



ANNEX 1

of the Commission Implementing Decision on the Annual Action Programme 2019 in favour of the Republic of Moldova

Action Document for "EU4MOLDOVA: Startup City Cahul (UE pentru Moldova: Startup Oraşul Cahul)"

1. Title/basic act/ CRIS number	EU4MOLDOVA: Startup City Cahul (UE pentru Moldova: Startup Oraşul Cahul) CRIS number: ENI/2019/042-243 financed under the European Neighbourhood Instrument	
2. Zone benefiting from the action/location	Republic of Moldova The action shall be carried out at the following location: the Republic of Moldova	
3. Programming document	Single Support Framework for EU support to Moldova (2017-2020)	
4. Sustainable Development Goals (SDGs)	Main SDG(s): 9. Industry, Innovation and Infrastructure and 11. Sustainable cities and communities Other significant SDG(s): 5. Gender equality, 8. Decent work and economy growth, 10. Reduced inequalities	
5. Sector of intervention/ thematic area	Sector 1: Economic development and market opportunities, <i>including</i> sustainable and inclusive economic growth	DEV. Assistance: YES
6. Amounts concerned	Total estimated cost: EUR 7 000 000 Total amount of European Union (EU) contribution EUR 7 000 000	
7. Aid modality(ies) and implementation modality(ies)	Project Modality Indirect management with an entrusted entity	
8 a) DAC code(s)	Main DAC code - 22040 Information and communication technology (ICT)	
b) Main Delivery	42000 - European Commission - European Development Fund	

Channel				
9. Markers (from CRIS DAC form)	General policy objective	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input type="checkbox"/>	X	<input type="checkbox"/>
	Aid to environment	X	<input type="checkbox"/>	<input type="checkbox"/>
	Gender equality and Women's and Girl's Empowerment	<input type="checkbox"/>	X	<input type="checkbox"/>
	Trade Development	<input type="checkbox"/>	X	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	X	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity	X	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	X	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	X	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	X	<input type="checkbox"/>	<input type="checkbox"/>
	10. Global Public Goods and Challenges (GPGC) thematic flagship	Human development, incl. decent work, social justice and culture		

SUMMARY

The overall objective is to support inclusive economic development in Moldova by increasing the potential of the digital economy and enhancing regional competitiveness and its business and investment environment.

The programme will be implemented in the region of Cahul, which is a focal region for EU support to Moldova. The focus on the Information and communications technology (ICT) sector and innovation has the potential to support Moldova competing in the regional and global markets, generating additional source of export revenues and providing high value-added, sustainable and well-remunerated employment. This programme could also contribute to reducing regional socio-economic imbalances and strengthening social cohesion in small towns and rural areas. However, this is contingent upon several factors: the development of adequate infrastructure, the provision of an enabling ecosystem, support to ICT entrepreneurs and business start-ups. . It will complement the existing EU programme on supporting inclusive economic empowerment of the focal regions (Cahul and Ungheni) of Moldova.

The Programme objective will be achieved through measures targeted at: (i) Support to the creation of a Regional Innovation and Technology Centre; (ii) Support to the National Moldovan Science, Technology, Engineering and Math (STEM) promotion campaign and development programmes; and (iii) developing a seed funding and acceleration programme for ICT related start-ups.

This Programme is in line with the Eastern Partnership priorities, the revised Association Agenda and the objectives of the 2017-2020 Single Support Framework (SSF) for Moldova and Chapter 18 of the European Union – Moldova Association Agreement. It will also support the implementation of the Eastern Partnership's "20 Deliverables for 2020", as they relate to economic development. The proposed activities will support the implementation of the priorities identified in the European Joint Development Cooperation Strategy (Joint Programming Document), the National Strategy "Digital Moldova 2020", Strategy for enhancing IT industry competitiveness.

This Programme will help create in the Republic of Moldova jobs, growth and innovation, particularly benefiting the young people in terms of opportunities for education and employment and for starting up low initial capital businesses. The programme will link to the smart specialization priorities of Moldova's national research and innovation agenda.

1 CONTEXT ANALYSIS

1.1 Context Description

The Republic of Moldova (further on referred to as Moldova) is a lower middle-income country with a population of 3.55 million¹. The population is distributed evenly between men (48.1 %) and women (51.9%). In 2017, the National Bureau of Statistics estimated that 42.7% of the population were urban dwellers and 57.3% lived in the rural areas. Moldova ranks 118th out of 188 countries on the Human Development Index (HDI-0.7). Moldova remains the poorest country in Europe with a gross domestic product (GDP) per capita of USD 3,187 in 2018, compared with USD 2,693 in 2017². A European Neighbourhood and Partnership Instrument (ENPI)-funded project on regional statistics concluded that in 2014 56.32% of GDP was generated in Chisinau. The private sector accounts for 56.6% of GDP. Corruption in the public and the private sectors still remains a major obstacle to sustainable economic, political and social development of the country.

Despite strong investments, GDP growth slowed to 4.0% in real terms in 2018, moderating from the 4.7% expansion in 2017. The economy is projected to grow by 3.6% in 2020 and as the growth of the main trade partners strengthens, growth in Moldova should reach 3.8% in 2021. Growth was driven by a surge in investments following a sharp increase in public investment and resurgence in lending and a rise in household consumption, supported by growing remittances and real wages.

The economic growth in recent years has not yet resulted in increasing formal employment in industry, construction or services. The employment rate for the working-age population (15-64) is only 46.1%. However, this refers only to employment inside Moldova and excludes

¹ National Bureau of Statistics of the Republic of Moldova (www.statistica.md). The figure is considered to be overestimated; the real population would be around 2.8 million.

