IncoNet EaP: STI International Cooperation Network for the Eastern Partnership Countries

Deliverable Title	**D2.2.b - Analytical evidence of S&T cooperation between EU and EaP countries - STI cooperation barometer between EU and EaP countries**
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Abstract	The barometer was developed for the cooperation in science and technology between EU-EaP countries especially regarding the "attitude towards STI cooperation" through: - Two online-questionnaires addressed to project coordinators and partners in the projects identified in WP1 (approx. 100), as well as to other stakeholders in the policy and science communities. - Collected input from a focus group of 7-10 experts and face-to-face interviews in order to get a deeper insight.

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Versioning and Contribution History

Version	Date	Modification reason	Modified by
v.01	14.06.2016	First version of the report	RCISD
v.02	25.07.2016	Second version of the report including comments by ZSI, CeRISS	RCISD
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v.04	05.08.2016	Fourth version of the report, remarks by the Quality Check Expert	Quality Check Expert
v.05	17.08.2016	Fifth version of the report, the remarks by the Quality Check Expert taken into account	RCISD

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1. EXECUTIVE SUMMARY

One of the activities of the IncoNet EaP Project is the development of the STI cooperation barometer[1] to provide a knowledge base for evidence-based STI decision-making drawn from analyses and monitoring regarding the state of cooperation between EU and Eastern Partnership Countries (EaP) as well as its future potential. It also provides recommendations based on the results from analytical evidence.

STI cooperation barometer between EU and EaP is developed especially regarding the "attitude towards STI cooperation". The barometer is purposefully addressed only to stakeholders and researchers with EU- EaP research and development cooperation experience in order to analyse any perceived developments on the ground ("sounding board") with regard to framework conditions, cooperation opportunities and potential for bi-regional STI cooperation over time. It identifies bottlenecks and trends that will help in defining further actions and strategy to facilitate bi-regional Science, Technology and Innovation cooperation. Close coordination with the IncoNet CA project was ensured in order to develop a common methodology for this activity.

The barometer was implemented through two online questionnaires addressed to a minimum of 100 project coordinators and partners in the projects identified in the mapping activity and further actors with EU-EaP cooperation experience in the STI policy, research and innovation communities (e.g. identified through the bibliometric co-publication analysis).

The first questionnaire was sent out at the beginning of January 2015 to 700 stakeholders, and out of that 136 answers (19% response rate) could be analysed (the other 564 questionnaires were partially completed). The second round of questionnaire was prepared with some minor changes in March 2016. The link for the second survey was sent out to more than 850 stakeholders. 570 questionnaires of these could be analysed. The collected input was consolidated by a focus group of 12 experts (2 experts from each EaP country) organised back-to-back with STI Days in Paris on 18 March 2015 in the frame of a Grant Scheme activity to get a deeper understanding and a clearer picture.

The two surveys were jointly elaborated by Centre for Social Innovation (ZSI/Austria) and Regional Centre for Information and Scientific Development (RCISD/Hungary).

The main target group of the task was the scientific community in each Eastern Partnership countries, namely Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine in the fields of the 3SC (Health, Energy and Climate Change).

The results of the two surveys were analysed mainly by aggregate tables and SPSS Statistics[2] by the Regional Centre for Information and Scientific Development.

[1] The method of the barometer was asking researchers from EaP countries to respond several questions about STI cooperation through online questionnaire in two rounds in two different years in order to see the changes/development. From statistical point of view we used the same questions only with some minor changes in the two rounds. The second survey was not implemented for the same pool of respondents since the aim was to reach higher response rate in the second round. We did not compare directly the replies from same responder in two rounds from statistical point of view.

[2] SPSS Statistics is an integrated family of products that addresses the entire analytical process, from planning through data collection to analysis, reporting and deployment. It is a widely used program for statistical analysis in social science.

The result of the barometer gives an overview about the tendencies in STI cooperation with EU and other regions. During the last two years EU was indicated as the most important region concerning science research and technology cooperation in the case of all EaP countries. The most important EU countries, as the barometer has shown, are Germany, Romania (mainly for Moldova), France, Italy, and Poland. The USA (mainly for Georgia) was indicated also as an important country. Cooperation with single European countries (bilateral cooperation), with more European countries in the EU Programmes and with the neighbouring EaP countries showed higher increase in the last two years than cooperation with Russia, the USA, Japan, South Korea, China, India and Turkey. The barometer also identified the most important trends, bottlenecks, actions and tools in STI cooperation. Generally speaking, international cooperation is very significant for all the responding organisations: the level of cooperation with European countries shows increasing tendency. The most important international research, science and technology cooperation activities are bilateral and international multilateral project collaboration with the EU countries and exchange of S&T Information on strategic level to set up future joint activities. The most popular tools that facilitate the participation of EaP researchers in H2020 are scientific conferences and partner search support, and mobility schemes to visit ad hoc research organisations in other countries to discuss and prepare joint Horizon 2020 proposals.

2. INTRODUCTION

The STI barometer was implemented in two rounds[3] in 2015 and in 2016. The preparation of the questionnaire started in February 2014 by RCISD and ZSI. The first version of the questionnaire was delivered in June 2014 as an internal document. Then, the first round of the questionnaire with 33 questions was sent out at the beginning of January 2015 to 700 stakeholders. By the end of February 202 stakeholders had opened the questionnaire; here 136 of them could be analysed.

The second round of the questionnaire was prepared in March 2016 with some minor changes compared to the first one (2 questions were added and 1 questions were modified). In the second survey we also asked the researchers whether they are planning to submit proposals for Work Programme 2016-2017 of Horizon 2020; and if yes, are they part of a consortium yet. The other question that was not included in the first questionnaire asked about the difficulties with EaP which scientists face when they try to establish contacts with European researchers to get involved in HORIZON 2020 applications. The aim of adding these questions was to get further information regarding participation of EaP researchers in H2020. In the second survey Q19 (What kind of difficulties did you face when preparing and implementing the projects) asks the scientists to choose from the bulleted list that was elaborated from the answers in the first round. This modification contributed to a more punctual and simple analysis. After testing the questionnaire, the final link for the survey was sent out to more than 850 stakeholders at the beginning of March 2016. In the first round the number of the respondents was quite low as the potential stakeholders were selected only from the mapping exercise[4]. Therefore RCISD and ZSI decided not only to ask the same pool

[3] The questions of the barometer, the second survey tool that was sent to the EaP scientists in 2016 is detailed in the annex.

[4] The IncoNet EaP consortium agreed to address the questions to a minimum of 100 project coordinators and partners in the projects identified in the mapping activity (other task of the project), a database about EaP researchers. Before the second

of respondents of the first round, but also to send it out to as many additional contacts as possible, in order to get a higher response rate. So finally, the second round of the questionnaire was sent out to all contacts from the first round and to additional participants who attended events organised by IncoNet EaP (like Policy Stakeholders Conferences, workshops, Grant Scheme, etc.) in the period after the first round. Besides, all respondents were asked to forward the survey to their colleagues. Due to the effective distribution, 570 questionnaires were filled in and could be analysed starting from mid-April.

During the analysis all personal data were dealt confidentially, and aggregated results were used by the project. Moreover, all the respondents were informed about other project activities (scientific workshops, financial support schemes for participation in various events etc.), which can be beneficial for their scientific work.

round the project partners decided to ask also other EaP researchers beside the participants in the first round in order to achieve a larger pool that can be analyse.

3. RESULTS OF THE STI COOPERATION BAROMETER

There is a significant difference between the number of respondents in the two rounds (136 replies in 2015, 570 replies in 2016) and in the share of the country respondents. For instance, these numbers strongly influenced the country preferences in later questions (e.g. strong connections between Moldova and Romania, Georgia and the USA). Besides, it has to be mentioned that more than 50% of the replies in the second round coming from Georgian researchers also distort the results. Special measures have been taken to avoid a distortion by the unbalanced responses to the survey.

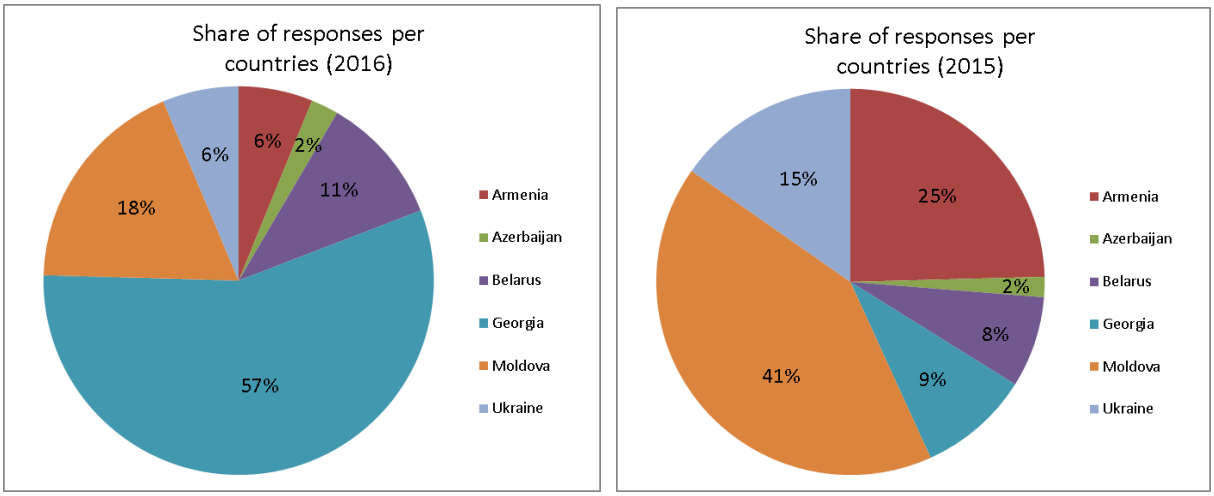


Figure 1 – Share of responses per countries

The *share of male and female respondents* was well balanced: 286 males and 272 females have filled in this category (59 males and 54 females in 2015). As for the *age division*, there is a considerable amount of younger researchers up to 39 years in case of both rounds, which shows the interest of these age groups in the future of S&T cooperation.

