

United Nations Economic Commission for Europe

Webinar report

New Approaches to Innovation Policy in the Transition Economies of the SPECA sub-region

19 May 2022
Online, Zoom platform



Background

UNECE has extensively worked with the transition economies of Central Asia to support governments in the successful use of innovation policy for increased economic competitiveness and sustainable development, as well as to contribute to the digital and circular economy transition. The socio-economic challenges, opportunities, and institutional legacy among these transition economies share distinct features of innovation policy governance, innovative entrepreneurship support, investment in innovation, industrial policy, as well as demand and supply side tools of innovation policy more broadly. The innovation policy in this sub-region therefore calls for a different approach that is more adapted to the transition context and takes into consideration the above distinct features.

Building on its work under the UN Special Programme for Economies of Central Asia (SPECA), in particular the SPECA Innovation Strategy for Sustainable Development and the corresponding Action Plan (2021); the Innovation for Sustainable Development Reviews of Kyrgyzstan (2019), Tajikistan (2015) and Uzbekistan (2022); the work on innovative high-growth enterprises, the sub-regional science, technology and innovation (STI) gap analysis and the handbook on business incubators, UNECE has developed a draft publication on new innovation policy for transition economies of the SPECA sub-region. The publication outlines the key innovation policy challenges common to SPECA countries and points to possible policy solutions, taking into account the specificities of the sub-region and experience from other economies that have successfully undergone the transition to knowledge-based market economies.

Objectives

The webinar provided an opportunity to present emerging findings of ongoing work on "New innovation policy for transition economies of the SPECA sub-region" to SPECA stakeholders with the aim to receive their feedback and reflect it in finalised policy guidance. In addition, the webinar was used to gather SPECA stakeholders' views on themes they would like to see covered in the upcoming UNECE training on effective support to innovative enterprises, with consideration being given to the possibility of establishing a SPECA business incubator and accelerator network.

Webinar series structure

The workshop targeted government officials and experts from the SPECA countries responsible for designing and implementing innovation policy, including aspects related to support of innovative enterprises from business incubators and accelerators.

Summary of the discussions

The main focus of this webinar was to present a new innovation policy concept for developing economies, with the aim to ensure the transition to higher value-added economic activities and to generate positive spill-overs for the wider economy. This is particularly important for the countries of the SPECA sub-region, that were severely affected by the COVID-19 crisis that has created a significant challenge to achieve the Sustainable Development Goals (SDGs).



Therefore, supporting the development of innovation policies through work on STI policy, technology upgrading more broadly, and innovative entrepreneurship more particularly would be critical to help the SPECA countries to embark and successfully move on to a path of knowledge-based development and inclusive and sustainable growth.

To elaborate on these ideas, Mr. Slavo Radosevic, Professor of Industry and Innovation Studies at University College London, presented the concept of a new industrial policy approach application in the context of the SPECA sub-region. This builds on the policy paper by Professor Radosevic on this topic for the SPECA sub-region. He stressed the shortcomings of a conventional industrial policy approach in the context of fragmented value chains, and the potential value of a new industrial policy approach targeting all economic sectors, including services, agriculture, natural resources and manufacturing to generate value creation and economic growth.

In the same vein, Mr. Kris Boschmans, international expert from the European Future Innovation System Centre, presented the results of a study on "New innovation policy for transition economies of the SPECA sub-region". Based on the Science, Technology and Innovation (STI) gap analysis of the SPECA countries and drawing on previous work on technological transformation of the SPECA countries by Rumen Dobrinsky, he presented the main barriers for innovation in the sub-region. He highlighting the importance of a new approach to innovation policy taking into consideration existing constraints (e.g. capacity constraints for implementation on the side of the governments, weak innovation absorptive capacities and integration into global value chains on the private sector side, as well as fragmented policy governance, etc.). He also put forward a number of policy principles around which policy actions in the SPECA sub-region could be structured and ways to put these principles into practice, drawing on examples from countries across the UNECE region. A survey was conducted during an interactive session to gather participants' views on the issues discussed. The survey results showed the following:

- Insufficient importance is attached to monitoring and evaluation across the SPECA countries with efforts needed to build a culture of monitoring and evaluation in the SPECA sub-region;
- A lack of interaction between academia and business stakeholders was specified as the most challenging principle to adhere to;
- Private sector involvement in STI policy development was rated as 4 (where 10 was considered as excellent involvement);
- Improvement in the regulatory framework (e.g. for crowdfunding, VC investments) would be the most appropriate support measure to be implemented in SPECA countries.