² World Bank, Economic update for Moldova, <https://www.ceicdata.com/en/indicator/moldova/gdp-per-capita>

work-related short-term migration, which has been recovering in the last years. The number of residents working abroad or looking for work abroad stands at 13.7% of the working-age population compared to 12.4% in 2017. Unemployment stayed very low at 3.1% in 2018, cushioned by seasonal work in agriculture and migration. Although the World Bank Human Capital Index for Moldova has slightly increased in the recent years, the country still lags behind the average for its region.

Remittances increased by 12% year-on-year in 2018. Most of the increase comes from EU countries. Net foreign direct investment, which has only been recovering slowly since the banking crisis in 2014-2015, reached 1.7% of GDP in 2018 and is still significantly below the pre-crisis levels.

Looking ahead, the economy is likely to continue to grow moderately in the next years driven by private consumption and public and private investment. With limited economic growth driven by consumption, deep structural reforms are needed to enable new drivers of growth. If Moldova is to continue to maintain macro-economic stability, sustain good GDP growth, increase employment opportunities and tackle poverty, it will need to stimulate the creation of higher value-added businesses capable of better remunerating the workforce. At present, there are few sectors or niche sub-sectors capable of meeting that challenge. Innovation creates new and improved products and services, leading to jobs and investment opportunities. The ICT is the fastest growing sector in Moldova recording 20-fold growth in the past 12 years. The sector accounts for 8% of Moldova's GDP and has been identified by the government as one of the country's priority economic sectors. Moldova is expected to continue to be an attractive ICT destination in the future due to its advantages in terms of costs, location, and skills. As exports have grown, so has the domestic ICT market. The ICT industry employs more than 20,000 people, of which those in IT constitutes 10,000, and pays the highest salaries in all sectors in the last years based on the National Bureau of Statistics (NBS) data.

1.2 EU Policy Framework

The **Association Agreement**³ includes a commitment to improve the Information Society (Chapter 18 of the AA) and Innovation (Chapter 10 of AA). Moldova committed to cooperation in this sector, through facilitating access to markets, encouraging competition and investment, and promoting the development of public services online.

The "**Eastern Partnership 20 Deliverables for 2020**"⁴ puts a great emphasis on sustainable and inclusive economic development. Deliverable 7 relates to the harmonisation of digital markets with one of its targets to establish by 2020, well-structured ICT research and innovation ecosystems in Eastern Partnership countries. Moreover, Deliverable 6, also very relevant for the present programme, is about the creation of new job opportunities at the local and regional level. Furthermore, the programme addresses also Deliverable 18 that aims at investing in young people's skills, entrepreneurship and employability.

³ Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part
OJ L 260, 30.8.2014, p. 4–738 (BG, ES, CS, DA, DE, ET, EL, EN, FR, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV)

https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=uriserv%3AAOJ.L_.2014.260.01.0004.01.ENG

⁴ https://eeas.europa.eu/sites/eeas/files/20_deliverables_for_2020.pdf

Under the priority on Economic development of the Single Support Framework 2017-2020 for Moldova, the specific objective 4 aims at facilitating the emergence of start-ups in strategic sectors including by using the potential of the digital economy and at enhancing innovation and technology transfer towards business.

Moldova has been participating since 2014 to **HORIZON 2020** – the Framework Programme for Research and Innovation (2014-2020). It is the main instrument financing research and innovation in the European Union and the successor to seven previous Framework Programmes. Moldova is an active partner of the programme and shall continue to benefit from the opportunities the next programme offers as well.

1.3 Public Policy Analysis of the partner country/region

The ICT sector has evolved rapidly. With the support of the former ICT Ministry in the past and the Ministry of Economy and Infrastructure⁵ currently, a number of policies incentivising business start-ups and growth in the sector have been and continue to be implemented: tax incentives for IT specialists (extended until 2020), The Law on IT Parks no.77 from 21.04.2016, Start-up visa initiative for simplification of permits to stay for a longer period for IT specialists and IT investors in IT parks (adopted by Parliament in June 2017). The Ministry of Education, supported initiatives to upgrade ICT curricula in schools, apply ICT services in schools, investment for ICT related infrastructure, introduce optional ICT courses such as robotics, to update STEM disciplines, to promote student mobility in IT, and therefore to develop human capital for the future.

The government is committed to using IT to increase competitiveness and jobs and improve governance and has made efforts to establish a supporting strategic, legal (including the IPR) and institutional framework. The Government approved a national strategy “**Digital Moldova 2020**”, which *inter alia* defines targets for broadband internet connection, strengthening backbone networks, automation of public services, use of electronic signatures, digital literacy enhancing, cyber security, etc. The Moldovan Parliament announced on the 29 November 2016, that the Parliamentary Committee on National Security, Defence and Public Order had approved amendments to the 2011 law related to the regulatory functions and powers of the National Centre for Personal Data Protection (NCPDP). The amendments form part of Moldova’s process of implementing the EU Data Protection Regulation⁶. The **Small and Medium Enterprises’ Sector Development Strategy 2012–2020** also includes reference to the need to develop the digital economy and stimulate growth in the ICT Sector.

Currently, the Ministry of Economy and Infrastructure works upon developing the IT Sector Competitiveness Strategy 2.0 that will refer to IT human capital development and better business environment. It will include continuation of existing efforts on one hand, as well as enlargement of the current portfolio of actions. In particular, it will introduce amendments to

⁵ Ministry of IT was merged with the Ministry of Economy in 2017

⁶ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). OJ L 119, 4.5.2016, p. 1–88

the existing law on IT Parks and support to start-ups under a start-up Moldova program, including legislation to support seed funding or support to business angels.

The Ministry of Education, Culture and Research of Moldova embraced the roadmap for Smart Specialization and is in the process of identifying Smart Specialization priorities as part of the national research and innovation agenda, which will provide basis for future actions and investment projects in this area.