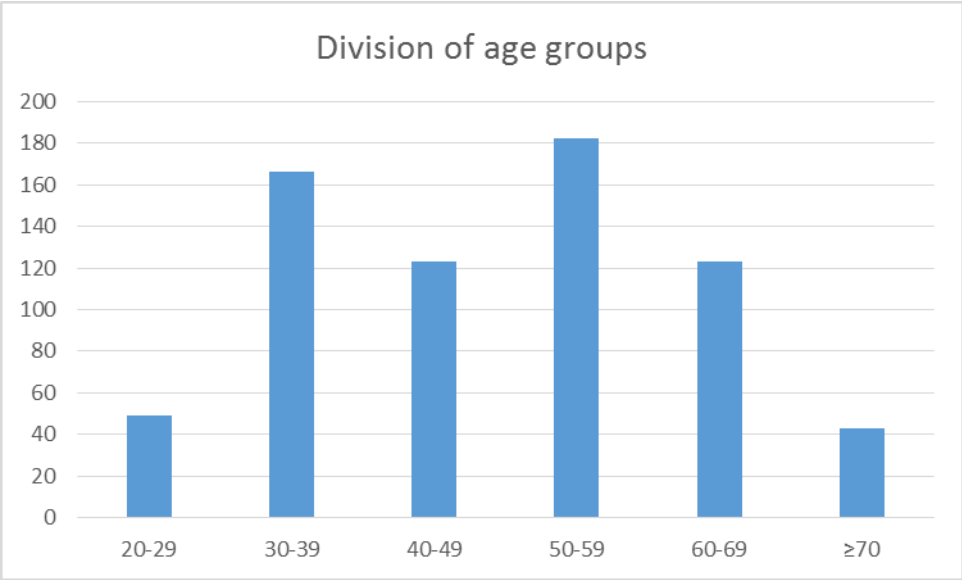


Figure 2 – Division of age groups (First and Second round data)

As regards the *types of organisations*, more than half of the respondents are working with universities and academies of sciences, however only few of them are coming from the business sector.

Type of organisation	2016	2015	Total	Total (%)
University	287	23	310	44%
Academy of Sciences (Institute or centre)	146	52	198	28%
State owned Research or technology centre	39	6	45	6%
Private small or medium enterprise (SME) <250 employees	16	3	19	3%
Private Industry (large enterprise, >250 employees)	2	2	4	1%
Ministry or advisory body (policy making)	12	7	19	3%
Agency or Funding body	15	7	22	3%
Other	53	31	84	12%
Total	570	131	701	100%
Not answered	0	5	5	

Table 1 – Division of type of organisations

Due to a high number of "other" responses, the types of organisations had to be regrouped into broader categories to find connections between other question groups. Instead of the 7 given types of groups (universities, academies of sciences, state owned research centres, SMEs, private industry, ministries, agencies and funding bodies) we created three larger categories:

- Public research institutions including universities, academies and other state owned research organisations;
- Private research institutions including SMEs and large industry as well as NGOs;
- Public bodies such as ministries, funding bodies, agencies, National Contact Points.

In this way we could cover more stakeholders and identify connections between industry-related researchers, policy makers and researchers coming from the academic sphere, and other question groups, especially on how far they are interested in various types of international scientific cooperation. As the table shows below, there is a very significant share of academic institutions.

Type of organisation	2015		2016		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Public research institutions, universities, academies of sciences	96	73,3	472	82,8	568	81
Private research institutions (SMEs, large companies, NGOs)	13	9,9	40	7	53	7,6
Public bodies (funding and advisory bodies)	15	11,5	29	5,1	44	6,3
Other	7	5,3	29	5,1	36	5,1
Total	131	100,0	570	100,0	701	100,0

Table 2 – Type of organisation – Aggregated organisation types

Based on both rounds of the survey, regarding the *fields of science*, natural sciences, engineering and medical sciences are much better represented than agricultural sciences and humanities.

Fields of science	2016	2015	Total
Natural sciences	161	39	200
Engineering and technology	142	21	163
Medical and Health sciences	92	19	111
Agricultural sciences	32	4	36
Social sciences	67	12	79
Humanities	26	5	31
no specific field	38	14	52
not answered	12	22	34

Table 3 – Field of science based on the classification of the FRASCATI Manual

Respondents were asked to indicate *how important international cooperation for their organisations is* on a scale from 1 to 5 (1=not important at all, 5=very important) and in 2016 the average result was 4,71 (4,77 in 2015), so we can assume that, in general, international cooperation is of substantial importance for all the responding organisations.

Respondents were then asked to *name those countries, which had been the most important for their organisation concerning science, research and technology cooperation activities* during the last two years. They indicated in a free text field all the countries they considered relevant, and Germany and the USA resulted as the most important countries. There is a slight increase in popularity of the USA from 2015 to 2016. Romania, France, Italy, and Poland are also mentioned as important countries. But quite surprisingly, Russia, France and Romania seem to lose importance in scientific cooperation activities with the EaP countries (these countries show the highest fall - with almost 50% - in popularity from 2015 to 2016).

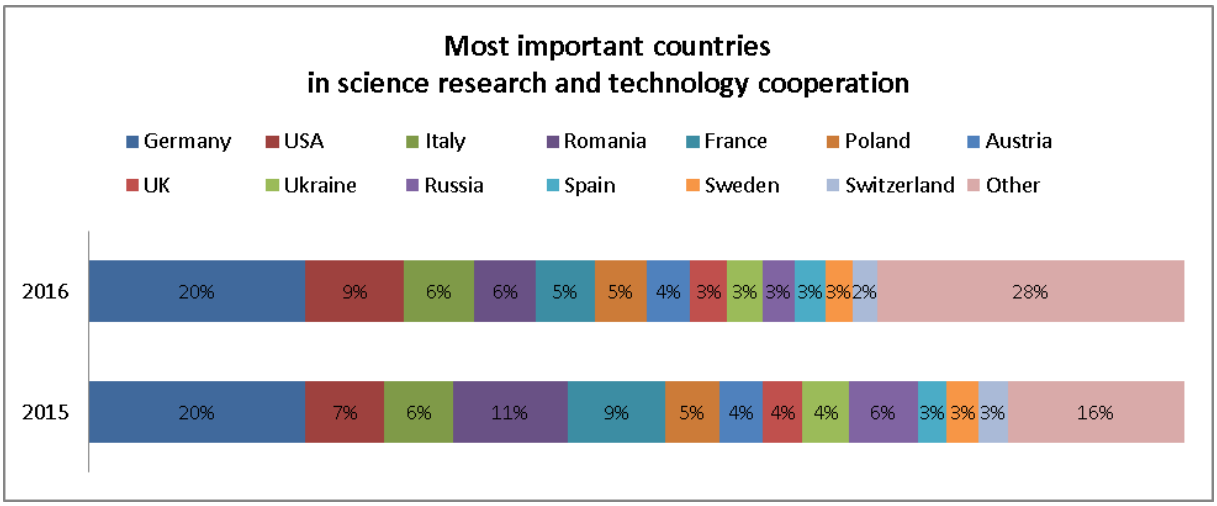


Figure 3 – Most important countries in science research and technology cooperation

We examined the *relation between the most important countries for each EaP country* based on data from the second round. EU was indicated as the most important region in the case of all EaP countries (713 mentions out of 923). To add, Germany was indicated as the most important country among all EaP countries with 225 mentions. The USA is the second most important country, but this value is highly influenced by the high number of Georgian respondents (in 82,5% of the cases the USA was mentioned by a Georgian researcher). The

UK, Italy, France were also mentioned as ones of the most important countries. Romania was one of the most frequently indicated country, thanks to the high number of Moldovan respondents (in 83,8% of the cases Romania was mentioned by a Moldovan researcher). Looking at this number from the other perspective, in 22,7% of Moldovan replies, Romania was mentioned as the most important partner. Armenia has a strong relation with France and Russia. Poland is popular among researchers from Belarus and Ukraine besides Georgia, which can be explained by their geographic proximity. In the case of Russia, the best relations are with Armenia and Belarus, and this fact was confirmed when respondents were asked about future changes in the scientific cooperation with given countries.

Most important country	Armenia	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	Total
EU	49	21	91	319	172	61	713
• Germany	19	6	25	114	44	17	225
• UK	3	2	6	40	8	5	64
• Italy	5	4	10	40	20	3	82
• France	9	3	10	35	8	8	73
• Romania	1	1	0	5	57	4	68
• Poland	1	1	17	25	4	12	60
• Austria	3	1	6	18	12	6	46
• Spain	2	0	5	18	10	1	36
• Sweden	2	0	7	14	5	3	31
• Greece	4	3	5	10	4	2	28
USA	5	2	2	85	4	5	103
Ukraine	0	2	2	18	22	1	45
Russia	10	1	10	9	4	1	35
Switzerland	3	0	2	17	4	1	27

Table 4 – Most important countries per EaP countries

A dedicated question concerns the *importance of various international STI activities* like incoming and outgoing mobility, teaching assignments, hosting and sending young researchers abroad, bilateral and multilateral international cooperation, co-publications, inter-institutional agreements, technology cooperation and market oriented activities, access to large research infrastructure as well as the exchange of science and technology information.

Respondents were asked to define the list of activities that were relevant for their organisations, on a scale from 1 to 5 (where 1= unimportant and 5=very important) for international research, science and technology cooperation. The general results of 2016 were then compared to those from 2015. *Bilateral and international multilateral project collaboration with the EU countries; exchange of S&T Information on strategic level to set up future joint activities* were the most important activities in both rounds (average index above 4,5). *Market oriented activities to utilize research results with partners from abroad; hosting young researchers from abroad and teaching assignments* are considered as the most unimportant actions. *Mobility and exchange of scientists incoming* to EaP countries shows the highest increase from the year of 2015 to 2016 (increase of the average index is above 0,2).