Following this intervention, Mr. Rumen Dobrinsky, Director for Strategy at the European Alliance for Innovation, commented on findings presented and stressed the important role innovation has to play in the SPECA countries to drive sustainable development and post-pandemic recovery. He noted the need to take into account the local context of SPECA sub-

¹ https://unece.org/sites/default/files/2021-10/3%20Towards%20Technological%20Transformation%20of%20the%20SPECA%20Countries_ENG_0.pdf



region, including showcasing local success stories, when adapting international best practices or mechanisms of innovation policy governance and national innovation system development, while also taking into account historical and cultural dimensions.

Webinar participants were asked for feedback and to share their experiences and challenges in the field of innovation policy in their respective countries. Ms. Aisuluu Mustapakulova, Head of the Innovation and Strategic Development Division at Kyrgyzpatent, gave an overview of the situation in Kyrgyzstan, where Kyrgyzpatent supports a broad range of initiatives in the field of innovation. She thanked UNECE for its support in developing a roadmap for national innovation ecosystem development and re-iterated the need for capacity-building for staff at the newly established 11 business incubators at higher educational institutions in Kyrgyzstan. In addition, Kyrgyzpatent now focuses on innovative development of the regions through support for start-ups (e.g. facilities, access to finance and support services, etc.).

Representative of the National Union of Economists of Turkmenistan, Mr. <u>Yuriy Aronskiy</u>, noted the relevance of the webinar to the country's internal challenges. Realizing the need to drive innovation and maintain economic competitiveness, the Government recently adopted a law on innovation to ensure an effective legal framework. He further noted a new initiative - Technovation - aimed at supporting female technical education, and thanked Uzbekistan for cooperation on a start-up development programme in Turkmenistan. Additionally, Mr. Yuriy Aronskiy asked for UNECE help to support national incubation and acceleration initiatives (including potential participation in international start-up competitions, mentorship, etc.).

Mr. Vladimir Popov, Director of the Start-up Incubator of the Kazakh-British Technical University, shared his experience working with students who struggle to successfully commercialize and scale up their initiatives. He detailed the main problems that impede the effective functioning of business incubators in higher education institutions, including the high cost of maintenance and management challenges. Mr. Popov suggested that a way to address numerous challenges would be to have business incubation as part of the educational curriculum rather than an extracurricular activity.

Finally, Mr. Erbolat Orazbekuly, Director at the Centre for Commercialization of University of Turan, mentioned that one of the main challenges for business incubators in Kazakhstan is low efficiency due to a lack of start-up projects. Mr. Orazbekuly informed that a network of business incubators across Kazakhstan would soon be created to facilitate access to funding, including venture funds and business angels, and to provide state support to innovative businesses in the regions. Mr. Erbolat Orazbekuly also requested UNECE assistance in organizing trainings for business incubator staff for more effective support to innovative start-ups.

Key insights

- ✓ SPECA countries have expanded STI policy support in recent years, but results have been mixed. STI policies would be more successful in general if underlying weaknesses in the SPECA sub-region were addressed, ideally in tandem, and starting from an honest assessment of existing capacities in the private and public sector.
- ✓ It is essential to adopt a new innovation policy approach based on a number of principles, including that national innovation policy should allow ample space for



- policy experimentation through pilots while investments in the hard infrastructure for STI support need to be matched with improvements in soft infrastructure.
- ✓ The SPECA countries should address gaps in coordination in terms of policy design and implementation in the area of STI policies and insufficient linkages among relevant actors, as well as the challenge of a weak monitoring and evaluation culture.
- ✓ The SPECA countries should access global value chains for innovation and knowledge imports. Countries in the region are not well integrated into global value chains, in part due to poor logistics and infrastructure, but also due to deficiencies in soft infrastructure such as conformity assessment and metrology, non-trade barriers, etc.
- ✓ It is important to strengthen the managerial capacities of business owners, especially of innovative ventures, and to promote lifelong learning in the workplace.
- ✓ There is a need to put forward the lack of commercialization of research as problematic in the SPECA countries. In general, formal cooperation mechanisms and linkages between the business community and research and higher learning organizations are few and are missing out on much of the potential they hold.