1.4 Stakeholder analysis

In accordance with the Decree of the Government of Moldova N°690 (30 August 2017), the **Ministry of Economy and Infrastructure** was established and assumed responsibility for the further development of the legal, regulatory and institutional framework in support of the ICT Sector. The Ministry will be the primary counterpart for this Action.

The Ministry of Education, Culture and Research is responsible for research in the Government. It supports as well initiatives to upgrade ICT curricula in schools, apply ICT services in schools, investment for ICT related infrastructure, introduce optional ICT courses such as robotics, to update STEM disciplines, to promote student mobility in IT, and therefore to develop human capital for the future.

The National Agency for Research and Development of Moldova (NARD) was created in 2018 following the Research and innovation sector reform. It is the successor of the three Moldovan public institutions: the 'Agency for Scientific Research and Development', the 'Agency for Innovation and Technology Transfer' and the 'Center for International Projects (CIP)' of the Academy of Sciences of Moldova. The Agency is a central administrative body subordinated to the Government which implements the state policy and programmes in research, innovation and development. The Agency is responsible for Horizon 2020 programme.

The Small and Medium Sized Enterprise Development Organisation (ODIMM) is a state agency that contributes to the development of a competitive national economy by working with the SME sector, especially in rural areas and in the non-agricultural sectors. ODIMM is part of the Enterprise Europe Network (EEN).

The Moldovan Association of ICT Companies (ATIC) is the leading association and the voice of the Moldovan ICT industry and promotes the development of the ICT sector through viable partnerships between companies, similar organisations, government, educational institutions, state institutions and international organisations. ATIC represents the industry on different policy and legislative issues and to facilitate the exchange of best-practices between members. ATIC is growing fast and has now more than 400 IT companies as members.

ATIC has previous experience in working on human capital development initiatives with such projects as Aleg Cariera IT⁷, interventions to the Vocational ICT Education implemented through direct grants from Austrian Development Cooperation, Moldova ICT Summit Initiatives, The Tekwill⁸ project with a focus on entrepreneurship, innovation and education

⁷ <http://cariera.ict.md/>

⁸ <https://www.tekwill.md/>

with funds from USAID and Sweden, Robotics and ICT program for young people funded by USAID and Sweden, Smart Classroom program from KOICA resources. All the programs have been implemented in close cooperation with government agencies, private sector, academia and donor community.

The State University “B. P. Hasdeu” from Cahul is the youngest (1999) of the higher educational institutions of Moldova. It comprises three faculties (Economics, Computer Science (IT), Mathematics; Law and Public Administration; Philology-History). It has 180 teaching staff training 1,700 students (500 on part-time studies), with 18 Bachelor and six Master programmes.

Dunarea de Jos "University of Galati" is the oldest higher education institution in the South East region of Romania. Its sister college, **The Industrial Pedagogic College from Cahul**, has over 1,000 students with approximately 70 graduates annually in IT specialties. This college has benefited from endowment and support from the Austrian Development Agency through two projects starting December 2012 and has been connected with the IT industry via training of trainers in various IT related areas, internship programmes etc. ATIC considers that the college could serve as a node for further ICT Development in the region.

Civil society is less developed than in the EU, especially outside the capital, but it is slowly getting involved in decision making on public issues. The few existing policy centres / think tanks are mostly concerned with national policy making rather than local issues.

Local entrepreneurs, businessmen and businesswomen are also regarded as **target stakeholders**, whose engagement in the Programme will be essential.

1.5 Problem analysis/priority areas for support

The number of jobs in the **ICT sector** could increase provided that there are enough skilled workers. However, the industry has reached a peak, with the number of start-ups in the sector drying up, and further development will require support for the development of an adequate infrastructure, enabling ecosystems and constant supply of new, qualified labour.

Support is required to ensure capacity building and skills development of the labour force, not only at the Vocational Education and Training (VET) secondary education and higher education levels but also through STEM initiatives at the secondary level in general and where job seekers can benefit from relevant training/re-training programmes. The private sector would benefit from assistance to access foreign markets. Greater efforts are needed to promote entrepreneurship to foster the growth of new, innovative, competitive ideas and offers of access to IT funding.

An important element is to ensure support through development grants (i.e. co-financing and or/reimbursable) for innovative Moldova based companies, at the three different stages of business development: planning of a business, start-up phase and growing innovative businesses.

The efforts of the Government of Moldova in the past years through the e-Government agenda and joint initiatives with the private sector suggest that the sector has a high potential

to position itself competitively in the region, penetrate global markets and consequently make a significant contribution to economic growth.

Moldova has still an economic comparative advantage in ICT sector but remaining competitive will require significant investments, amongst others, in ITC and entrepreneurial education, also by deploying a larger scale ICT sector development agenda nationwide. To address the lack of human capital and entrepreneurial ecosystem, as the key challenges inhibiting ICT industry growth and innovation, the Government of Moldova jointly with the private sector strongly supported the development of an ICT Excellence Centre (Tekwill). The institutional approach is needed for stimulating economic growth through technology and education.

The Programme is expected to contribute to improvements in Moldova’s regional competitiveness and its business and investment environment, which will spur innovative, high-value technology products and businesses, which are essential for the development of the knowledge-based economy. In this sense, it further strengthens the achievement of objectives and fortifies the action ‘Inclusive economic empowerment of focal regions in Moldova’ (AAP 2018) which will be implemented in the focus regions of Ungheni and Cahul.