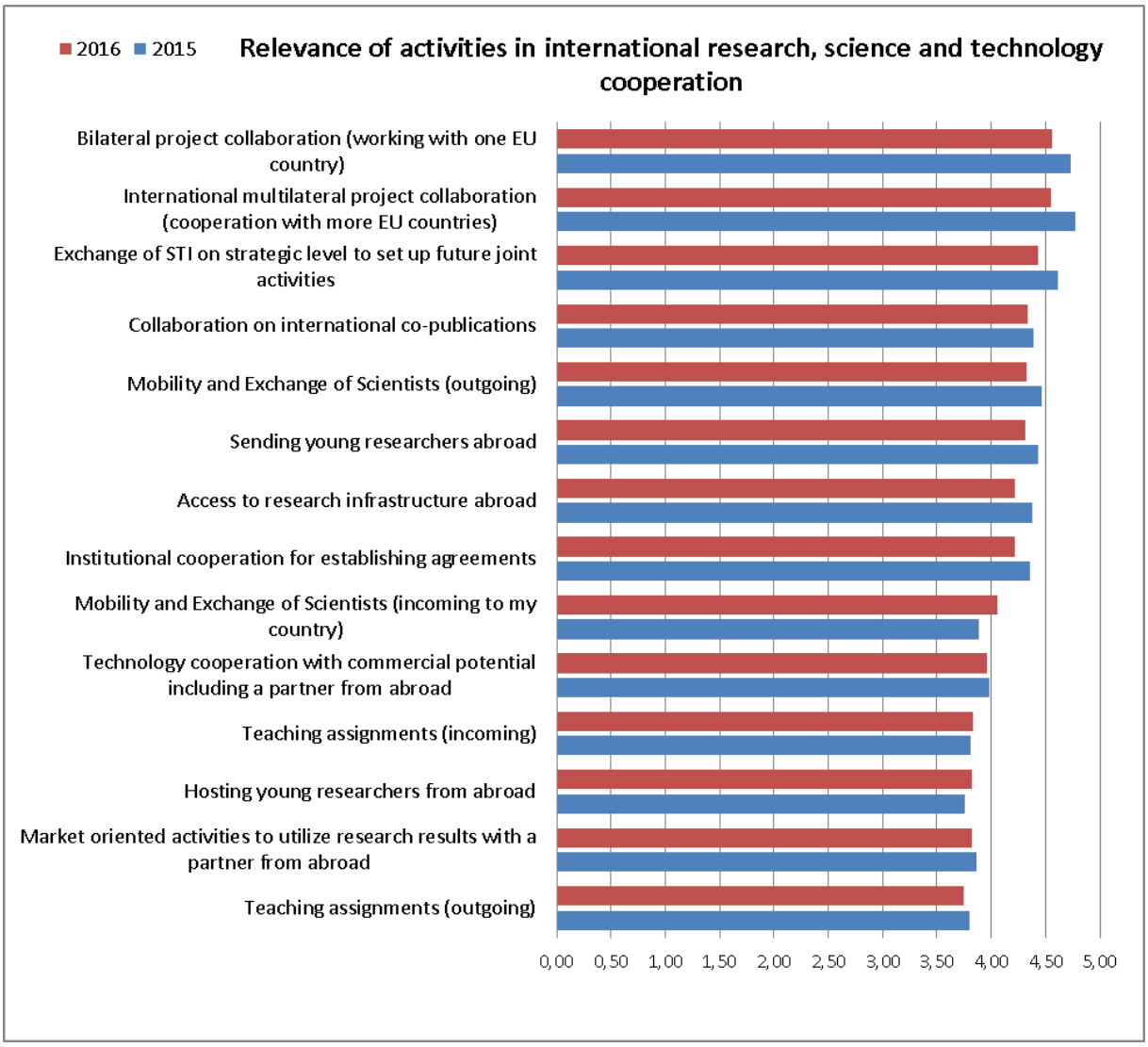


Figure 4 – Relevance of activities in international research, science and technology cooperation

We also examined the *relation between the type of organisations and the activity assessments*, based on data from both rounds[5]. There is not much difference between the different options, i.e. the rating is between 3.5 and 4.5 as the figures show. We supposed that most of the participants do not have well developed preferences for any of the options but would like some form of cooperation. Maybe they have little practical experiences so that they could not estimate which form of cooperation is preferable. We assumed that there might be some connection between private ownership and the importance of market oriented research, or public bodies and S&T agreements etc. Interesting results are shown on the figures below.

Mobility, teaching assignments and sending/hosting young researchers are definitely the most appealing for scientists coming from the public research institutions, academic sciences, and universities as it is illustrated in Figure 5. Hosting young researchers is less preferable than sending young researchers abroad, that main reason is that EaP scientists have more possibilities in networking abroad.

[5] The graphs show the mean (using a scale from 0 to 5) of each activity in international research, science and technology cooperation

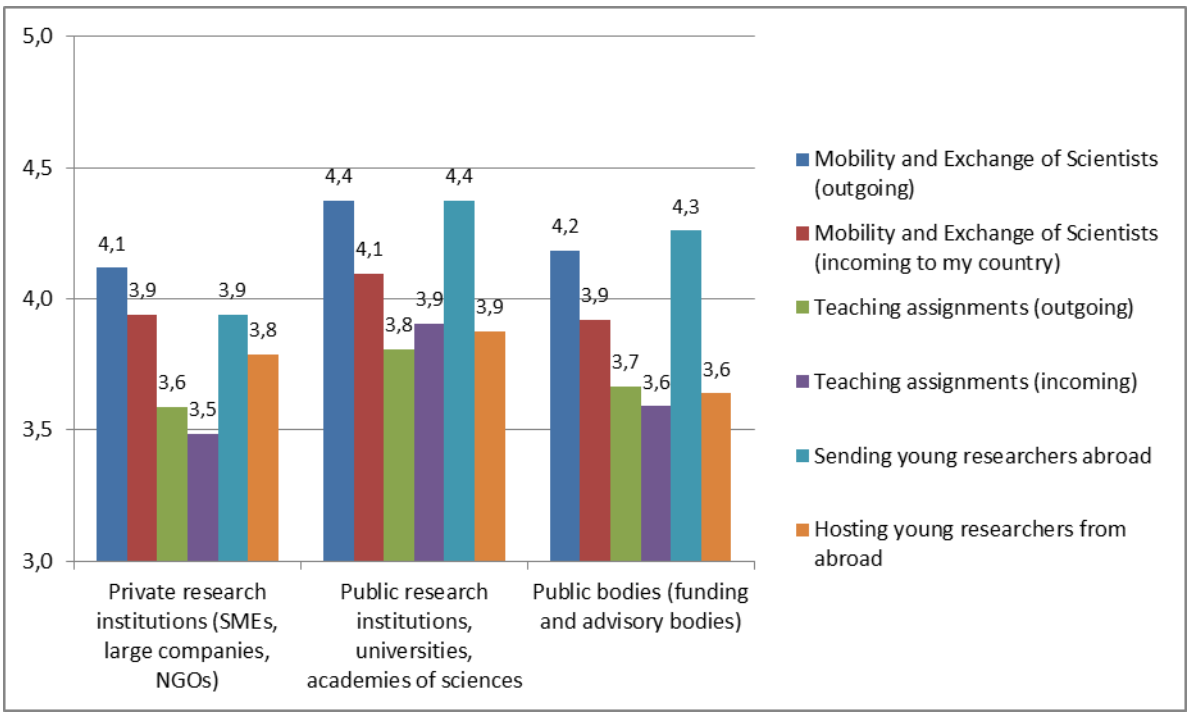


Figure 5 – Relation between the type of organisations and the activity assessment – I

Bilateral and multilateral project collaborations are mostly popular among public bodies. Co-publications are definitely more interesting for scientists coming from the academic sphere than scientists working in the private sector or for public bodies. Institutional cooperation for the creation of S&T agreements is of much higher relevance for public bodies, it is hardly interesting for private companies, which is a realistic result.

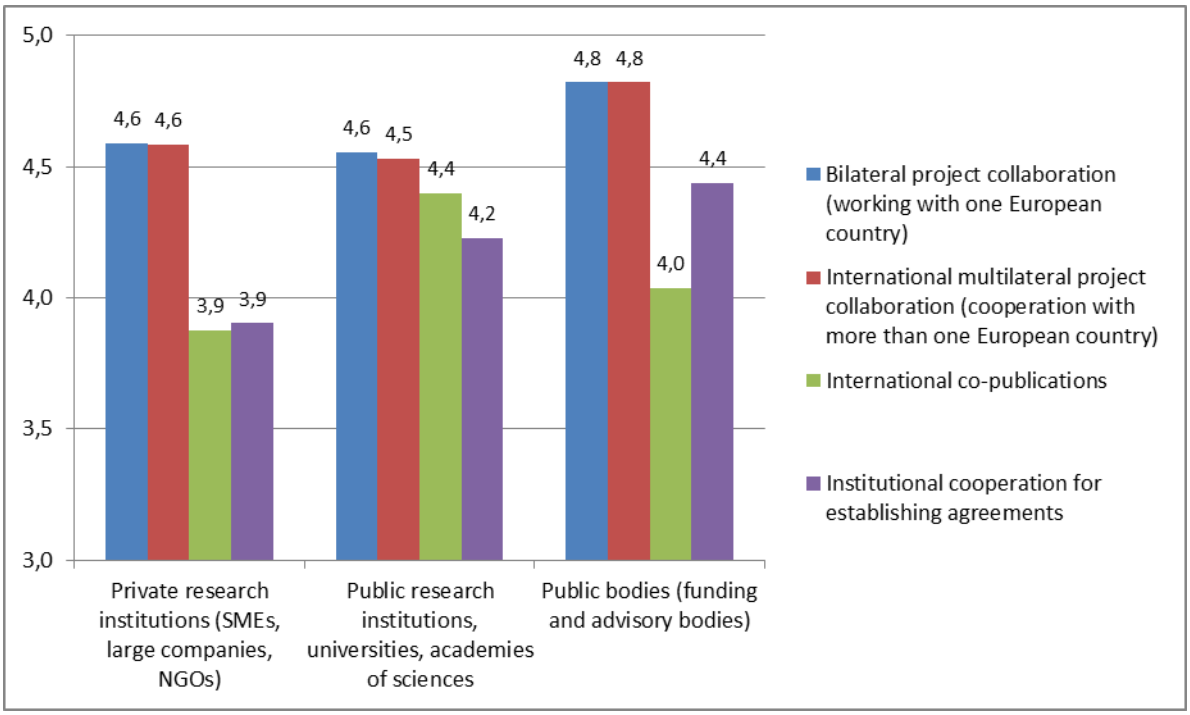


Figure 6– Relation between the type of organisations and the activity assessment – II

Technology cooperation received the highest scores from the public bodies, while the market oriented activities are the most popular among private research institutions and public bodies. Unlike in the previous cases, private researchers and public bodies are hardly interested in the use of research infrastructures, while it was highly evaluated by researchers from public research institutions. Although the exchange of S&T Information on strategic level to set up future joint activities seems to be important for all the stakeholder groups, it received the highest scores from the public bodies. We should bear in mind that although all the scores for these activities were high, we can only find relative differences between the priorities of various types of organisations.

