



Roadmap for EU - Eastern Partnership S&T cooperation

1. EASTERN PARTNERSHIP as a partner of the EU

2017 EaP Summit

The **Eastern Partnership** (EaP), launched at the Prague Summit of 7 May 2009, is a joint initiative of the EU and 6 Eastern European partner countries (Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova¹ and Ukraine) that aims to bring Eastern European countries closer to the EU.

EU and partner country leaders meet every other year in Eastern Partnership Summits. The 2017 Summit took place in Brussels on 24 November 2017 to make an overall assessment of on-going EaP cooperation in support of partner countries' state and societal resilience, in the light of the 2015 ENP Review and the Global Strategy for the European Union's Foreign and Security Policy presented by the High Representative in 2016. The Summit also offered a realistic vision for the future and provided guidance to the reform processes in the four priority areas² agreed at the 2015 Summit held in Riga. The objective was to strengthen state and societal resilience through these priorities. All leaders agreed on a joint declaration reconfirming their commitment and the high importance they attach to the Eastern Partnership.

While stressing the inclusiveness of the EaP, the Brussels Summit demonstrated the EU's commitment to differentiation in bilateral relations with some key achievements. Following the example of Moldova, visa liberalisation is now in operation for Georgia and Ukraine, showing that the EU delivers when partners undertake significant reforms meeting the required benchmarks. The ratification process of the Association Agreement/Deep and Comprehensive Free Trade Area with Ukraine was completed and entered into force on 1 September 2017, The Association Agreements for Georgia and Moldova (in force since 1 July 2016) triggered a series of reforms for the modernisation of public administration across various sectors including research and education. Four EaP countries (Moldova, Georgia, Ukraine and Armenia) have signed and ratified association agreements to Horizon 2020, fostering closer cooperation on research and innovation with the EU. The Comprehensive and Enhanced Partnership Agreement (CEPA) with Armenia was signed in the margins of the summit and entered into force on 1 June 2018. In July 2018 Azerbaijan and the EU concluded their negotiations under the EU-Azerbaijan Partnership Priorities..

¹ Hereafter referred to as Moldova.

² Economic development and market opportunities; Strengthening institutions and good governance; Connectivity, energy efficiency, environment and climate change; and Mobility and people-to-people contacts.

In Belarus, the human rights dialogue is not yielding concrete results and the European Council prolonged restrictive measures against this country until February 2019. Meanwhile, the EU-Belarus Coordination Group as well as the Dialogue on Trade allowed for a more comprehensive approach to relations with the country.

At the summit, leaders also welcomed the '20 deliverables for 2020'. This a framework aiming to improve the lives of citizens across the Eastern Partnership in the four priority areas of cooperation identified in Riga in 2015. Those deliverables include EU support to business development and access to finance, notably for small and medium-sized companies; enhanced trade in products and services both between the EU and partner countries and among them; closer cooperation between the digital markets of the partners and the EU; increased governance transparency and accountability; strengthening of the judicial systems via institution-building measures and adoption of new legislation guaranteeing an effective fight against corruption; e-governance and e-services; improving resilience to security threats; progress with regard to interconnections with the EU and between the partners (e.g. Ungheni-Chisinau and the Southern Gas Corridor) and people-to-people contacts (Erasmus+, Creative Europe, Horizon 2020 and visa dialogues) with a particular focus on youth.

EU-EASTERN PARTNERSHIP S&T cooperation agreements

Among the six EaP countries, Ukraine is the only country with a bilateral S&T Agreement with the EU. Four countries are already associated to Horizon 2020: Moldova (association effective since 1st January 2014), Ukraine (association effective since 17 August 2015), Georgia (association effective since 1st January 2016) and Armenia (association effective since 7 November 2016).

At regional level, cooperation on research and innovation is addressed in the 4th policy platform ("contacts between people"). To specifically address bi-regional cooperation in research and innovation, a dedicated Panel on research and innovation, attached to the 4th platform, was launched on 13 November 2013. This Panel gathers senior officials and experts from Member States and Eastern European partner countries, as well as from the Committee of the Regions and the EaP Civil Society Forum.