2 RISKS AND ASSUMPTIONS

Risks	Risk level (H/M/L)	Mitigating measures
The central authorities do not show enough support for the activities proposed at local level.	L	The EU will enhance exchanges with local authorities and encourage the central administration to strengthen its dialogue with them.
Lack of skilled local entrepreneurs and workforce to use fully the facilities of the Regional Innovation and Training Centre.	M	The Action will broaden the area of involvement beyond Cahul to attract best talent and will engage in networking and capacity building to strengthen capacities of entrepreneurs and potential workforce. The Centre will focus also on innovation in several sectors including ICT and creative industries.
The overall education system is not conducive to innovative pedagogical projects and embedding STEM in mainstream teaching.	M	The EU will enhance its consultation and dialogue with ministries and state agencies in charge of education and innovation.
Lack of good quality high tech start-ups and limited absorption capacity in the private sector.	M	The action will be designed taking into account the business reality in Moldova, including the average start-ups size and their capacity.
The business environment is not conducive to sustain initial investments and start-up activities.	H	In its policy and political dialogues with Moldova, the EU will continue to stress the need to ensure a level playing field for business, including fair competition and

	<p>transparency of investment conditions. Synergies with other projects (e.g. support to small and medium-sized enterprises (SMEs), to Intellectual Property Rights, etc.) will be sought.</p>
<p>Assumptions</p>	
<ul style="list-style-type: none"> - The Government continues to support the ICT Sector and innovation and meet its commitments under Chapter 18 of the Association Agreement; - The local actors in Cahul are prepared to play an active role in setting up and managing the Regional Innovation and Training Centre; - Sufficient staff and resources to Programme activities are made available by stakeholders; - Local civil society organisations, educational establishments, the government and private sector companies active in the ICT sector are willing to engage with the Programme. 	

3 LESSONS LEARNT AND COMPLEMENTARITY

3.1 Lessons learnt

Drawing on experiences from previous and on-going development programmes, funded by the EU and other donors, the main lessons learnt are:

- Involving stakeholders at all stages of the intervention processes allows building ownership and accountability for project results and ensures that the assistance is demand-driven.
- Concrete, tangible initiatives, delivering results early in the project, can ensure positive momentum, leverage and mobilise communities for more complex initiatives later.
- It is important to build the capacities of local partners to continue and replicate similar initiatives beyond the project lifetime. Coupling international expertise with local expertise would help transfer know-how and fortify local capacity. International organisations should be involved in project activities.
 - To build capacities to strengthening branch organisations has proven to be a good way to ensure local ownership and promote economic growth in the ICT sector.
- Infrastructure investments should be coupled with capacity development for local governments and service operators (both institutional and individual) to manage and maintain the services and internalise participatory governance practices.
- Finally, the action should foster logical linkages between local initiatives and policy changes at the national level, both for improving the national policies and to facilitate their implementation.

3.2 Complementarity, synergy and donor co-ordination

The proposed programme will complement and seek for synergies with the existing EU initiatives implemented in the framework of **EU4Business**, **EU4Innovation**, **EU4Digital** and/or **EU4 youth**⁹ but also **Horizon 2020**¹⁰, and its successors. Actions proposed in this programme will enhance the quality of human capital and thus, further support the growth and competitiveness of Moldova, complementing in particular, the assistance provided to SME development. Synergies will be sought with the following activities – linking research and business and providing finance for innovation start-ups. The proposed initiative is also complementary to the assistance provided by the EU in the framework of Erasmus+.

There has been greater activity at regional level. Since 2015, the Panel on Harmonisation of Digital Markets (HDM Panel) has been promoting harmonisation of digital markets within the Eastern Partnership region and between Eastern Partnership (EaP) partner countries and the EU. This is in line with deliverable N°7 ‘Harmonisation of digital markets’ under priority 1 ‘Economic Development and Market Opportunities of the adopted Joint Staff Working Document, ‘*Eastern Partnership – Focusing on key priorities and deliverables*’¹¹.

Building on the work of the HDM Panel, the EU launched in 2016 the EU4Digital initiative to support the preparation and implementation of roadmaps in the focal topics identified, including ICT innovation and start-ups ‘ecosystems and digital skills’. Regional technical assistance will be available as of 2019 for the implementation of concrete actions based on the recommendations of HDM studies. This will coincide with the start-up of this Programme, providing greater critical mass of support to the ICT sector.

United States Agency for International Development (USAID) has been assisting the development of Moldova’s ICT sector competitiveness since 2005, being at the forefront of policy, infrastructure, skills, entrepreneurship and trade developments in this sector. In 2016 USAID and the Government of Sweden initiated a joint support to the Development of ICT Excellence Center project that has supported the development of the first ICT Innovation and Excellence Centre in Chisinau, branded **Tekwill**, which has been implemented and currently is managed by ATIC. Tekwill aims to foster technological education and new businesses creation by energising research and development activities in Moldova and bringing together the sharpest minds to analyse industry issues, brainstorm solutions, stimulate breakthroughs and participate in the process of creating new prototypes and products that will become tomorrow’s tools. Tekwill is viewed as a sustainable and market-driven solution to address the workforce development gaps, thereby growing industry competitiveness, creating high quality, well paid jobs, and deterring the emigration of talented young people, including women. The excellence centre Tekwill has received attention and interest from stakeholders throughout the country. It is important to share and extend this positive experience from the capital to other regions with growth potential such as Cahul and Ungheni, the focus regions of the EU’s Annual Action Programme 2018. Leveraging positive experience from the capital would help to enhance competitiveness of the focus regions and help to promote diversification of economic opportunities pertinent for a long-term inclusive growth.

⁹ https://eeas.europa.eu/delegations/ukraine_en/28476/EU4Youth%20programme

¹⁰ <https://www.h2020.md/>

¹¹ http://ec.europa.eu/neighbourhood-enlargement/sites/near/files/near-eeas_joint.swd_2016467_0.pdf

Such initiatives, as a creative hub "ARTCOR", to be opened in Chisinau in June 2019, will provide space for co-working for professionals, organisations and creative businesses and it aims to become an engine of innovation that contributes to the development of creative entrepreneurship and stimulates the exchange of know-how and ideas. The experiences gained under such initiatives should be available to be accessed by the other regions.

