



EU4Digital

EU4Digital: supporting digital economy
and society in the Eastern Partnership

ICT Innovation Ecosystems for start- ups and scale-ups: action plan for policy recommendations: Republic of Moldova

June 2020



Background

The EU4Digital Facility was launched by the European Commission in January 2019. It aims to extend the benefits of the European Union's Digital Single Market to the Eastern partner countries: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova (hereinafter – Moldova) and Ukraine. The EU4Digital Facility works in six digital thematic areas, including ICT innovation stream.

In 2019-early 2020, the ICT Innovation stream is focusing on the identification and sharing of best policies and practices of policy implementation at the national and regional level in ICT innovation field. Each Eastern partner country selected one policy area for EU4Digital Facility to focus on.

Five policy areas have been selected by partner countries:

1. Intellectual property rights management for digital innovations (Armenia);
2. New organisational forms for supporting ICT Innovation (Azerbaijan);
3. Digital innovation SMEs' access to finance (Georgia, Ukraine);
4. **ICT innovation ecosystems for start-ups and scale-ups (Moldova);**
5. Digitising industry (digital transformation of SMEs in traditional sectors) (Belarus).

List of abbreviations used in the document:

Agency for R&D – National Agency for Research and Development

ATIC – Moldovan Association of Information and Communications Technology Companies

EaP – The Eastern Partnership

EC – The European Commission

EU – The European Union

MFAEI – Ministry of Foreign Affairs and European Integration

MEI – Ministry of Economy and Infrastructure

MECR – Ministry of Education, Culture and Research

TBD – To be determined

ODSME/ODIMM – Organization for the Development of the Small and Medium Enterprises Sector

VET – Vocational education and training

For each of these areas, the Facility has studied the best EU practices, undertaken the gap analysis in each country and developed recommendations that identify specific EU tools, platforms, practices that can be mastered by Eastern Partnership country stakeholders. The gap analysis and recommendations have been validated with the EU4Digital ICT innovation Expert Network of Moldova in April 2020.

This document provides the **action plan** for addressing the gaps related to policy area '**ICT Innovation Ecosystems for start-ups and scale-ups**' in the **Republic of Moldova**. It defines five key recommendations with action steps and considerations for implementation or intervention.

The proposed action plan can be used as a basis for further activities and possible independent joint projects of stakeholders. Some of activities proposed in this action plan can be covered within the current mandate of the EU4Digital Facility (training, study visit, networking events, promotion activities, etc.).

This document was provided for national stakeholder consultation. EU4Digital Facility asked the stakeholders to read and share their position, comments and suggestions during the consultation.



Ecosystem for digital innovations is seen as the one formed by people, start-ups and companies in their various stages and various types of organisations interacting as a system to create and support digital innovations.

Ecosystem builders are those ecosystem actors who:

- play a role in creating an inclusive network of entrepreneurs in the local community through running a co-working space, mentoring young entrepreneurs or organising networking events;
- play a role in government and are involved in making the policy that effects start-ups;
- play a role in the innovation and entrepreneurship infrastructure and service menu (Startup Europe).

The goal of the innovation ecosystem is to enable the high level of innovative companies' productivity in the ecosystem through delivery of certain required services.

Policy towards innovation ecosystem development draws from the understanding that the main productivity sources of ecosystems are the quality of institutions (quality of regulation and framework conditions for innovations in the country), quality of the actors (through building competencies and skills of ecosystem actors) and the quality of links (through networking and developing relevant organisational forms) among them.



Overview of the Action Plan

Key recommendations	Reference to Policy recommendations
<p>1. Establish the marketplace facilitating collaboration of all ecosystem actors in Moldova (and broader in EaP) and providing a range of innovation support services across lifecycle stages of innovation</p> <p>Final goal: <i>one stop shop for ICT innovation ecosystem actors and communities in the EaP which provides collaboration opportunity and serves as a marketplace to provide and receive ICT innovation services during all business lifecycle stages. The platform is made accessible and open for all ecosystem actors. Infrastructure organisations can register and independently update their information. The platform exchanges data with similar platforms (e.g. F6S, Dealroom, EuropeanStartups). Also, the lacking services can be identified and introduced.</i></p>	<p>R.1.1.-R.1.3.; R.2.1.-R.2.5.; R.3.1.-R.3.4.</p>
<p>2. Facilitate international cooperation of ecosystem builders and digital innovation start-ups and scale-ups</p> <p>Final goal: <i>increased collaboration of Moldavian ecosystem actors, start-ups and scale-ups with the EU / international networks and ecosystem actors and enhancement of the ICT innovation services that are currently insufficiently covered through transfer of the EU knowledge and practices.</i></p>	<p>R.3.5.; R.3.6.; R.6.1.; R.6.2.</p>
<p>3. Facilitate the development of expert communities and increase their involvement into policy design and implementation</p> <p>Final goal: <i>increased number, capacity and credibility of digital expert communities and their involvement by public authorities into policy design and implementation, as well as visibility of the expert communities to start-ups and SMEs.</i></p>	<p>R.3.7.; R.4.1.-R.4.5. R 5.7.</p>
<p>4. Enhance institutional capacity through training and development programmes for ecosystem actors</p> <p>Final goal: <i>enhanced capacity of policymakers and implementers to design, implement and deploy good innovation policy, support and services in collaboration with each other and similar actors across the borders (in the EU).</i></p>	<p>R.3.8.; R.4.6. R.5.1.; R.5.2.; R.5.4.-R.5.6.; R.5.8. R.7.1.-R.7.2.</p>
<p>5. Develop financial support framework and introduce instruments for financial support of digital innovation ecosystem players</p> <p><i>Additional recommendation as per request of Moldova Expert Network (not extensively covered in the gap analysis).</i></p> <p>Final goal: <i>financial support instruments are introduced for innovation ecosystem development, including innovation projects, start-ups and SMEs, and innovation ecosystem actors.</i></p>	<p>R.1.4.; R.4.7.-R.4.9.; R.5.3.; R.8.1.-R.8.3.</p>



