 2. Since 2015, UNECE Innovation for Sustainable Development Reviews (henceforth I4SDRs) have been completed and published for Belarus and Kyrgyzstan. Subsequent to a second methodological update in 2020, Georgia became the first country to select elective in-depth chapters addressing national policy priorities for sustainable development². The Government of Georgia selected two topics for these in-depth chapters: "Public procurement and financing as drivers of innovative development" and "Innovation and growth dynamics in Georgian enterprises".³
- 3. Requested by the Government of Moldova, the Innovation for Sustainable Development Review of Moldova was endorsed by the 14th session of the UNECE Committee on Innovation, Competitiveness Policies (Decision 2021 4b.4) held in Geneva

³ See https://unece.org/economic-cooperation-and-integration/publications/innovation-sustainabledevelopment-review-georgia



¹ These Reviews are country-led and participatory, where international experts assess the national innovation system, policies, institutions and propose a set of policy recommendations for further improvements for reforms. Following an international peer review and publication, UNECE works with the country to support subsequent reform efforts.

² ECE/CECI/ICP/2018/INF.1

- (hybrid) 2-4 June 2021. Moldova selected the following elective topics for its in-depth chapters of the Review: "Boosting science-industry linkages and technology commercialization", "Developing the innovation and technology transfer infrastructure" and "Leveraging the diaspora for innovation-driven sustainable development".
- 4. The in-depth elective chapters were developed together with leading international experts Prof. Slavo Radosevic, Professor of Industry and Innovation Studies at the University College London, United Kingdom⁴, Lisa Cowey, Director, The Technology Transfer Interface Ltd, Oxford, United Kingdom, and Prof. Alexandr Gevorkyan, Associate Professor, St John's University, United States of America, respectively.
- 5. Extrabudgetary support for the I4SDR of Moldova is provided by the Government of Sweden under the project "Promoting innovation policy capacities in Eastern Europe and the Caucasus".

II. Status of the project

- 6. Draft chapters of the I4SDR have been developed based on desk research (January 2020 April 2021), with a joint mission to Chisinau held as part of the UNECE Innovation Policy Outlook in January 2020 to agree the priority topics to be covered by the I4SDR. This was followed by an extensive, virtual⁵ fact-finding process involving interviews and focus group meetings with national innovation stakeholders (March May 2021). The virtual fact-finding covered such topics as innovation performance, the national innovation system, its governance, institutions and policies, innovation and technology transfer infrastructure, as well as diaspora engagement for development.
- 7. Subsequent to the development of draft chapters, a two-stage peer review process was conducted. First, in July August 2021, the draft chapters underwent technical review by experts and stakeholders that had participated in the fact-finding process, including international organizations working on the topics and contributing their feedback on initial findings. Second, comments received during the technical review were integrated, and the chapters went through a high-level review by international partners and the Government of Moldova in September October 2021.
- 8. Following the incorporation of changes to reflect the review process, the I4SDR was finalised in October 2021, with work initiated on professional editing and design of the manuscript for the final publication. A mission to Moldova is planned in the final quarter of 2021 to present and discuss the findings of I4SDR with national stakeholders and high-level Government officials, COVID-19 related travel restrictions permitting. The final manuscript will be submitted as an official UN publication by the end of 2021 with a high-level national launch event (potentially virtual) planned for Q1 2022.
- 9. The UNECE secretariat thanks the Government of Sweden for the project funding and, as national focal point, the Ministry of Education and Research of Moldova, for its continuous support during the project implementation.

III. Initial findings

10. Moldova, an open, lower-middle income economy, has navigated a challenging transition to a market economy in recent decades, but managed to secure substantial, albeit volatile growth. With the traditional drivers of growth running out of steam, innovation, the process of trying out new ideas to create value more systematically, emerges as a driver for increased productivity, economic competitiveness and long-term sustainable development.

⁴ Prof. Radosevic has previously worked with UNECE on the I4SDR for Georgia and is member of the UNECE Policy Principles Task Force.

 $^{^5}$ Fact-finding meetings with national stakeholders were held virtually due to COVID-19 travel restrictions.