The IT sector has been seen as a catalyst for economic development in Moldova with an opportunity for quick growth, high earning potential, a swift path from education to the workforce, and leverage to create positive changes in Moldovan exports. A responsive, multifaceted approach was used by USAID and Sweden with corresponding sector advancement and programmatic benchmarks. Results can be measured in terms of increased exports, strengthened inter-sector collaboration, and new innovations. Human capital development is at the core of USAID assistance, as the main resource for the ICT industry.

A National Centre for Digital Innovation in Education "Future Classroom" was created within the Pedagogical State University in Chisinau with the support of the aforementioned partners, private companies and the Moldovan Government. Based on the European Schoolnet model in Brussels, the centre aims to transform the educational system in Moldova by integrating digital technologies into schools. It is equipped with digital educational equipment. The Future Classroom pilot project was launched in 2017 in 11 general education institutions.

Sweden has launched the "*Girls go IT*" initiative. The goal is to economically empower girls and women, particularly the most vulnerable and marginalised women from poor rural communities of Moldova. Acquiring IT skills will enhance the opportunities for girls and women to find better paid jobs and potentially start their own businesses.

Ultimately, this will lead to improved living standards, more sustainable livelihoods and resilient communities. ICT jobs are still perceived as a non-traditional occupation for women. Therefore, promoting women and girls in ICT has a potential to reduce the gender gap and labour market segregation in Moldova. Besides, the global experience demonstrates that economically empowered women become more active and demand equal representation and participation in politics and decision making.

NOVATECA helps Moldovans attain a higher quality of life by increasing their economic and social opportunities through public libraries. Through a seven-year national program supported by the Bill & Melinda Gates Foundation in partnership with USAID, Novateca has provided Moldovan citizens with access to relevant information and locally tailored services in public libraries countrywide including access to free WiFi and internet in libraries throughout the country.

The EU Delegation is engaged in a wide-ranging policy dialogue with the Government.

The EU (including the European Training Foundation, (ETF)), Switzerland, Austria, Germany and Liechtenstein are active players in the VET sector reform.

4 DESCRIPTION OF THE ACTION

4.1 Overall objective, specific objective(s), expected outputs and indicative activities

This programme is relevant for the Agenda 2030. It contributes primarily to the progressive achievement of SDG Goal: 9.

The **overall objective** is to support inclusive economic development in Moldova by increasing the potential of the digital economy and enhancing regional competitiveness and its business and investment environment

The **specific objectives** are:

- 1) To foster partnerships for innovation and entrepreneurship between the private sector, public sector and educational institutions in the region of Cahul,
- 2) To promote technology, problem solving and creative solutions in learning and make STEM topics more attractive, for women and men, girls and boys.
- 3) To facilitate the emergence of start-ups in innovative sectors, build their capacity and investment readiness.

The Action will achieve the following **results**:

Result 1. A Regional Innovation and Technology Centre in Cahul (“EU4Innovation Centre”) is established.

Result 2. More young people, especially girls and women, are attracted to start a career/work in the ICT sector.

Result 3. Enabling conditions for innovative sectors start-ups to emerge and grow are put in place.

Main indicative activities:

Activity 1. Support the creation of a Regional Innovation and Technology Centre in Cahul, (“EU4Innovation Centre”)

The activity will support the creation of one regional centre in Cahul that provides a space for an enabling innovation environment. It will contribute to specific objectives 1 (i.e. partnerships for innovation and entrepreneurship) and three (i.e. facilitate the emergence of start-ups).

The main functions of the Centre will be to:

- provide training and education programmes to youth, entrepreneurs and professionals, for women and men, girls and boys, in the field of technology and ICT/e-commerce, with a view to developing new skills, build and strengthen entrepreneurship in the region,
- facilitate networking among a wide range of entrepreneurs, academia and public authorities,
- host and offer new development possibilities firstly for start-ups but not exclusively;
- create a IT Engineering laboratory to support emerging of new IT solutions in close cooperation with research organisations.

Activity 1 will support the set-up and implementation of the above mentioned functions of the Centre and will offer a mix of training rooms, spaces for events, co-working areas and business offices for start-ups and other established business residents, serving as a hybrid of training, accelerator and collaborative space, but as well laboratory tools and facility.

The Regional Centre will serve as educational, practical skills, community and entrepreneurship hubs for technology, creative, ICT, other (export-oriented) innovation and engineering sectors (given the potential of Moldova in these areas) and e-commerce.

The Centre will be managed by a competent organisation (such as ATIC) and in collaboration with the Cahul University and the IT colleges active in the Raion of Cahul and possibly also other representatives of the private sector. The Centre will bring together key actors from the academic, educational, research sector, ICT, public and private sector.

This regional centre will be designed on the basis of best practice acquired in the EU as well as Tekwill (Chisinau), Armenia and Georgia, where some of these centres opened in 2015-2017 and are fully operational. It will build on the characteristics and special advantages the Cahul region has in terms of private sector and the profile of the university education in Cahul.

This centre will aim at having a regional impact, since it will contribute to education in technology and creativity related-skills and will encourage the emergence of “smart” (technology-driven and technology-enabled) businesses outside Chisinau.

“EU4Innovation Centre” will serve as a “spin-off” of Moldovan R&D initiatives, including EU Horizon 2020 initiatives and their successors, initiatives from ICT and innovation companies targeting exports or e-commerce within a DCFTA context. It will further be a “spin-off” from the Tekwill ICT Excellence Centre and Creative Hub initiatives and any other linked innovation initiative by Moldovan companies. Links will be established against set criteria, and the centres will form together a network of Innovation and Technology Hubs across Moldova. This network could also be connected with similar innovation centers in the EU. The Regional Innovation and Technology Centre will also aim at attracting national and international businesses and actors from the academic, education and research sectors.