The Georgians hosted the EaP Research and Innovation Panel Event in Tbilisi on 1 October 2018 focusing on research/industry links and looking at Technology Transfer and Smart Specialisation. Fact finding missions to Eastern Partnership Countries will start in 2019 to perform an analysis of the state of play of technology transfer, with recommendations. This is part of an Eastern Partnership-wide JRC technology transfer initiative. The JRC also started a smart specialisation strategy (s3) support mechanism across EaP countries to support prioritisation and evidence-based policy decision making for growth and jobs.

R&I landscape in the EASTERN PARTNERSHIP

All EaP countries have a long tradition of scientific excellence, but have faced a dramatic decrease of their R&D intensity since the early 90s. That led to the shutting down or reorientation of many research branches as well as a significant decrease in the number of researchers. The situation is worsened by an intense brain drain across the region.

A common characteristic of the EaP countries is that research is largely funded from the state budget with very limited contributions from the private sector. Research activities are mainly conducted in institutes and centres under the coordination of National Academies, with the exception of Georgia where research institutes have been integrated into the university system following a recently completed reform.

Because of the difficulties they are facing, all countries have launched ambitious national strategies to modernise and boost their research and innovation systems, notably through improving conditions for encouraging business activities and commercialization of R&D outcomes. This resulted in recent years in the emergence of many technology parks and incubators and reforms concerning venture capital funding and IPR protection. It is in this context of on-going policy reforms that new dynamics exist for intensifying bi-regional cooperation. There is still a strong focus on fundamental research but recently introduced legislation and reforms are pushing towards more applied research with a strong focus on innovation and market-oriented results.

The table below illustrates the overall R&D landscape in the Eastern Partnership countries.

Table 1: Eastern Partnership Countries – Overall R&D Landscape

Country	Population ¹	GDP ² (per capita)	GERD ³ (as % of GDP)	R&D personnel per million habitants ⁴ (researchers per million habitants)
Armenia	3.03	25.4 (8394)	63.7 (0.25%)	1672 (1278)
Azerbaijan	9.87	172.0 (17740)	381.6 (0.22%)	2368 (1654)
Belarus	9.48	168.0 (17661)	870.2 (0.52%)	2754 (1785)
Georgia	3.98	35,7 (9679)	114.3 (0.32%)	3122 (2267)
Moldova	4.06	17,9 (5039)	66.2 (0.37%)	1237 (828)
Ukraine	44.6	340.0 (7916)	2,100.9 (0.62%)	2376 (1259)

¹In million; values of 2016

²In billion PPP current international \$; values of 2015.

³In million current PPP \$; values of 2015

⁴ In head-count; values of 2015

Source: DG Research and Innovation - International Cooperation

Data: UNESCO Institute for Statistics, retrieved on 12/10/2017

2. State of play of EU-EASTERN PARTNERSHIP S&T cooperation

2.1. On-going FP7 and Horizon 2020 cooperation

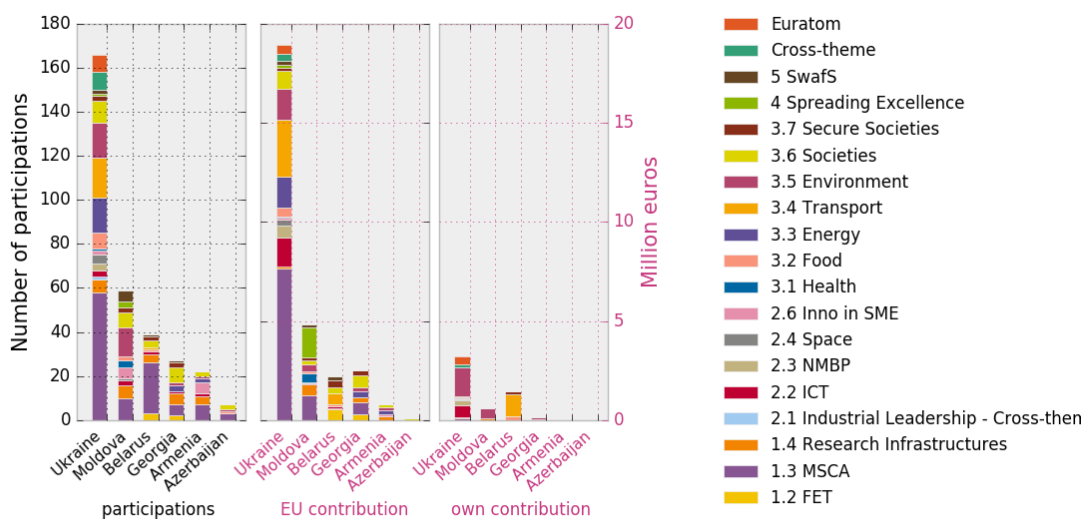
Eastern Partnership entities have participated 320 times to 184 signed grants of collaborative, MSCA, ERC and SME Instrument actions of Horizon 2020, receiving 29.8 million euros of direct EU contribution while 5.5 million euros is the non-EU budget of beneficiaries from Eastern Partnership countries.