- 11. While Moldova has tackled some of the regulatory barriers negatively affecting the environment for doing business, further progress on structural reforms is needed to drive entrepreneurship development and overall experimentation by firms. Trade and foreign direct investment are essential in this regard. At present, Moldova has substantial untapped potential in diversifying and upgrading its exports, and exploiting the opportunities offered by foreign direct investment to transfer skills, knowledge, and ideas with the right policy frameworks, institutions, and processes needed to support this dynamic.
- 12. Most importantly, the transition to a knowledge-based economy significantly depends on firm absorptive capacity, i.e., the ability of the private sector to innovate, which, as the limited firm R&D expenditure and low levels of ISO9000 certificates⁶ and trademark applications in Moldova demonstrate, requires strengthening. Increased cooperation between business and science could help to enhance the innovativeness of Moldovan firms through knowledge exchange and technology transfers at the condition of capable R&D sector and high-quality education system.
- 13. The path towards innovation-driven sustainable development lays through strengthening of Moldova's national innovation system. With the main institutional and legal building blocks in place, the right incentives and mechanisms are needed to ensure alignment, additionality, complementarity, and cost-effectiveness of innovation policy across all levels of government.
- 14. With innovation policy often limited to R&D, a more comprehensive approach should be adopted to make sure that opportunities in all sectors offered by innovation are strategically used for economic growth and tacking social and environmental sustainable development challenges. Strengthening policy processes and institutional capacities throughout the policy cycle, in particular when it comes to stakeholder dialogue and effective monitoring and evaluation, would be important to ensure inclusive and effective innovation policy delivery.
- 15. To address policy fragmentation across different ministries and agencies, a mechanism of innovation policy coordination, such as the National Innovation Council, should be established for increased effectiveness of policy actions and balanced development across the territory, including at the sub-regional level. In addition, promoting innovation in and through the public sector could be enhanced through progress on eGovernment reform and introduction of innovation enhancing procurement to strengthen the demand for innovation.
- 16. Boosting science-industry linkages would require targeted action on the demand side (firms), the supply side (R&D sector and education system), and the linkages between the R&D and business sectors. Enhancing private sector participation in public R&D programmes based on transparent rules and introduction of additional mechanisms of funding of innovation and R&D activity (e.g. innovation vouchers, specific training programmes for firms) would help stimulate innovation in the private sector.
- 17. Re-structuring of the R&D and educational systems to ensure the inflow of young researchers and availability of skilled graduates, accompanied by the gradual increase in public R&D funding would be an important step towards enhanced capabilities of the R&D system to produce high-quality results with real potential for commercialisation and further integration into the international research and education frameworks.
- 18. Solid, well-developed, and well-run infrastructure is essential to support innovation and technology transfer. In Moldova, innovation and technology infrastructure is relatively recent and encouragingly diverse. However, to be effective, regulatory barriers to its

⁶ ISO 9000 is defined as a set of international standards on quality management and quality assurance developed to help companies effectively document the quality system elements needed to maintain an efficient quality system. They are not specific to any one industry and can be applied to organizations of any size.

development should be addressed (e.g. revision of the law on scientific and technological parks, mechanisms for product certification, etc.). In addition, with the focus on IT industry, a sector-specific infrastructure covering other sectors could help to support innovation across the economy and the national territory, building on regional strengths and potential.

- 19. The current weakness of the technology transfer infrastructure could be addressed through the establishment of a national level Technology Transfer Office with the aim to consolidate dispersed efforts on technology transfer across institutions and ensure the robust pipeline of projects, as well as skilled and well-trained staff. At the same time, adequate and locally relevant infrastructure should be developed in the regions to close the rural-urban gap in innovation and effectively address local socio-economic challenges.
- 20. The diaspora or, more broadly, Moldovans living abroad, constitutes an important source for innovative development of Moldova, including when it comes to knowledge and skills transfers and direct investment in development projects back home. To effectively engage with the diaspora to promote innovation, it is important to assess its potential by building nuanced and up-to-date understanding of its composition, location, professions, networks, and skills through dedicated mechanisms (e.g., diaspora census, voluntary registry).
- 21. Moldova has successfully tried out several diaspora engagement mechanisms (e.g. PARE 1+1, DAR 1+3, Diaspora Engagement Hub and Diaspora Excellence Groups), substantially supported by donors, but facing sustainability issues, in part due to lack of the long-term funding and limited trust in centrally driven initiatives. Building on this experience while taking into account international practices would help to put in place effective mechanisms for diaspora engagement (e.g. at policy level, through dedicated networks and sectoral or regional hubs). Enhancing meaningful cultural, business, and scientific connections between Moldovans abroad and their home country could help addressing the issue of trust.
- 22. As development needs in Moldova increase, ensuring a flexible matching mechanism to link diaspora project proposals to those needs, for example, through an online platform, could help to focus and effectively utilize diaspora resources. Further strengthening in a structured manner the links between academia in Moldova and Moldovan researchers, scientists, and affiliated organizations abroad could be done through the establishment of a Diaspora Science Group, an organisation tasked with the promotion and fostering of cooperation between relevant groups in Moldova and abroad.
- 23. Findings and recommendations of the I4SDR will support the government of Moldova in shaping and improving innovation policies in line with the strategic Government policy priorities, including as reflected in the Government Action Plan for 2021-2022. UNECE stands ready to continue the support to innovation policy in Moldova through subsequent national capacity building activities to assist with the implementation of the recommendations of the I4SDR.