Some sub-activity under Activity 1 could be extended to the region of Ungheni, which is the other focal region under the Action Document "Inclusive economic empowerment of micro-regions of the Republic of Moldova" of the AAP 2018.

Activity 2. Support a campaign and development of a programme to promote technology, problem solving and creative solutions in learning and improve the attractiveness of STEM

This activity will:

- strive to promote creative thinking and innovation for instance through coupling STEM with other subjects as creative arts and design. The overall idea is to help to promote a process of generating new ideas of value and to translate those ideas into new products and services.
- promote adapting STEM to facilitate innovation and strengthen digital economy

- promote the use of technology at school and work, for women and men, girls and boys, also with a view to reinforce the attractiveness and uptake of STEM (Science, Technology, Engineering and Math) and,
- provide grant funding to promote specific STEM-focussed initiatives at school and workplace level.

This activity will contribute mainly to specific objective 2 (i.e. make STEM topics more attractive). The goals are:

- to support the Ministry of Education, Culture and Research to develop and formulate a STEM framework/policy for Moldova and
- within that framework/policy, devise and implement specific STEM promotion campaigns at general population, education and workforce levels, which includes gender-sensitive message.

For the first purpose (i.e. bring technology into learning), the focus will be on “Future Classroom Labs” to be deployed in several educational institutions across Moldova, with each Lab containing learning environment, hardware (like Interactive Boards, tablets, robotics, 3D printing), software (for technology-enabled learning), and teaching materials (based on projects and modern teaching methods). It will be based on a similar initiative of the European SchoolNet¹². The future classroom initiative should be coupled with introducing training for teachers in applying a creative pedagogical approach that is inclusive so as to engage and attract both girls and boys to STEM. The approach should for instance include problem based learning (PBL) when introducing children and students to STEM and creative design. A second part of this activity will be focused on increasing access to IT training via the network of Libraries building up under the "Novateca" project.

Where appropriate, priority will be given to the focal regions as identified under the "Inclusive economic empowerment of focal regions of the Republic of Moldova" of Annual Action Programme 2018.

For the second purpose (i.e. technology-oriented workplaces for women), the focus will lay on similar activities undertaken in EU Member States, especially in the field of linking this activity to the EU 2020 Digital Strategy and Agenda.

Activity 3. Developing a seed funding and acceleration programme for digital and innovative start-ups and entrepreneurs, strengthening their capacity building and investment readiness.

This activity will contribute to specific objective 3 (i.e. emergence of start-ups).

Various analyses of Moldova have identified possible market failures that hold back the development of digital and innovative start-ups. These include gaps in entrepreneurial skills, limited access to early-stage financing and weak networks including to access markets or

¹² European Schoolnet is a network of 34 European Ministries of Education, based in Brussels. As a not-for-profit organisation, its aim to bring innovation in teaching and learning to its key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners.

mentorship. These issues can be addressed through a responsive programme, which can help accelerate the creation and maintenance of digital and innovative start-ups in Moldova by combining financial support with technical assistance.

Hence, activity 3 would mainly consist in rolling-out a seed-fund and acceleration programme for innovative start-ups or young SMEs:

- The programme would offer the following forms of assistance for the development of innovative products or services or others to selected start-ups, for example but not limited to:
 - Training, coaching and mentoring (both women and men), on how to develop and place their products and services in the market;
 - Support on legal and taxation issues;
 - Support on commerce and marketing;
 - Financial support - in the form of a co-financing grant or reimbursable grant for the development of new products and services or research activities;
 - Support on Intellectual Property Rights (IPR): to offer capacity building and hands-on support for start-ups to protect their inventions and enforce their Intellectual Property Rights on the market;
 - Support to build investment readiness capacity: to offer training and mentoring to support start-ups in finding appropriate funding opportunities, helping them to build strong business cases and solid investment propositions for investors.

- The programme would also foresee networking activities among the beneficiary start-ups and with other relevant stakeholders of the start-up landscape (e.g. private sector including industry, students, universities, research institutes, banks, angel investors, investment funds, public authorities including local ones, innovation centres at national and or/international level etc.) This could include support for strengthening:
 - Sustainability: existence of funding sources, instruments and actors that can provide follow-on funding to the supported start-ups;
 - Deal flow: promotion of quality innovative projects and start-ups to ensure an appropriate number of candidates eligible for support and funding.

- The programme would also communicate to potential start-uppers on opportunities it affords. The idea here is to attract talents and contribute towards "brain gain". Opportunities offered by established EU programmes such as Horizon 2020, including Marie Skłodowska-Curie Actions should be explored.
 - Targeted beneficiaries should include in principle women and men driven start-ups and entrepreneurs that are:
 - Innovative;
 - In the early phase (seed, start-up, first stage, marketing phase);
 - Thought likely to generate profits and create jobs;
 - Likely to attract investors;
 - Previous investments must have been low in budget and duration.

Private persons/students, women and men, with innovative ideas, which are benefiting from the “EU4Innovation Centre” in Cahul (planned under activity one of the present fiche), should also be eligible to early-stage funding.

The programme will also be rolled out in close links with the Innovation Centres in Moldova, including in particular Tekwill in Chisinau and the Innovation Centre planned under activity one of the present document. Additionally, the action will be complementary with the EU4Digital activities, especially its networking opportunities of innovation ecosystem players within the Eastern Partnership region which provide for a more supportive environment for entrepreneurs to thrive and grow.

This programme will be designed on the basis of best practice acquired in EU Member States and other partner countries.