Regarding collaborative actions³ of Horizon 2020, Eastern Partnership applicants are involved 1603 times in 1023 eligible proposals of which 124 were mainlisted, leading to a success rate of 12.1% (as compared to 15.8% overall). Eastern Partnership entities have 203 participations (176 times as beneficiaries) in 117 signed grants, receiving 18.6 million euros from EU.

Regarding the Marie Skłodowska-Curie Actions (MSCA), Eastern Partnership entities have participated 106 times (of which 51 as beneficiaries) in MSCA actions (1 in Individual Fellowships (IF), 94 in the RISE, 9 in the ITN and 2 in the COFUND programme). Beneficiaries from Eastern Partnership countries have received 9.5 million euros as direct EU financial contribution. A total of 654 researchers from Eastern Partnerships countries have participated in MSCA actions. Finally, 11 nationals from Eastern Partnership countries have acquired an ERC grant.

Regarding grants funded by the SME instrument, Eastern Partnership applicants are involved 365 times in 348 eligible proposals of which 12 were mainlisted leading to signed grants, receiving 1.7 million euros from EU while 0.7 million euros is non-EU budget of these beneficiaries.

Figure 1: Participation of the Eastern Partnership countries in Horizon 2020



Note: Participations of beneficiaries, third-parties and partner-organisations.
 Source: DG Research and Innovation - International Cooperation
 Data: CORDA (JRC, EIT and art.185 not included); extraction date: 15/10/2018

³ i.e. excluding projects under ERC, MSCA and SME Instrument.

2.2. Current framework conditions for EU-EASTERN PARTNERSHIP S&T cooperation

Framework conditions are mostly relevant to bilateral aspects of cooperation with EaP countries rather than at a regional level. Issues such as the protection of intellectual property rights, competition rules or the liberalisation of public procurement are addressed in bilateral association or cooperation agreements the EU has established individually.

It is however to be noted that 4 out of 6 EaP countries are now fully associated to Horizon 2020 (Moldova, Ukraine, Georgia and Armenia). Those associations obviously translate the fact that framework conditions are in place for alignment of those four countries with the ERA. An assessment of the three Horizon 2020 association criteria was performed when those countries requested to be associated, and one of these criteria is related to fair and equitable dealing with intellectual property rights.

3. Priorities for the future in S&T cooperation

3.1. Areas of future S&T cooperation agreed at latest Joint Committee/High Level Dialogues

Two fields of intervention have been identified by the EaP Panel on Research and Innovation as priority areas for cooperation with EaP countries: common societal challenges to focus on, and cross-cutting issues to address in order to improve the cooperation framework conditions. This priority setting was based on contributions received from EU Member States and EaP countries that were consolidated by an expert group mandated by the EaP Panel on Research and Innovation. Assessment towards goals is aligned with the achievement of deliverable 20 of the '20 deliverables for 2020'.

Collaborative research and innovation activities should be concentrated on the following priorities:

- Health, demographic change and well-being⁴;
- Climate action and environment;
- Secure, clean and efficient energy;

Although a challenge-based approach is proposed, particular attention should also be given to cooperation activities on key enabling technologies listed in Horizon 2020 with a particular focus on ICT and nanotechnologies.