Detailed Action Plan

Recommendation / Action	Potential activity owners / leads	Other participants (optional)	Indicative timeline		Status	Specification	Link to Policy REC	Comments and suggestions
			2020-2021	2022-2025				
1. Establish the marketplace facilitating collaboration of all ecosystem actors in Moldova (and broader in EaP) and providing a range of innovation support services across lifecycle stages of innovation								
Final goal: one stop shop for ICT innovation ecosystem actors and communities in the EaP which provides collaboration opportunity and serves as a marketplace to provide and receive ICT innovation services during all business lifecycle stages. The platform is made accessible and open for all ecosystem actors. Infrastructure organisations can register and independently update their information. The platform exchanges data with similar platforms (e.g. F6S, Dealroom, EuropeanStartups). Also, the lacking services can be identified and introduced.								
1.1. Develop a concept of the regional marketplace , incl. technical, organisational and legal set-up, including operator in each Country	Tekwill; Moldova IT park	ATIC	X		Not started	<i>Note:</i> It is important to ensure the national data ownership and possibility for the stakeholders to quickly update their profiles. <i>Possible steps:</i> <ol style="list-style-type: none">determine the scope of the platform – national, regional or international;determine the funding sources, operator and the functions of operator;prepare technical specification of the platform.	R.1.2.; R.1.3.	
1.2. Develop the platform for ICT Innovation ecosystems collaboration and service provision	Tekwill; Moldova IT park	ATIC		X	Not started	<i>Note:</i> Mapping the list of ecosystem actors, their services, and list of existing digital communities in Moldova was done by EU4Digital Facility. <i>Possible functionalities:</i> <ul style="list-style-type: none">mapping of the ecosystem actors;mapping the services provided by ecosystem actors (marketplace of services);possibility for service providers from other countries to register;assessment by businesses of the quality of the services received and voting for existing and lacking services;infrastructure organisations can register and independently update their information;display of the aggregated service landscape is available;	R.1.1.; R.2.1.-2.5.; R.3.1.; R.3.3.; R.3.4.	



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			2020-2021	2022-2025				
						<ul style="list-style-type: none"> enabling teambuilding for digital businesses and search for partners with complementary competencies (or enable this functionality to be provided externally in an interoperable mode with the platform); enabling the networking of the R&D and innovation laboratories and centres for digital innovations among the EaP partners and EU Member States (or enable this functionality to be provided externally in an interoperable mode with the platform); other functions. 		
1.3. Promote and maintain the platform	Tekwill; Moldova IT Park	ATIC		X	Not started	<p><i>Possible steps:</i></p> <ol style="list-style-type: none"> information dissemination among stakeholders regarding list of services provided, gaps in provision of the services, demand for new services as well as promotion of the platform in mass media; the organisations are informed about possibility to update their profiles. 	R.1.1., R.2.1. R.3.2.	
2. Facilitate international cooperation of ecosystem builders and digital innovation start-ups and scale-ups Final goal: <i>increased collaboration of Moldavian ecosystem actors, start-ups and scale-ups with the EU / international networks and ecosystem actors and enhancement of the ICT innovation services that are currently insufficiently covered through transfer of the EU knowledge and practices.</i>								
2.1. Connect to the most relevant EU platforms and networks	Tekwill; Moldova IT Park	ATIC	X	X	In progress	<p><i>Note:</i> The basic list of EU platforms is developed by EU4Digital Facility.</p> <p><i>Possible steps:</i></p> <ol style="list-style-type: none"> identify the priority platforms and networks; assign the coordinators; join and maintain the initiative. 	R.6.1.	
2.2. Transfer the incubation and acceleration programmes and other support	National Agency for R&D; Tekwill	MEI; iHub		X	Not started	<p><i>Possible sources of programmes:</i></p> <p>EIT Digital Accelerator, European Cluster organisations.</p>	R.3.6.	