This component will be implemented through a delegated cooperation and the entrusted entity would provide grants to other entities.

4.2 Intervention logic

Supporting the innovation capacity and the ICT sector are key for improving competitiveness, boosting economic growth and creating jobs in Moldova. In order to contribute to the implementation of Eastern Partnership 20 Deliverables for 2020 in the area of digital market and innovation, this Action will support Moldova's innovation capacity and ICT sector in the following ways:

- The first emphasis will be put on the development of a new Innovation centre in the south region of Moldova with a view to expanding Tekwill (i.e. a successful innovation centre established in Chisinau) project type content and initiatives in ICT, Education and Entrepreneurship with an added value for citizens and economic operators.
- Other activities will target the promotion of inclusive economic development by providing specific support to create and accelerate innovative start-ups and create jobs in the ICT sector.
- The programme will also foresee activities to make STEM topics more attractive for girls and women.

4.3 Mainstreaming

When planning, implementing and monitoring the activities, the action will consider the following themes as integral, cross-cutting dimensions of the processes:

The principle of gender equality and women empowerment is a key value of the EU and is critical important for ensuring equal opportunities for women and men. In addition, ensuring women's employment and engagement in innovation and entrepreneurship is important for economic growth. This will ensure that no talent is lost and that women's experience and interest in these sectors is to be taken into account.

Studies have also shown that women entrepreneurs tend to be more risk averse and therefore are more careful and targeted in lending. In addition, a study on the DCFTA impact from a gender perspective shows that SMEs will need the most help to take advantage of the

DCFTAs, and women entrepreneurs will need more assistance than men, because they face unequal challenges in almost every area (access to land, credit, basic and quality infrastructure, market information, technology, skills, technical support, business networks, and reliable infrastructure)¹³.

If women are not prioritised in assistance, they could be left behind and stronger competitive pressures would make it even harder for them to advance. This programme will therefore need to take into account particular gender barriers for women entrepreneurs. For example, trainings and mentorship actions may need to be organised in such a way that enables also women entrepreneurs to take part, while at the same time making sure the daily business activities are being taken care for. This may be particularly important for small SMEs with no extra staff to run the business, while the owner is taking part in trainings.

Moldova continues to face disadvantages when it comes to employment opportunities for women on the labour market, including high gender pay gap, age-based discrimination, lack of women's involvement in public/political life. These trends are aggravated by gender stereotypes, which means women often stay in public service sector. The Programme will reinforce Sweden's initiative in targeting women and girls and encouraging them in getting active into the ICT sector, notably through Activity 2 Support to the STEM promotion campaign and development programme.

Innovation is central to this Programme. Each of the planned interventions contributes directly or indirectly to the promotion and application of innovative technologies and software applications.

The activities will also take into consideration the need to mainstream environmental and climate goals, in particular as concerns the energy efficiency of ICT and eco-innovation opportunities in the sector, as well as green procurement principles. This could be addressed through a variety of tools, for example training on environment and climate mainstreaming, the assessment of environmental impacts of selected ICT solutions, or peer-to-peer exchanges with start-ups in the European Union.

4.4 Contribution to SDGs

This intervention is relevant for the 2030 Agenda. It contributes primarily to the progressive achievement of SDG(s) 9 Industry, Innovation and Infrastructure and 11 Sustainable cities and communities.

Other significant SDG(s): 5. Gender equality, 8. Decent work and economy growth, 10. Reduced inequalities.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is not foreseen to conclude a financing agreement with the partner country.

¹³ <https://www.sida.se/contentassets/1d7e165f86b349f7a4629d30ffdcde83/executive-summary---gender-analysis-of-eu-aadcfta.pdf>

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4 will be carried out and the corresponding contracts and agreements implemented, is 80 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Decision and the relevant contracts and agreements.

5.3 Implementation modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures¹⁴.

5.3.1. Indirect management with an entrusted entity

This action may be implemented in indirect management with an entrusted entity, which will be selected by the Commission's services using the following criteria: operational capacity to implement this action and having the sectoral expertise in innovation and the ICT sector.

The implementation by this entity entails the activities foreseen under Activities 1, 2 and 3 as indicated under section 4 with the objective of establishing a regional innovation and technology centre, implementing the STEM Campaign and implementing a seed-funding and acceleration programme for innovative and digital start-ups.

The main expected results are: 1) A Regional Innovation and Technology Centre in Cahul is established; 2) More young people, especially girls and women, are attracted to start a career/work in the ICT sector; 3) Enabling conditions for innovative sectors start-ups to emerge and grow are put in place.

The entrusted entity would carry out the budget-implementation tasks related to the public procurement and grant award procedures of all three activities; concluding and managing the resulting contracts, including making of the related payments. **Scope of geographical eligibility for procurement and grants**

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility in accordance with Article 9(2)(b) of Regulation (EU) No 236/2014 on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.4 Indicative budget

	EU	Indicative
--	-----------	-------------------

¹⁴ www.sanctionsmap.eu Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

	contribution (amount in EUR)	third-party contribution, in currency identified (EUR)
Objective/Result 1, 2, 3 <Regional Innovation and Technology Centre, STEM Campaign and Acceleration programme for digital start-ups > composed of	6,800,000	0
Indirect management with the entrusted entity – cf section 5.3.1.	6,800,000	0
Evaluation (cf. section 5.8) Audit/ Expenditure verification (cf. section 5.9)	200,000	0
Totals	7,000,000	0

5.5 Organisational set-up and responsibilities

For the activities of the Action a multi-stakeholder approach will be followed in the context of the Project Steering Committee in order to ensure a high level of coordination and synergies between the three proposed activities under this action document.

The main counterparts of this action will be the Ministry of Economy and Infrastructure, the Ministry of Education, Culture and Research implementing partners, academia and representatives of CSOs and the private sector (e.g. ATIC).