To further explore barriers SPECA countries face in supporting innovative enterprises, the UNECE secretariat conducted a survey targeted at the staff of the innovative business support institutions, i.e. business incubators and accelerators. The survey showed that:

- The main barrier for business incubators to effectively support start-ups is a lack of finance;
- To be more effective in their tasks, business incubators require government support, especially early in their operation (grants, training programmes);
- The majority of business incubators already have the basic competencies and capacities to effectively support start-ups, but they lack more advanced knowledge and skills;
- Support in fund raising for start-ups is a key knowledge gap for effective support.

The results of the surveys can be found in Annex 3 of the report.

In closing, the UNECE secretariat reiterated its commitment to support the efforts of the SPECA countries to reach Sustainable Development Goals (SDGs) and ensure a circular economy transition, and warmly welcomed further steps of joint cooperation under the Action Plan of the SPECA Innovation Strategy.



Annex I Draft Agenda

New approaches to innovation policy in the transition economies of the SPECA sub-				
	region			
09:30 - 10:00	Access to the session			
(Geneva)	Participants are recommended to join the meeting at least 15 minutes			
13:30 – 14:00	prior to its start.			
(Almaty, Bishkek)				
10:00 – 10:10 14:00 – 14:10	Welcome and opening remarks Mrs. Elisabeth Tuerk, Director, Economic Cooperation and Trade Division, UNECE			
10:10 – 10:30 14:10 – 14:30	Industrial policies to support innovative development of the SPECA sub-region Mr. Slavo Radosevic, Ph.D., Professor of Industry and Innovation Studies, University College London, United Kingdom			
10:30 – 11:30 14:30 – 15:30	New innovation policy in transition economies of the SPECA subregion: policy challenges and solutions Mr. Kris Boschmans, Ph.D., Senior Researcher, European Future Innovation System Centre, Belgium Comment by Mr. Rumen Dobrinsky, Director for Strategy, European Alliance for Innovation Comments by SPECA representatives: • Ms. Aisuluu Mustapakulova, Head of innovation and strategic development division, Kyrgyzpatent • Mr. Yuriy Aronskiy, Chairman, National Public Association Union of Economists of Turkmenistan • Mr. Vladimir Popov, Director, Startup Incubator of the Kazakh-British Technical University, Kazakhstan • Mr. Erbolat Orazbekuly, Director, Centre for Commercialization of University of Turan, Kazakhstan			
11:30 – 11:50 15:30 – 15:50	Poll and discussion on SPECA stakeholders' interest in the topics of the upcoming UNECE training on effective support to innovative enterprises in the sub-region. Moderator: Ms. Lyudmyla Tautiyeva, consultant, ECE			
11:50 – 12:00 15:50 – 16:00	Next steps Mr. Christopher Athey, Economic Affairs Officer, Innovative Policies Development Section, UNECE			



Annex II Webinar participants

1	Kuspangaliyev	Makhambet	Satbayev university	Head of the Lab	Kazakhstan
2	Litvinova	Liubov	Kazakh National University	PhD Student	Kazakhstan
3	Kambarova	Zhulduz	Astana IT University	Head manager	Kazakhstan
4	Drobysheva	Liubov	Kokshetau University named after Sh.Ualikhanov	Commercialization office manager	Kazakhstan
5	Bukvaeva	Gulnar	University Turan Astana	Head of the Center for Entrepreneurship	Kazakhstan
6	Almetova	Aigerim	LLP Kazakhstan Engineering and Technology University	Professor	Kazakhstan
7	Nurmatova	Aigul	Kyrgyz Economic University named after M.Ryskulbekov	Vice-rector for extracurricular and social work	Kyrgyzstan
8	Reid	Alasdair	European Future Innovation System Centre	Policy Director	Belgium
9	Tokonbekova	Begimai	KNAU named after K.I. Scriabin	Student	Kyrgyzstan
10	Baimukhanov	Dauletzhan	ENU named after L.N. Gumilyov	Professor	Kazakhstan
11	Boschmans	Kris	European Future Innovation System Centre	Senior Researcher	Belgium
12	Kazhenov	Saken	Research Intern	MIT Enterprise Forum CEE	Kazakhstan/Poland
13	Radosevic	Slavo	University College London (UCL)	Professor of Industry and Innovation Studies	United Kingdom
14	Bostroem	Steven	ВКСР		Kazakhstan
15	Pallaev	Tokhir	UNECE	Consultant	Tajikistan
16	Zholamanov	Yerlan M.	Kazakhstan Engineering Technological University	Associate Professor	Kazakhstan