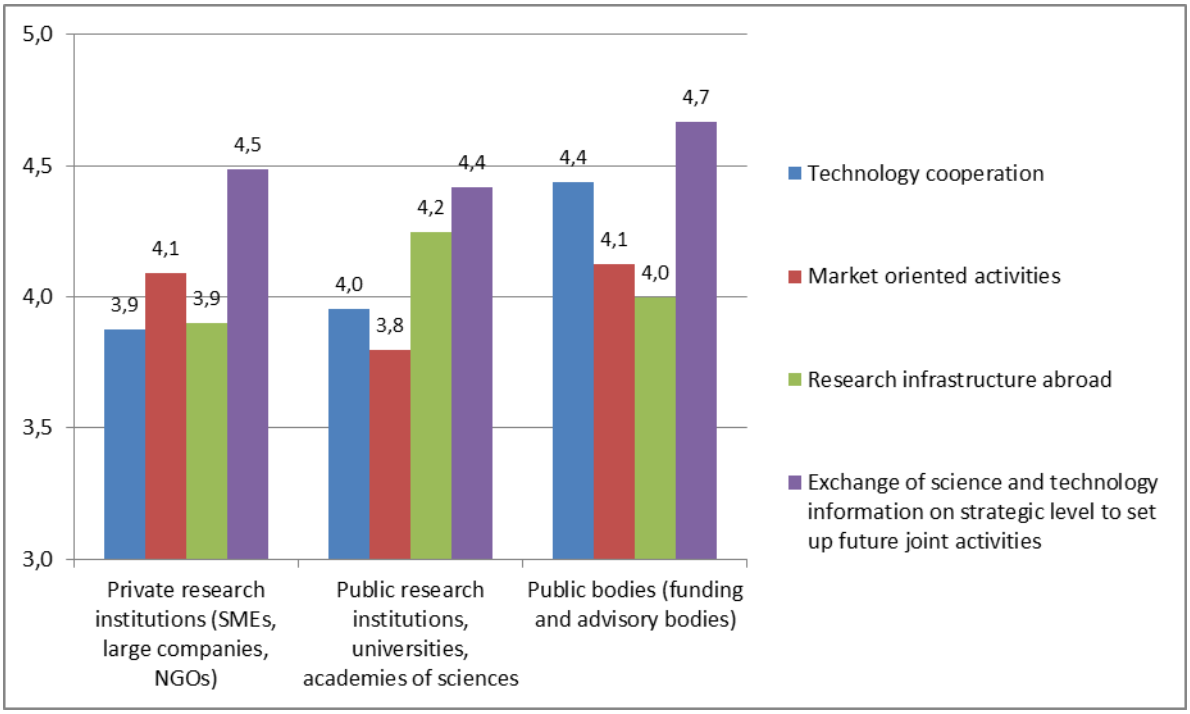


Figure 7 – Relation between the type of organisations and the activity assessment – III

We also compared the *relative importance of the above mentioned activities with the field of research*. Overall, activities in international research, science and technology cooperation seem to be the most important for researchers from agricultural sciences, humanities, engineering and technology, medical and health science. International bilateral and multilateral collaboration was highly evaluated by scientists from all fields. Mobility seems to be more important for agricultural scientists than for social scientists. Teaching assignments are the most important for researchers from agricultural science and humanities. There is a huge difference in the importance of the technology cooperation and market oriented activities as agricultural scientists and engineering, technology researchers find it more significant, while natural, social, medical and health scientists find it less important.

Respondents were then asked to select from a list the *type of actions in which they had experience with European countries*. The table below shows that a) joint research collaboration including mobility and b) higher education cooperation including mobility and development cooperation are the most typical forms of scientific cooperation in both years, while research policy making in the field of science and research or innovation, cooperation with industry and SMEs, are quite low.

Having experience in actions with European countries	2016	2015	Total	Total %
Joint research collaboration including mobility	373	28	401	57%
Higher education cooperation including mobility	261	19	280	40%
Development cooperation (development assistance)	238	21	259	37%
Policy making in the field of science, research or innovation	173	11	184	26%
Research cooperation with industry or small and medium enterprises	128	2	130	18%
no experience yet	45	9	54	8%

Table 5 - Experience in actions with European countries

When asking about *how many years they had been working with European countries*, the general finding is that the level of cooperation with European countries is increasing. The table below shows that in 2015, 16% of the respondents were not performing any cooperation with Europe at all, while in 2016 that number has reduced to 11%. The number of researchers who have been cooperating with European countries for 3-5 years or more than 5 years has also increased slightly. More than half of the respondents have been working with the EU countries for more than five years, which is a signal of a good cooperation level established between the EaP countries and the EU. On the other hand, only 40% of the respondents are well informed about calls for proposals launched under bilateral S&T agreements with European countries (using a scale from 1 to 5, where 1=not informed and 5=very well informed).

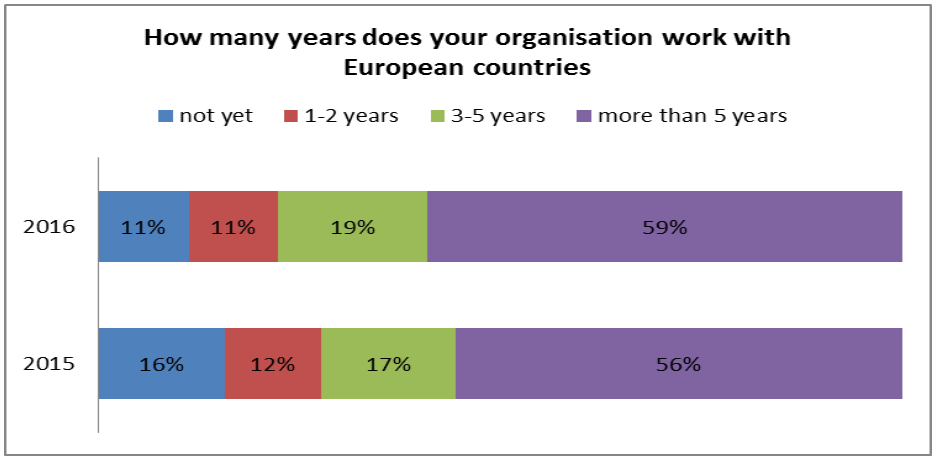


Figure 8 – Number of years EaP organisation working with EU countries

Most of the respondents were well informed about H2020 and the majority of them know about ERA-NETs. Much less scientists know about other instruments and initiatives (JPIs, ETP, EIT). Less than 20% of the respondents are familiar with JTI.

Having experience in tools with EU countries	2016	2015	Total	Total%
HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)	449	102	551	78%
ERA-NETs (Supports the coordination of national research programmes accross countries)	234	60	294	42%
ETP (European Technology Platforms)	111	28	139	20%
JPIs (Joint Programming Initiatives)	96	24	120	17%
JTI (Joint Technology Initiatives)	67	23	90	13%
EIT (European Institute of Technology)	116	29	45	6%

Table 6 - Experience in tools with EU countries

Asking in a separate question *"How well are you informed about HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)?"* EaP researchers replied on an average score of 3,7 (out of 5). Concerning their information about concrete calls the average score is 3,5 (out of 5). Based on the result of the second survey, approximately 70% of the respondents have never submitted any proposals under FP7. The numbers are even lower in the case of H2020: approximately 75% of the respondents have not submitted proposal under H2020 yet, but 63% of the respondents are planning to submit proposals for Work Programme 2016-2017 of Horizon 2020, although only half of them are already involved in a consortium.

Based on results from both surveys, the five main difficulties identified by the respondents when *preparing and implementing a project* are the following:

- finding a potential partner, identifying partners from EU countries;
- finding a potential project coordinator from EU countries;
- building a consortium;
- poor infrastructure and financial support;
- lack of experience in writing project proposals.

Nevertheless, only a few of the respondents face the following difficulties when preparing and implementing the project: *legal rules are incomprehensible and overregulated; unclear conditions of the application and implementation; communication problems between partners*.

65% of the respondents have already tried to establish contacts with European researchers to get involved in Horizon 2020 applications. However, the majority of the respondents find it rather difficult (23%) or moderate (45%) to establish these contacts. In most cases they face the following difficulties when trying to establish contacts with European researchers:

- finding an appropriate partner with common research interest;
- different approaches to solve specific problems;
- significant differences in the use of current technology;
- low number of publication in international scientific journals;
- lack of personal network, lack of information and links, language barriers;
- no experience in writing proposals, lack of information from potential coordinator from EU countries in the stage of a new project and consortium creation;
- poor infrastructure and financial support, lack of financing for visiting more brokerage events and info-days, other conferences.

Respondents were also asked to indicate which *tools might facilitate their participation in H2020*, selecting from a list of possibilities. The most positive responses were given for participation in scientific conferences (67% of the respondents find it important), partner search support (57%), and mobility schemes to visit ad hoc research organisations in other countries to discuss and prepare joint Horizon 2020 proposals (52%). Project management training, participation in brokerage events, "twinning" schemes, information about calls launched under Horizon 2020 were also mentioned as important tools (41%-45% of the respondents find it important). The language courses were considered to be useful by only 30% of the respondents, and information about IPR received only 22%.

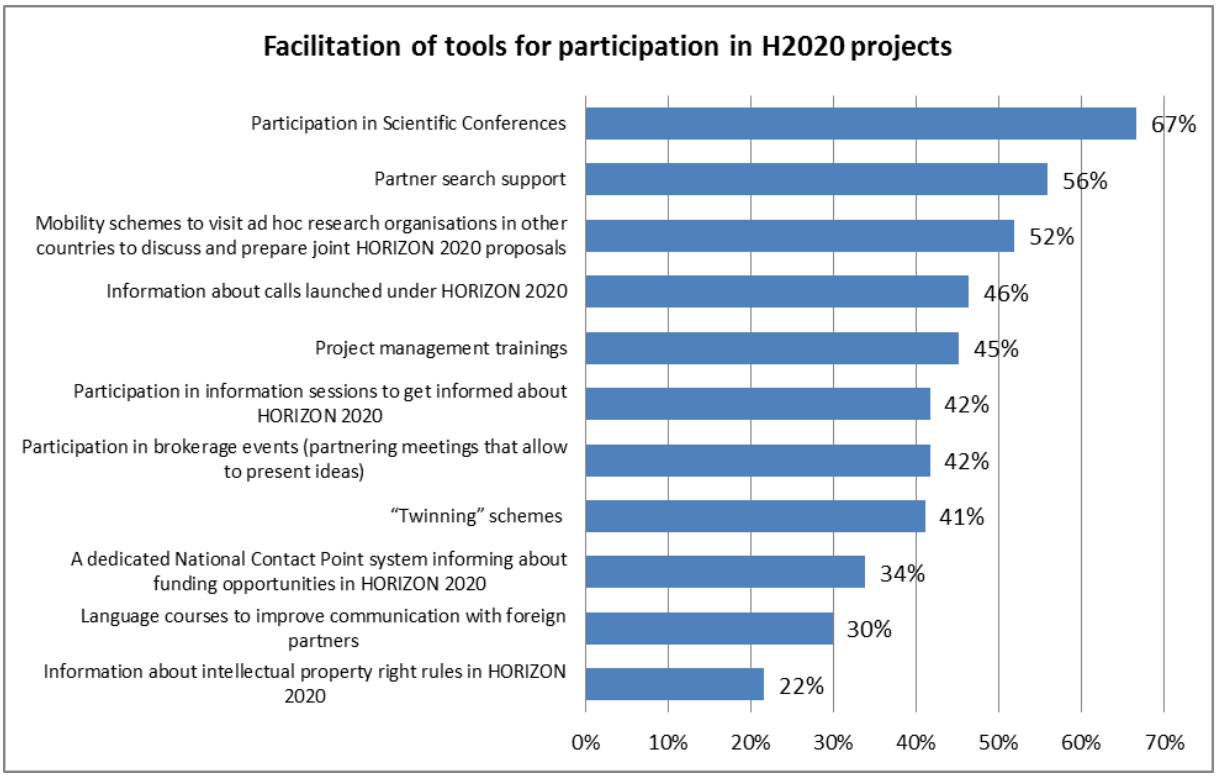


Figure 9 – Facilitation of tools for participation in H2020 projects

The survey also measured the *development of cooperation of the researcher's country in the last 2 years* with other countries or regions, using a scale from -1 to 1 (where -1=reducing, 1 =increasing and 0=stable). Based on the data from 2015 and 2016, overall cooperation with single European countries (bilateral cooperation), research cooperation within more European countries in the EU Programmes (such as FP7 or Horizon 2020) and the neighbouring countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) show the highest increase. Collaboration with Russia and India has decreased.