The cross-cutting priorities on which efforts should be concentrated include:

⁴ Cooperation on health research with EaP countries may be supported via the cooperation in multi-lateral initiatives. An excellent example, which has currently 20 members, is the initiative called Global Research Collaboration for Infectious Diseases Preparedness (www.glopid-r.org) for the organisation of a network of research funders that may immediately react in case of an outbreak.

- a. Sharing best practice between EU Member States and EaP countries in research and innovation management and establish a regional evaluation platform;
- b. Provide technical assistance and training to support EaP countries in improving their national research and innovation systems;
- c. Promoting researcher mobility and common use of research infrastructures, notably through the creation of a regional network of Centres of Excellence that could potentially be connected to ESFRI (the European Strategic Forum on Research Infrastructures); It is be noted that in that sector, an initiative (EaPConnect) for the development of a regional EaP Research and Education Network and its interconnection to GEANT was launched in 2015, with Belarus and Azerbaijan the latest to connect to GEANT in November 2016.
- d. Promoting the link between state-of-the-art EU initiatives such as research-intensive clusters and technology platforms with similar structures in EaP countries, and enhancing the participation of EaP countries private companies in these structures.

3.2. Potential new areas of future S&T cooperation proposed at the latest Joint Committee/High Level Dialogue, through SFIC, or by thematic services

In order to support the reinforcement of EaP countries innovation capacities in a more coordinated way, Commissioners Moedas and Hahn jointly announced the launch of a new initiative, EU4Innovation, during the informal EaP Ministerial Dialogue held in Yerevan in November 2016. This initiative has been included as one of the 20 deliverables for the 2017 EaP Summit and will aim at launching concrete EU support activities across the following structure:

- A 1st communication layer to develop the EU4Innovation visual identity, website and presence in social networks and aggregate information from all existing EU instruments already in support of EaP countries innovation capacities (eg. Horizon 2020, COSME, Erasmus +, ENI, etc...).
- A 2nd layer of support measures for policy-makers that could be implemented through twinnings, and where the main objective would be the formulation and implementation of policy measures in line with the peer-reviews recommendations.
- A 3rd layer of support measures for the research and innovation stakeholders: private sector organisations, innovation support organisations (industrial clusters, science parks, technology transfer offices, incubators, accelerators etc..), research institutions, entrepreneurs...with the objective to provide dedicated technical assistance and coaching services.

Under the EU4Innovation strategy, the research and innovation policy dialogue is also supported by the Horizon 2020 [EaPPlus project](#). Building on the results of the predecessor FP7 project 'IncoNet EaP', the project is working to eliminate remaining obstacles to EU-EaP STI cooperation through a number of innovative and targeted actions including the enhancement of optimal framework conditions to increase coordination in policies and programmes, capacity building sessions, dedicated training and matchmaking for projects submission.

In addition, the Informal Ministerial Dialogue identified promising cooperation under the SPIRE (Sustainable Process Industry Resources and Energy Efficiency) Public Private Partnership (<https://www.spire2030.eu/>). Related SPIRE calls encouraging explicitly cooperation with EaP countries have been included in the H2020 Work Programme 2018-2020.

3.3. Improvements in framework conditions agreed at latest Joint Committee/High Level Dialogue and additional framework conditions to be addressed at future policy dialogue meetings

The associations to Horizon 2020 are major steps forward to the improvement of framework conditions for the cooperation with the EU. As a matter of example, Moldova, Ukraine, Georgia and Armenia requested support from the Horizon 2020 Policy Support Facility, in order to review and increase the competitiveness of their national research and innovation system, and make them further compatible with the ERA.

The dialogue on framework conditions in 2019 will be driven by the 2018 Eastern Partnership Annual Conference, at ministerial level, on jobs and skills, organised by the Austrian Presidency, to be held on 7 December in Vienna. The JRC will present smart specialisation.

The 2018 Eastern Partnership panel on Research and Innovation will meet on 14th December in Brussels to discuss and identify future policy priorities as part of the EaP high level dialogue.