17	Aronskiy	Yuriy	The Union of Economists of Turkmenistan	Chairman	Turkmenistan
18	Suyunchaliyeva	Maiya	KazNARU	Project manager	Kazakhstan
19	Aisalkyn	Talasbekova	John Galt	VP	Kyrgyzstan
20	Atabayev	Hemra	USAID YDA	Youth capacity development program coordinator	Turkmenistan
21	Mustapakulova	Aisuluu	Kyrgyzpatent	Head of innovation and strategic development division	Kyrgyzstan
22	Sharsheeva	Aida	Researcher	Researcher	Kyrgyzstan
23	Cappellano	Francesco	University of Eastern Finland	Researcher	Italy
24	Popov	Vladimir	JSC "Kazakh-British Technical University"	Director "KBTU Startup Incubator"	Kazakhstan
25	Babiyev	Beimbet	OQUDA	CEO	Kazakhstan
26	Alimkulova	Aigul	OQUDA	COO	Kazakhstan
27	Dobrinsky	Rumen	European Alliance for Innovation	Director of Strategy	Switzerland
28	Ayesheva	Gulshat		Tech commercialisation specialist	Kazakhstan
29	Isakul kyzy	Venera	Kyrgyz National Economic University	Head of Marketing Department	Kyrgyzstan
30	Tologonova	Aida	Kyrgyz-German Institute of Applied Informatics	Rector	Kyrgyzstan
31	Orazbekuly	Yerbolat	Centre for commercialisation of technologies, University of Turan	Director	Kazakhstan

UNECE staff engaged in organisation, including speakers

Elisabeth Tuerk	Director, ECTD	Speaker
Christopher Athey	Economic Affairs Officer, ECTD	Moderator
Lyudmyla Tautiyeva	Consultant, ECTD	Moderator
Ekaterina Guznova	Consultant, ECTD	Technical moderator



Annex III Survey results

Poll 1	Question	Responses	Results (number or percentage of votes)
1	What is the most challenging principle to adhere to in your country?	Interact more with academia and research, and business stakeholders when designing and implementing STI policy	6 votes
		Tailor policies to implementation capabilities	4 votes
		Make improvements to the "soft infrastructure of innovation policy"	2 votes
		Adopt a broad view of innovation policy beyond cutting-edge research	3 votes
		Coordinate better across government bodies, at the national and subnational	8 votes
		level	
2	What is the main barrier towards improving the	Insufficient budget	38%
	monitoring and evaluation culture?	Insufficient skills	38%
		Unfamiliarity/insufficient importance attached to monitoring and evaluation	69%
		exercises	
		Weak evidence base	8%
		Absence of a dedicated unit in government responsible for monitoring and evaluation	38%
3	How would you assess the private sector	0	7%
	involvement in STI policy elaboration to date?	1	0%
	(scale from 1 to 10, 10 is excellent involvement)	2	7%
		3	14%
		4	43%
		5	21%
		6	7%
		7	0%



		8	0%
4	What (additional) support measures for equity	Co-investment schemes	27%
	finance would be most appropriate in your country?	Tax incentives for equity investors (e.g. business angels or venture capitalists)	45%
		Public equity funds	27%
		Grant support	55%
		Improvements to the regulatory	82%
		framework (for crowdfunding, VC	
		investments and so on)	
Poll 2	Question	Responses	Results
1	What is the main barrier for your BI to	lack of capacities (staff)	46%
	accompany well the start-ups?	lack of support from state/university	31%
		incubator is located in	
		the problem is the lack of start-ups and	15%
		entrepreneurial talent	
		financial model of the BI/ lack of	85%
		financing	
2	What would enable you BI to be more effective	support from the private sector (investments,	62%
	in its tasks?	mentorships)	
		support from the government (grants,	77%
		training programmes)	
		understanding better how incubators work	15%
		your variant	-
3	How do you assess your competences/ capacities of your BI to effectively accompany a start-up:	well-equipped	15%
		have the basics but lack more advanced	85%
		knowledge and skills	
		lacking some basic knowledge and skills	8%
4		business planning	38%



What do you consider as the knowledge gap to	financial records and reporting	46%
effectively accompany start-ups:	legislation and regulations on start-ups	31%
	support in obtaining funding	54%
	support in expanding to other markets	46%