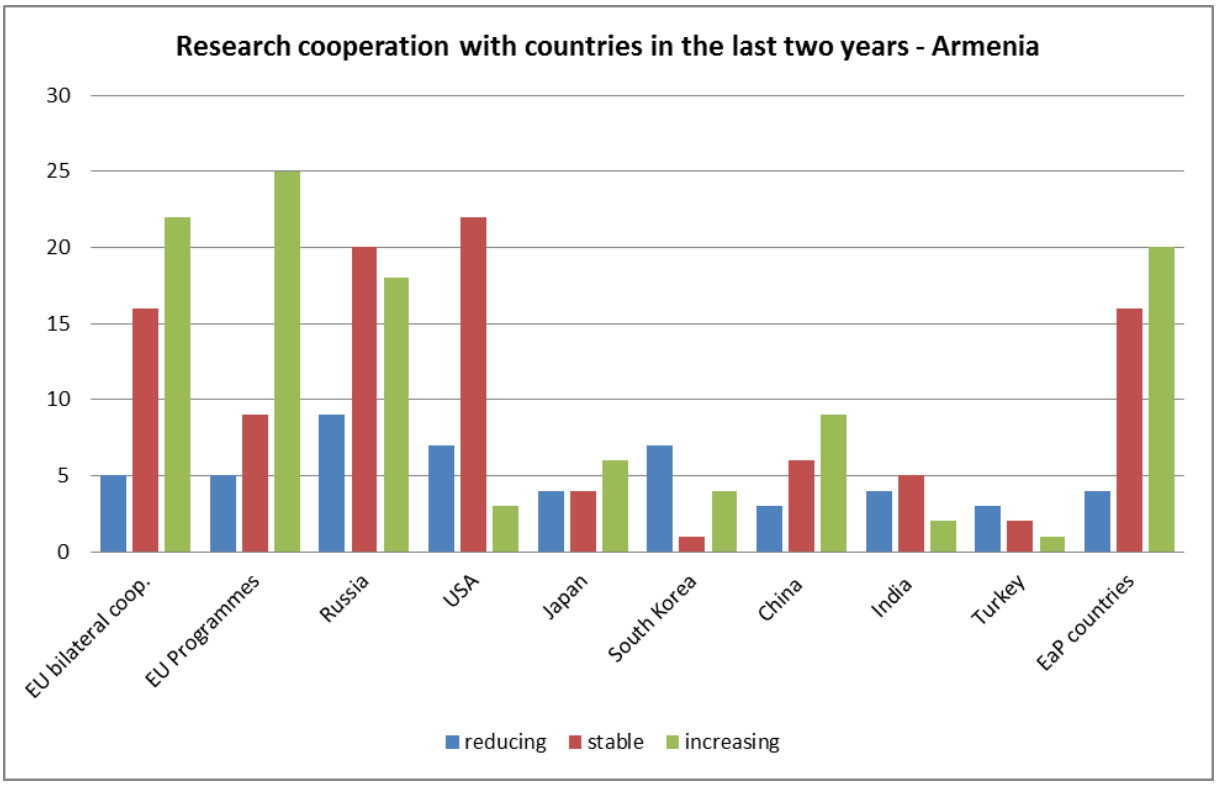
The development of research cooperation in the last two years was analysed on the basis of the nationality of the respondents[6] (especially because of the changes with specific countries).

Positive tendencies have been observed in Georgia, Moldova and Ukraine (associated partners of H2020), no real changes have happened in Azerbaijan and Belarus in terms of bilateral cooperation. EU programmes seem to be the most appealing for Ukraine, Moldova and Armenia. Azerbaijan has not experienced real changes.

Armenia and Belarus consider their scientific relations with Russia positively. Scientific cooperation with the USA is increasing only in Georgia and Ukraine, while it decreased in Azerbaijan, Belarus and Moldova.

Cooperation with China shows significant increase for researchers from Armenia, Belarus, Georgia and Ukraine, while with Azerbaijan the cooperation is decreasing. Intraregional cooperation in general is evaluated in a positive way by all the countries, Azerbaijan was the least optimistic, but it is still above the not changing – zero – level.

[6] The graphs show the number of opinion expressed regarding the importance of research cooperation with countries mentioned in Figure 6 in the last two years per EaP countries


Research cooperation with countries in the last two years - Armenia
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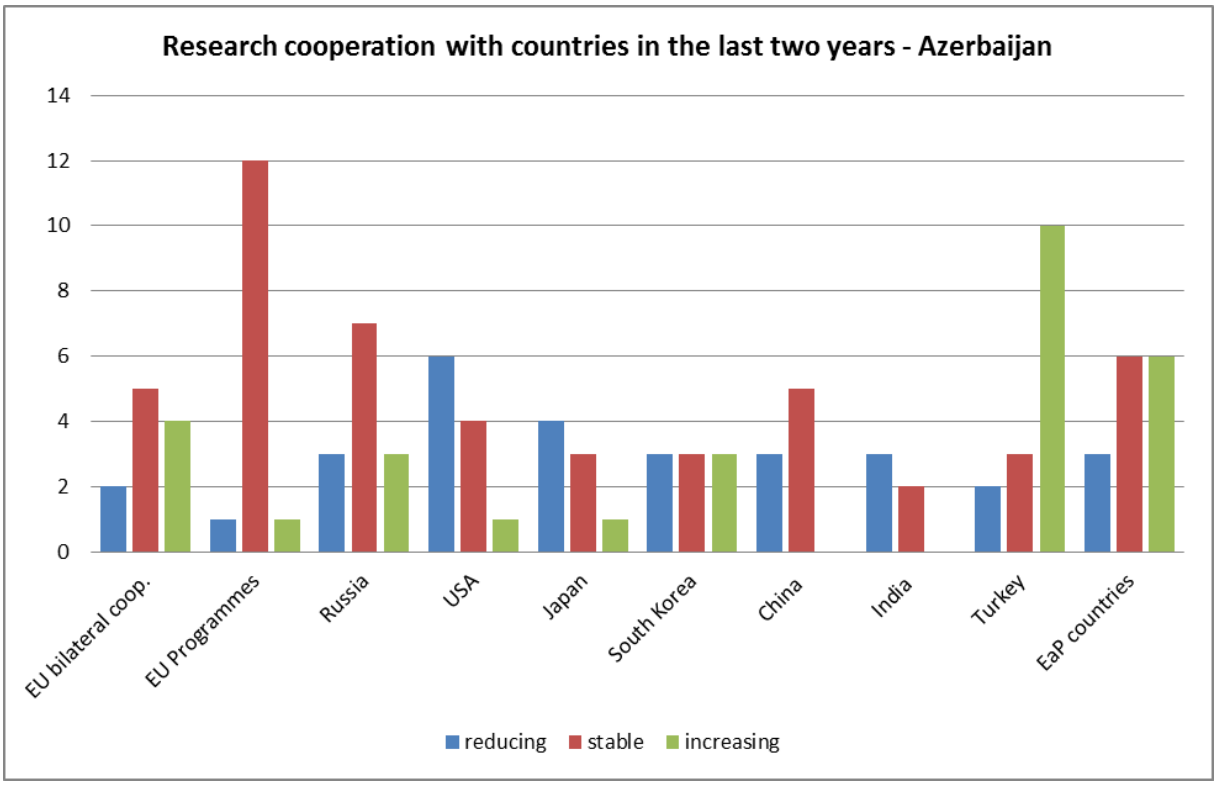
Research cooperation with countries in the last two years - Azerbaijan
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stable
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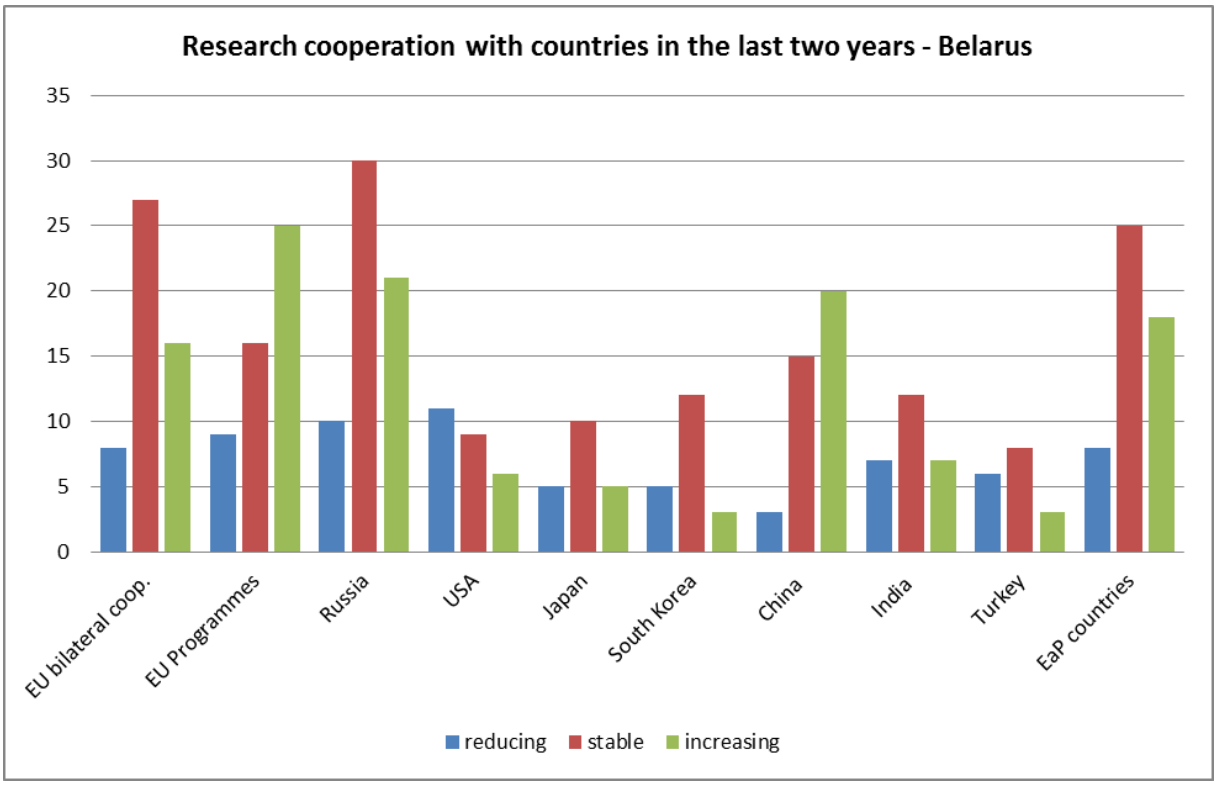
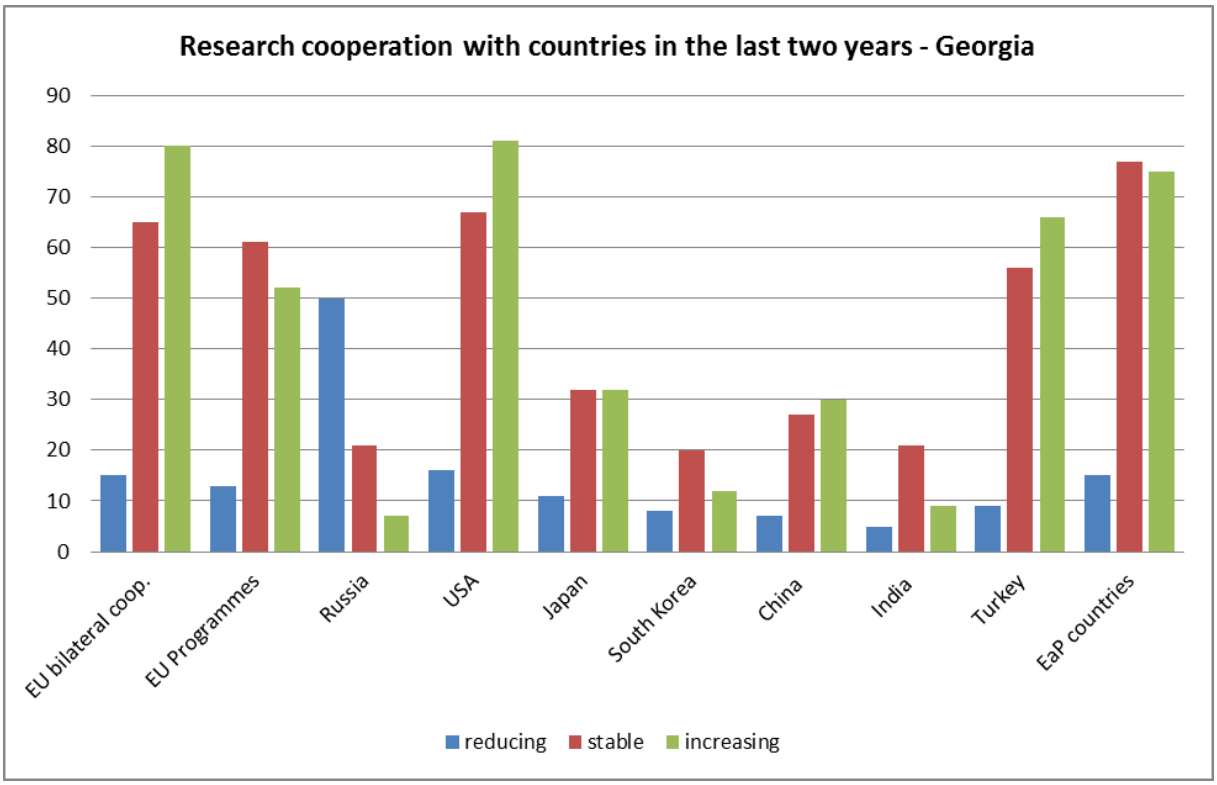