The Delegation of the European Union to Moldova will co-chair Project Steering Committee together with the Ministry of Economy.

A Steering Committee (SC) will be created for the action proposed to supervise the implementation of the project. The Steering Committee shall review and guide the work of the action and shall supervise its overall implementation. The Steering Committee shall meet at least twice a year or more frequently if needed.

5.6 Performance and Results monitoring and reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the Logframe matrix (for project modality) or the partner's strategy, policy or reform action plan list (for budget support).

SDGs indicators and, if applicable, any jointly agreed indicators as for instance per Joint Programming document should be taken into account.

The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

5.7 Evaluation

Having regard to the importance of the action, an ex-post evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

The ex-post evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision).

The Commission shall inform the implementing partner at least three months in advance of the dates foreseen for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Evaluation services may be contracted under a framework contract.

5.8 Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

It is foreseen that audit services may be contracted under a framework contract.

5.9 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This programme will be branded under the EU4Innovation, the EU4Digital and the EU4 Business initiatives.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country (for instance, concerning the reforms supported through budget support), contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Requirements for European Union External Action (or any succeeding document) shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

Visibility and communication actions shall demonstrate how the intervention contributes to the agreed programme objectives. Actions shall be aimed at strengthening general public awareness of interventions financed by EU and the objectives pursued. The actions shall aim at highlighting to the relevant target audiences the added value and impact of the EU's interventions. Visibility actions should also promote transparency and accountability on the use of funds.

Communication and visibility measures for the project activities under this Action Document will be reinforced, coordinated and implemented through the Action Document for Strategic communication and media support, which is part of the Annual Action Programme 2017 for the benefit of Moldova.

With regards to the Neighbourhood East, all EU-supported actions shall be aimed at increasing the awareness level of the target audiences on the connections, the outcome, and the final practical benefits for citizens of EU assistance provided in the framework of this action. Visibility actions should also promote transparency and accountability on the use of funds.

All necessary measures will be taken to publicise the fact that the action has received funding from the EU in line with the Communication and Visibility Manual for EU External Actions¹⁵. Additional Visibility Guidelines developed by the Commission will be strictly adhered to.

Where relevant, the provisions of the Financial and Administrative Framework Agreement concluded between the European Union and the selected international organisations shall apply.

It is the responsibility of the implementing organisation to keep the EU Delegations and, where relevant, Directorate General for European Neighbourhood Policy and Enlargement Negotiations fully informed of the planning and implementation of the appropriate milestones specific visibility and communication activities.

The implementing organisation shall report on its visibility and communication actions, as well as the results of the overall action to the relevant monitoring committees.

¹⁵ <https://ec.europa.eu/europeaid/node/17974>

This action will be communicated externally as part of a wider context of EU support to the country, and where relevant to the Eastern Partnership region in order to enhance the effectiveness of communication activities and to reduce fragmentation in the area of EU communication.

APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY)

On the basis of this indicative logframe matrix, a more detailed logframe(s) might be developed at contracting stage linked to this AD. The indicative logframe matrix will evolve during the lifetime of the Intervention. The activities, the expected outputs and related indicators are indicative and may be updated during the implementation of the Intervention as agreed by the parties (the European Commission and the implementing partner/s).

The logframe matrix must be used for monitoring and reporting purposes. At the latest in the first progress report, implementing partner/s should include the complete logframe including all baselines and targets for each indicator. Each progress report should provide the most up to date version of the logframe as agreed by the parties (the European Commission and the implementing partner/s) with current values for each indicator. The final report should enclose the logframe with baseline and final values for each indicator.

Indicators to be presented, when relevant and possible, disaggregated by sex, age, urban/rural, disability, any disadvantaged group, income quintile etc.

Additional notes: The term "results" refers to the outputs, outcome(s) and impact of the Action. Assumptions should reflect risks and related management strategies identified in the Risk analysis.

	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Sources of data	Assumptions
Impact (Overall Objective)	The overall objective is to harness and strengthen the potential of the digital economy and enhance innovation in order to support inclusive economic development in Moldova. <i>As per section 4 of the Action Document</i>		Country reports Evaluation report	<i>Not applicable</i>
Outcome(s) (Specific Objective(s))	1) To foster partnerships for innovation and entrepreneurship between the private sector research institutes and educational institutions in the region of Cahul 2) To make STEM topics more attractive, especially for women and girls 3) To facilitate the emergence of start-ups in innovative sectors including ICT and creative design industry. <i>As per section 4 of the Action Document</i>	Number of business start-up and survival rates Growth of ICT sector and innovative sectors Availability of qualified people to work in the ICT sector	NBS, Ministry of economy report/data, Ministry of Education Culture and Research report/data, any other relevant sources of data as International development part or NGOs reviews/analysis,	

			etc	
Outputs	A Regional Innovation and Technology Center in Cahul is established. <i>As per section 4 of the Action Document</i>	Number of beneficiaries that has accessed the Regional “EU4Innovation Centre”	NBS report, Ministry of Economy and Infrastructure annual report Curricula approved Contracts with residents List of participants Certificates issued Progress reports Independent reviews/evaluation	
	More young people, especially girls and women, are attracted to start a career/work in the ICT sector.	2 a) Number of Schools that offers the new approach to STEM education introduced by the project. 2b) Number of girls and boys that express interest in a career in ICT.	Progress reports, Ministry of Education, Culture and Research (MECR) report Official documents/ordinances issued by the MECR Schools reports Independent reviews/evaluation	
	Enabling conditions for innovative sectors start-ups to emerge and grow are put in place.	3) Number of innovative start-ups that have gained access to technical assistance and or seed funds.	ENP annual progress reports	