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			2020-2021	2022-2025				
services from the EU								
2.3. Provide support for local start-ups and digital innovation companies to select and participate in international incubation and acceleration programmes	Tekwill; Moldova IT Park	ATIC	X	X	Ongoing	<i>Examples:</i> EIC Accelerator Pilot; Accelerace; Antler Amsterdam; Antler Oslo; Antler Stockholm; APX; Birdhouse; Techstars London; Startupbootcamp Internet of Things and Big Data Barcelona; Yunus Social Business Accelerator and other	R.3.5.	
2.4. Establish the cooperation programme with expatriates to contribute their expertise and international networks	MEI; Moldova IT park	MFAEI (Office for Relations with the Diaspora)	X	X	Not started	<i>Possible steps:</i> 1. define the programme scope and determine the organisation governing the programme; 2. map the relevant and knowledgeable expatriates; 3. coordinate the matchmaking and interaction among expatriates, accelerators, new start-ups, scale-ups and other ecosystem actors by the determined organisation.	R.6.2.	
3. Facilitate the development of expert communities and increase their involvement into policy design and implementation								
Final goal: Increased number, capacity and credibility of digital expert communities and their involvement by public authorities into policy design and implementation, as well as visibility of the expert communities to start-ups and SMEs.								
3.1. Activate and support the relevant ICT innovation expert communities in Moldova through facilitated processes	Tekwill	Moldova IT Park; ATIC; Startup Moldova.	X		In progress	<i>Note:</i> The lists of stakeholders and existing digital communities are collected by EU4Digital Facility <i>Types of communities:</i> Thematic, uniting similar groups of actors, interlinked with non-ICT sectors of economy. <i>Possible steps:</i> 1. organise certain events and promote the usage of tools for community-building during events;	R.4.1.- R.4.4.	



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			2020-2021	2022-2025				
						2. task a competent organisation to provide operational services of community-building; 3. funding is made available as small grants to facilitate the development of new prioritised communities; 4. support by 'secretariat/virtual coordination office' during the initiation stage of the community; 5. provide guidance on possible forms of involvement into policy design and implementation; 6. promote success stories of expert communities' involvement and cooperation.		
3.2. Provide support to the existing ecosystem actors in replicating the activities in regional centres	Tekwill	Local Public Authorities	X		Not started	<i>Possible support:</i> Provision of premises, access to digital infrastructure, co-funding training of trainers for the regions and others.	R.4.5.	
4. Enhance institutional capacity through training and development programmes for ecosystem actors Final goal: <i>enhanced capacity of policymakers and implementers to design, implement and deploy good innovation policy, support and services in collaboration with each other and similar actors across the borders (in the EU).</i>								
4.1. Introduce the programme enhancing skills for better policymaking using existing EU tools for policymakers	MEI; MECR	ATIC	X		Not started	<i>Examples of the tools:</i> REFIT toolbox; "Skills for evidence-informed policy-making: professional development framework" (JRC); PAXIS and other tools.	R.7.1.	
4.2. Organise study visits and internships for policymaking organisations and innovation agencies for	MEI; MECR; Agency for R&D	ATIC	X		Not started	<i>Possible topics:</i> Public consultations, decision-making, collaboration with business and academia. <i>Possible support:</i>	R.7.1.	



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knowledge and practice transfer from EU						<ul style="list-style-type: none"> the knowledge transfer (bridging with EU organisations; providing of trainings) is facilitated by a professional organisation; funding associated with trainings and travel are available. 		
4.3. Establish the programme for integration of digital business associations from EaP region to the EU business community and international associations	ATIC	Business associations	X		Not started	<i>Possible steps:</i> <ol style="list-style-type: none"> identify the list of EU associations and the priorities of integration among the EaP associations; facilitate the agreement negotiation and establishment; support the stay at the EU association for learning the value proposition and integration into networks. 	R.3.8.; R.7.2.	
4.4. Establish the programme for the EaP ecosystem actors to join the specialised EU training programmes, enhanced with intensive practical component	Startup Moldova/ Tekwill; Moldova IT Park	Most of the ecosystem players	X	X	Not started	<i>Ecosystem actors:</i> Incubators, accelerators, innovation clusters, technoparks, digital competence centres, digital innovation hubs. <i>Possible steps:</i> <ol style="list-style-type: none"> select EU programmes (as Startup Commons); establish the organisational and financial mechanism for joining these programmes; establish internship schemes and programs in innovation infrastructure organisations with start-ups and innovative companies. 	R.5.1.; R.5.2.	
4.5. Establish targeted networking with the EU counterparties	Startup Moldova/ Tekwill; Moldova IT Park	Most of the ecosystem players	X	X	Not started	<i>Possible steps:</i> <ol style="list-style-type: none"> funding is made available for covering registration fee, travel and accommodation costs of live events in the EU (possible prototype: MOST project in Belarus); networking (bridging) online and offline among EU and EaP organisations. 	R.3.8.; R.5.1.; R.5.2.	