Research cooperation with countries in the last two years - Belarus
35
30
25
20
15
10
5
0
EU bilateral coop.
EU Programmes
Russia
USA
Japan
South Korea
China
India
Turkey
EaP countries
reducing
stable
increasing


Research cooperation with countries in the last two years - Georgia
90
80
70
60
50
40
30
20
10
0
EU bilateral coop.
EU Programmes
Russia
USA
Japan
South Korea
China
India
Turkey
EaP countries
reducing
stable
increasing

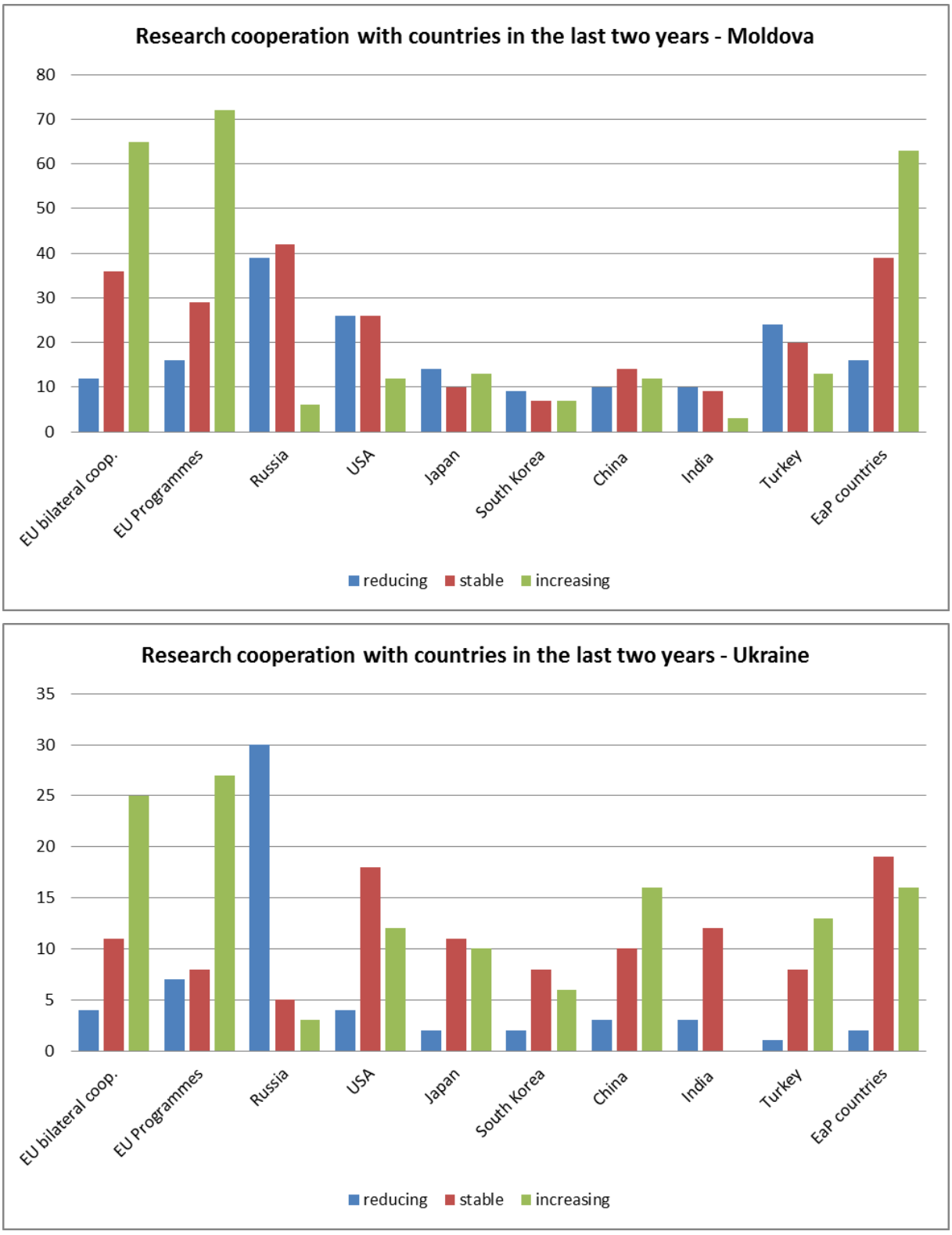


Figure 10 – Research cooperation with countries in the last two years

Respondents were asked to indicate *5 EU countries and organisations with which they have the most advanced STI cooperation*. It was quite difficult to analyse the most important five EU institutions, as many respondents have only mentioned countries instead of institutions. We decided to aggregate the data on country level, and these were then analysed on the basis of the nationality of the respondents. Generally more than 23% of the respondents indicated Germany as the most important EU country with whom they have the most advanced STI cooperation. Italy, France, Romania, Poland, and the UK were also mentioned among the most important 5 EU countries, based on both surveys.

Germany was indicated as the most important EU country in case of all EaP countries. We can observe that Romania is an important partner mainly for Moldovan researchers. Italy, France and the UK show close STI cooperation with Georgian researchers. When looking at the numbers, we have to keep in mind that most replies were received from Georgia; that is why their relative share is so high in many cases. We have also checked the occurrence of selected countries as a first, second, third etc. priority.

Most important EU countries	Armenia	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	Total
Germany	2,5%	0,5%	2,0%	11,0%	5,5%	1,5%	23,0%
Italy	1,0%	0,5%	1,0%	7,0%	2,5%	0,5%	12,5%
France	1,0%	0,5%	1,5%	5,5%	2,0%	1,5%	12,0%
Romania	0,5%		0,5%	1,0%	9,0%	0,5%	11,5%
Poland			2,5%	4,0%	1,5%	1,5%	9,5%
UK	1,0%	0,5%	1,0%	5,0%	1,0%	1,0%	9,5%
Spain	0,5%	0,5%	0,5%	3,0%	2,5%	0,0%	7,0%
Austria	0,5%	0,5%	0,5%	2,5%	1,5%	1,0%	6,5%
Greece	0,5%	0,5%	0,5%	2,5%	0,5%	0,5%	5,0%
Sweden	0,5%		0,5%	1,5%	1,0%		3,5%

Table 7 – most important EU country in STI cooperation

There was a relatively positive opinion about the *likelihood of the following trends in the next 3 years in EaP countries*:

- Researchers will develop more international cooperation activities
- Increased use of funding opportunities for international cooperation of researchers
- Stronger strategic cooperation of my own country with the European Union as a whole
- Stronger coordination of funding instruments and funding priorities of my own country with European countries
- More cooperation in applied research, technology development and innovation across borders

All trends were evaluated as ‘most likely’, none of them received ‘rather unlikely’. The following two trends received the highest evaulation: researchers will develop more international cooperation activities; stronger strategic cooperation of EaP countries with the European Union as a whole.

The *importance of research cooperation between the countries mentioned below and the EaP countries in the next three years* was also evaluated.[7] Overall, the most important are the European countries that received 4,43 avarage index in 2016, and the USA that indicates the highest growing from 2015 to 2016. Importance of Russia shows the highest fall, the average index declined by 1,3 from 2015 to 2016. India, South Korea and Russia are the least relevant countries in research cooperation among those proposed by the questionnaire.

[7] The table shows the mean (using a scale from -5 to 5) of the importance of research cooperation with the countries.

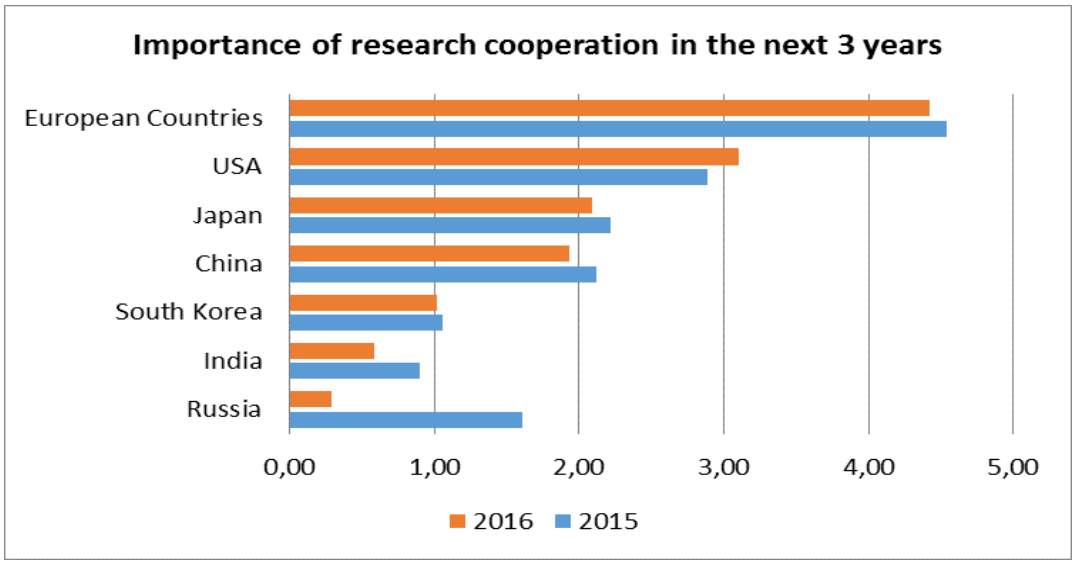


Figure 11 – Importance of research cooperation in the next 3 years

Different countries have different expectations about the various partner countries, so tendencies were also evaluated per EaP country[8]. General political connections strongly influence the estimations about future S&T cooperation.

Overall, the future cooperation with the European countries in the next 3 years shows the strongest increase, all the EaP countries have positive expectations. (Azerbaijan and Belarus show a bit lower increase than the other EaP countries.) Importance of research cooperation with Russia shows significant fall among researchers from Georgia and Ukraine. Perspectives for stronger cooperation with Russia are characteristic for Armenia and Belarus, while there are narrowly positive prospects for Azerbaijan and Moldova. In case of cooperation with the USA and Japan we can see the similar order of importance: relatively positive expectations from Georgia and slightly negative estimations from Belarus. With South Korea, China and India we have a similar picture, only Azerbaijan has more positive prospects for South Korea and negative prospects for China and India than all the other countries of the region. China seems to be the most important for Ukraine and Belarus.

[8] The graphs show the mean (using a scale from -5 to 5) of the importance of research cooperation with the countries per EaP countries

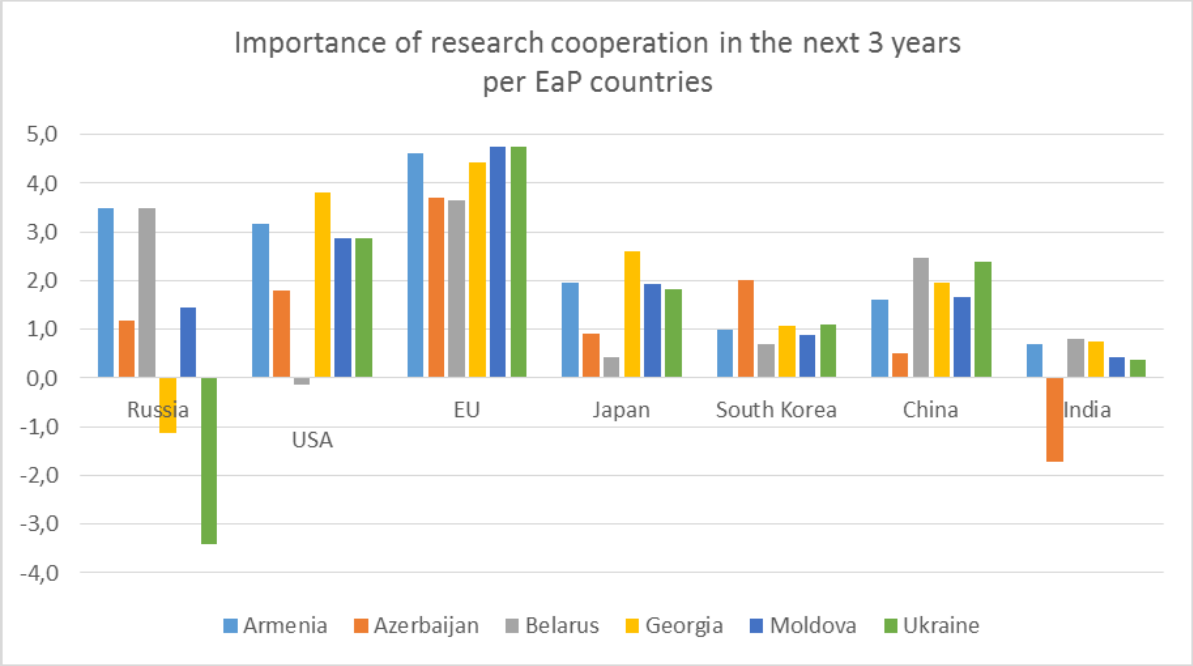


Figure 12 – Importance of research cooperation in the next 3 years

Respondents were asked to *evaluate the importance of International Science, Technology and Innovation cooperation with the European countries in the next three years* from scale 1 to 5 (where 1=minimum and 5=maximum). There is hardly any difference in the evaluation of respondents when speaking about the importance of European cooperation for their country (average scores 3,92 out of 5), for their institution (3,96) or for themselves (3,93) in 2016.

Last but not least, respondents were asked to evaluate from 1 to 5 (where 1=not informed and 5=well informed) *how well they are informed about the IncoNet EaP project*. It seems that they are well informed about the IncoNet EaP project as the average score was 3,1.

4. FOCUS GROUP RESULTS

Collected input was consolidated during a group interview dinner, face-to-face interviews (as a side event of the STI Days in Paris on 18 March 2015 with 12 experts (2 experts from all EaP countries) to get a deeper and clearer picture. Based on the results from the first round, the questions for the Focus Group were defined. The group interviews served to explore further factors influencing international STI cooperation. The following 4 topics were discussed during the group interview dinner:

1. **What are the main difficulties with international cooperation?**

Political boundaries, existing political contacts and conflicts seriously effect scientific cooperation. This trend is also confirmed by the replies of the barometer. Some EaP experts claimed during the interview that legal rules are incomprehensible, overregulated, there are communication problems between partners that cause difficulties in international cooperation. Besides, poor infrastructure and financial support make it also more complicated to cooperate. Different priority fields in the EaP countries and in Europe might cause another difficulty.

2. **Which are the main countries/regions you cooperate with and why?**

Participants have often mentioned the neighbouring countries, and that they often cooperate with countries in the region. Overall, Russia is still an important partner, however some scientists do not express so much interest towards it; this fact rather reflects current tendencies. Nevertheless, there is a shift towards Europe, especially with countries which are historically and geographically closer to the EaP region. The Baltic countries were mentioned as an example. In spite of this shift from Russia to Europe, the difficulty to establish new contacts and expand the research collaboration was highlighted.

3. **How could be you/your institution's international involvement facilitated?**

Instruments like the organisation of trainings, proposal writing trainings, participation in scientific events or brokerage events, exchange of scientists are important.

4. **How could be your involvement in H2020 facilitated? What are the main difficulties?**

In most of the cases finding appropriate partners and taken on board by an existing consortium have been mentioned as main difficulties. More personal network with EU researchers would be needed, but there is lack of national funding potential to participate in more events where networking and matchmaking with more EU experts are possible. Besides, some researchers have lack of information about the general rules for participation and basic requirements on how to become members of a H2020 consortium. Without H2020 experiences they need more time to find the appropriate call and EU partners, to prepare and submit a proposal. Lack of enough experience in project coordination causes that some scientists could not find a suitable coordinator for the chosen project from EU.

5. CONCLUSIONS

The results of the STI cooperation barometer between EU-EaP countries contribute to get a deeper picture about the development of framework conditions, cooperation opportunities and potentials of bi-regional STI cooperation over time. It identified also bottlenecks and trends, to define further actions and strategies to facilitate bi-regional Science, Technology and Innovation cooperation. When we analyse the differences between the two rounds, we have to take into consideration the significant difference between the number of the respondents in the two rounds and the distinct share of the country respondents that causes some distortions in the results. However, reaching a much higher response rate in the second round resulted in a better picture about EU-EaP STI cooperation.

Well balanced share of male and female respondents tells us that there is no evidence of gender distinction among scientists in EaP countries. As for the age division, there is a considerable number of younger researchers in case of both rounds, which shows the interest of this age groups in the future of STI cooperation. However, there is a huge difference in the share of types of institutions: the numbers of public bodies and private research institutions are low, while more than half of the respondents are working with universities and academies of sciences. Based on both rounds of the survey, natural sciences, engineering and medical sciences are much better represented than agricultural sciences and humanities.

Tendencies in STI cooperation with EU and other regions

EaP countries show even stronger cooperation with the European countries than other regions, which is justified with the results from several questions of the survey. The barometer observed the tendencies of science, research and technology cooperation during the last two years, as well as the importance of research cooperation in the next 3 years between countries and regions.

During the last two years, the *most important countries concerning science, research and technology cooperation* are Germany and the USA. Romania, France, Italy, and Poland are also mentioned among the most important countries. However, Russia, France and Romania seem to lose importance in scientific cooperation activities with the EaP countries (these countries show the highest fall in popularity from 2015 to 2016). Face-to-face interviews gave a clearer picture about cooperation trends: there is a shift towards Europe, especially with those countries which are historically and geographically closer to the EaP region, as Baltic countries. We observed strong relation between the USA - Georgia, Romania - Moldova and Armenia – France/Russia.

EaP countries claimed that *research cooperation between them and other regions developed* the most significant with the European countries - both bilateral cooperation and multilateral cooperation in the EU Programmes such as FPs, H2020 - and EaP countries in the last two years. Development with Russia, the USA, Japan, South Korea, China, India, and Turkey was not as highly evaluated as the previous two region. As regards the bilateral cooperation, positive tendencies have been observed in Armenia, Georgia, Moldova and Ukraine (associated partners of H2020), but no real changes have happened in Azerbaijan and Belarus. EU programmes seem to be the most appealing for Armenia, Moldova and Ukraine. Intraregional cooperation in general is evaluated in a positive way by all the countries. Armenia and Belarus think still positive about their scientific relations with Russia. Scientific cooperation with the USA is increasing only in Georgia and Ukraine.