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			2020-2021	2022-2025				
						<i>Note:</i> A list of over 100 initiatives and organisations identified by EU4Digital Facility		
4.6. Develop the legal framework for different ICT community actors regarding organisational forms of cooperation	MECR; MEI; Agency for R&D	ATIC	X		Not started	<i>Possible steps:</i> 1. the review of the national legislation to be done of new organisational forms (competence centres, accelerators, innovation clusters, digital innovation hubs etc.); 2. the mentorship from the experienced EU organisations might be considered useful.	R.4.6.	
4.7. Implement pan-European qualification frameworks and training packages based on them	MECR	MEI; ATIC	X	X	Ongoing	<i>Examples of frameworks:</i> European Entrepreneurship Competence Framework; European e-Competence framework; SFIA; DigiComp etc). <i>EU4Digital Facility Digital Skills stream is currently performing activities related to implementation of European qualification frameworks.</i>	R.5.4.; R.5.6.	
4.8. Develop a national network of digital innovation competence centres for SMEs	MECR; MEI; ODSME	ATIC; Tekwill; Local Public Authorities		X	In progress	<i>Note:</i> The EU Delegation to Moldova has already announced a project for creation of Digital innovation competence centres in 2 key regions in Moldova (Cahul and Ungheni). <i>Possible steps:</i> 1. select and apply the common Pan-European or international) framework for mapping digital competencies, digital technologies and solutions; 2. do the mapping of existing competences among R&D, high education, and ICT business sector; 3. networking activities for bridging the existing competence centres; 4. facilitation of strengthening of the existing competence centres.	R.3.7.; R.5.7.	
4.9. Develop a mass-scale VET training and retraining for professionals at the crossroad of IT	MECR	Tekwill		X	Not started		R.5.5.; R.5.8.	



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			2020-2021	2022-2025				
and traditional industries ('dual education' approach)								
5. Develop support framework and introduce instruments for financial support of digital innovation ecosystem players <i>Additional recommendation as per request of Moldova Expert Network (not extensively covered in the gap analysis).</i> Final goal: Financial support instruments are introduced for innovation ecosystem development, including innovation projects, start-ups and SMEs, and innovation ecosystem actors								
5.1. Localise the recommendation in other relevant ICT Innovation intervention areas (developed for other EaP countries by EU4Digital Facility) for the republic of Moldova	Tekwill	MEI Moldova IT Park	X		Not started	<i>Notes:</i> <ul style="list-style-type: none"> other topics of interest may include "Digital innovation SME's access to finance" and "Digitising industry (digital transformation of SMEs in traditional sectors)"; the main output of these recommendations should be the proposed framework for financial support. 	R.8.1.	
5.2. Establish a Fund for support of digital innovation and technology startups including the operational toolbox	MEI; ODSME Startup Moldova Program	Moldova IT Park; ATIC; ODIMM; MEI, Moldova IT Park	X	X	In progress	<i>Note:</i> Feasibility analysis is already undertaken in the country. <i>Possible steps:</i> <ol style="list-style-type: none"> undertake stakeholder consultations following the feasibility analysis; identify Donors/Co-investors to the Fund; perform negotiations; adjust framework and operational toolbox of a Fund to consider the rules of donors/co-investors; determine the operating structure and management of the Fund; develop additional instruments for financial support for innovation ecosystem development launch the Fund and promote its existence. <i>Possible instruments may include:</i>	R.1.4.; R.4.7.- R.4.9.; R.5.3.; R.8.2.- R.8.3.	



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			2020-2021	2022-2025				
						<ul style="list-style-type: none"> • innovation vouchers tool for bridging competence centres and SMEs (Startup Canada Communities; Finnish innovation vouchers etc); • small grants for services to coordinate the expert community and for networking events; • grants to support the innovation cluster operating companies and projects; • specialised decision-making tools for business angels, venture capitalists, venture fund; managers, for example, InnoRate project • maintain and publish an actual overview of funding sources for digital innovations. 		
5.3.Introduce DISC in the Republic of Moldova	Tekwill; MEI	ATIC; Moldova IT Park	X	X	Ongoing	<i>Note:</i> DISC is the Digital Innovation and Scale Up Program, planned EU Initiative for Central, Eastern and South Eastern Europe. <i>EU4Digital Facility is currently performing DISC feasibility study</i>	R.8.3.	