The *most important EU country in STI cooperation* seems to be Germany. Besides, Italy, France, Romania, Poland, the UK and Spain were also mentioned as countries of interest for collaboration. Romania is an important partner mainly for Moldovan researchers. Italy,

France and the UK show close STI cooperation with Georgian researchers. Poland is the most popular among researchers from Belarus.

Last but not least, the European countries were indicated again as the *most important region in research cooperation in the next three years* by each EaP countries. Russia, the USA, Japan, South Korea, China and India seem to be less important region in research cooperation for EaP countries in the nearest future.

Trends, bottlenecks actions and tools in STI cooperation

Generally speaking, international cooperation is very significant for all the responding EaP organisations and the level of cooperation with European countries is increasing. The good cooperation level between the EaP countries and the EU can be justified by the fact that approximately half of the respondents have been working with the EU countries for more than five years based on the survey. Besides, all EaP countries have a very positive opinion about developing more international cooperation activities and stronger strategic cooperation with the European Union as a whole in the next 3 years.

In the last two years the *most popular activities in international research, science and technology cooperation* are bilateral and international multilateral project collaboration with European countries. EaP countries are highly interested to establish bilateral cooperation with one European country and also multilateral cooperation with more European countries in the EU Programmes, like FPs and H2020. However, market oriented activities to utilize research results with partners from abroad, as well as hosting young researchers from abroad and teaching assignments seem to be quite unimportant actions.

The *most popular tools that facilitate the participation* of EaP researchers in H2020 are scientific conferences and partner search support, and mobility schemes to visit ad hoc research organisations in other countries to discuss and prepare joint Horizon 2020 proposals. Project management training, participation in brokerage events, "twinning" schemes, information about calls launched under Horizon 2020 were also mentioned as important tools.

International cooperation is very important for all EaP countries, however they have to face many difficulties, among others, with the following:

- having a lack of capacities both in terms of research personnel and infrastructure;
- having different institutional structure, financial instruments, funding mechanisms and tools make more complicated the cooperation with European countries;
- having different priority fields in the EaP countries and in Europe;
- only 40% of the respondents are well informed about calls for proposals launched under bilateral S&T agreements with single European countries;
- establishing contacts with European researchers are finding an appropriate partner with common research interest;
- having different approaches to solve specific problems;
- having significant differences in the use of current technologies.

Recommendations

Results from the survey provide recommendations and concrete suggestions on how to better support international STI cooperation in the EaP countries.

- National Contact Points (NCPs) have a really important role in intervening between the EU and the EaP institutions; however, several researchers from EaP countries are not familiar with their role. As the graph in Figure 9 illustrates only 34 % of the respondents consider NCP as useful tool that might facilitate their participation in H2020. NCPs inform about the current calls, programmes and also about the methodology (i.e. how to apply for an EU call). In addition, NCPs facilitate finding the appropriate partners from the EU for collaboration. The important role of NCPs should be also spread and shared among researchers from EaP countries.

- Most of the respondents were well informed about H2020 and the majority of them know about ERA-NETs. However much less scientists (less than 20% of the respondents as Table 6 illustrates) know about other instruments and initiatives (JPIs, JTIs, ETP, EIT). These instruments and initiatives should be also spread and shared among researchers from EaP countries.

- Even if the STI cooperation between the EU MS/AC and the EaP countries is already quite developed as the data from surveys illustrate, there is a strong interest on both sides in further enhancing the bilateral STI cooperation in the 3 SC. Bilateral cooperation networks or existing collaborations in EaP countries should be used to get into H2020 consortia. Exploiting the bilateral cooperation to multilateral could also promote stronger cooperation, as well as widen the cooperation with SMEs, academia and industry.

Although Horizon 2020 welcomes proposals from all Eastern Partnership countries, the number of eligible H2020 proposals with EaP attendance is quite low. The barometer survey has found that several EaP researchers seem to know about H2020 in general, but only smaller amount know about concrete calls of H2020. The majority (70%) of the respondents have never submitted any proposals under FP7 and H2020. Most of them are planning to submit proposals for the Work Programme 2016-2017 of Horizon 2020, even though only half of them is already involved in a consortium. In order to increase the number of the successful H2020 proposals with inclusion of EaP countries, flexibility is expected from the researchers' side to be able to take part in the call. Finally, there is a need for more partnering events for EaP countries, more SMEs from EaP through spin-off, more start-up programmes, as well as providing workshops about innovation.

6. LIST OF ABBREVIATIONS

EaP Eastern Partnership

EIT European Institute of Innovation and Technology

ERA-NET European Research Area Network

ETP European Technology Platforms

FP7 Seventh Framework Programme for Research and Technological Development

H2020 Horizon 2020 Framework Programme for Research and Technological Development

ICT Information and Communication Technologies

IncoNet International Cooperation Network

JPIs Joint Programming Initiative

JTIs Joint Technology Initiatives

NCP National Contact Point

NGO Non-Governmental Organization

SME Small and Medium-sized Enterprise

STI Science, Technology and Innovation

S&T Science and Technology

7. LIST OF TABLES

8. LIST OF FIGURES

9. ANNEXES

SURVEY TOOL as of 2015 (last version)

EU - Eastern Partnership Countries International Cooperation Barometer in Science, Technology and Innovation

IncoNet EaP is a project, financed by the 7th Framework Program of the European Union aiming at the **support** of the bi-regional **S**cience, **T**echnology and **I**nnovation dialogue between the **EU** Member States and Associated Countries and the **Eastern Partnership** Countries **Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine** with a focus on three selected Societal Challenges: **Climate** Change, **Energy** and **Health**.

With this questionnaire, addressing the six countries, we would like to measure the **development** of framework conditions, cooperation opportunities and potentials of **bi-regional Science, Technology and Innovation cooperation over time**. Please answer the 33 questions in this survey, which might take you **10 minutes**.

Your answers help us to see possible bottlenecks and trends, to define further actions and a **strategy** to **facilitate** bi-regional **Science, Technology and Innovation cooperation**.

Any personal data will be dealt confidentially, aggregated results will be used by the project and the European Commission. All the respondents will be **informed** about other project activities, which can be **beneficial** for their scientific work (scientific workshops, financial support schemes for participation in various events etc.) We are pleased to **share the results** of the survey with any respondents if indicated at the end of the questionnaire, you can also subscribe to our newsletter at the end of the survey!

Thank you very much for your cooperation!

Sincerely yours,

INCO-NET EaP Team

There are 33 questions in this survey

country

1 [Q18]

Please choose your country! (Country of permanent residence)

Note: This question is compulsory! *

Please choose **only one** of the following:

- ○ Armenia
- ○ Azerbaijan
- ○ Belarus
- ○ Georgia
- ○ Moldova
- ○ Ukraine
- ○ I am from another country

2 [Q18b]

We thank you for your interest!

The survey is addressed only to persons from Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine

You are cordially invited to indicate here e-mail contacts (Scientists, STI policy makers) from the 6 Eastern Partnershipcountries so that we can invite them to join the "Cooperation Barometer" survey!

Only answer this question if the following conditions are met:
Answer was 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!)

Please write your answer here:

Experience with cooperation and backward looking

3 [comeback]This survey will be delivered to you a second time in 15 months to see the developments concerning international cooperation with your country. It is important that you indicate here your e-mail address! This will facilitate a profound analysis. We will not share your contact details or use your data for any other purpose!

Only answer this question if the following conditions are met:
Answer was NOT 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!)

Please write your answer here:

4 [Q22]Gender

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ male
- ○ female

5 [Q23]Age

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ 20-29
- ○ 30-39
- ○ 40-49
- ○ 50-59
- ○ 60-69
- ○ ≥70

6 [Q18a]For which type of organisation are you working?

Only answer this question if the following conditions are met:
Answer was NOT 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!)

Please choose **only one** of the following:

- ○ University
- ○ Academy of Sciences (Institute or centre)
- ○ State owned Research or technology centre
- ○ Private small or medium enterprise (SME) <250 employees
- ○ Private Industry (large enterprise, >250 employees)
- ○ Ministry or advisory body (policy making)
- ○ Agency or Funding body
- ○ Other [ ]

7 [Q24]

In which fields of science are you active? - (Revised field of science and technology classification of the FRASCATI Manual)

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ Natural sciences
- ○ Engineering and technology
- ○ Medical and Health sciences
- ○ Agricultural sciences
- ○ Social sciences
- ○ Humanities
- ○ no specific field

8 [Q3]

How important is international co-operation for your organisation?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

1..not important at all, 5..very important Please move with your mouse the dark blue "Scroll thumb" 

9 [Q2]The following countries were most important for me and my organisation concerning science, research and technology cooperation during the last two years:

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer here:

10 [Q7]

How relevant are the following activities for your organisation in terms of international research, science and technology cooperation?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose the appropriate response for each item:

	1 (unimportant)	2	3	4	5 (very important)
Mobility and Exchange of Scientists (outgoing)	○	○	○	○	○
Mobility and Exchange of Scientists (incoming to my country)	○	○	○	○	○
Teaching assignments (outgoing)	○	○	○	○	○
Teaching assignments (incoming)	○	○	○	○	○
Sending young researchers abroad	○	○	○	○	○
Hosting young researchers from abroad	○	○	○	○	○
Bilateral project collaboration (working with one European country)	○	○	○	○	○
International multilateral project collaboration (cooperation with more than one European country)	○	○	○	○	○
Collaboration on international co-publications	○	○	○	○	○
Institutional cooperation for establishing agreements	○	○	○	○	○
Technology cooperation with commercial potential including a partner from abroad	○	○	○	○	○
Market oriented activities to utilize research results with a partner from abroad	○	○	○	○	○
Access to research infrastructure abroad	○	○	○	○	○
Exchange of science and technology information on strategic level to set up future joint activities	○	○	○	○	○

11 [Q1]

My organisation has experience in the following type(s) of action with European countries:

Only answer this question if the following conditions are met:
Answer was NOT 'more than 5 years' at question ' [Q5]' (How many years does your organisation work with European countries in European cooperation programmes?) *and* Answer was NOT 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!)

Please choose **all** that apply:

- ☐ Joint research collaboration including mobility
- ☐ Higher education cooperation including mobility
- ☐ Research cooperation with industry or small and medium enterprises
- ☐ Policy making in the field of science, research or innovation
- ☐ Development cooperation (development assistance)
- ☐ no experience yet
- ☐ Other: ____

12 [Q8]

How well are you informed about calls for proposals launched under bilateral S&T agreements with single European countries?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

1=not informed, 5=very well informed

13 [Q5]How many years does your organisation work with European countries in European cooperation programmes?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ not yet
- ○ 1-2 years
- ○ 3-5 years
- ○ more than 5 years

14 [Q10]Do you know about the following European research instruments or platforms?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose the appropriate response for each item:

	yes	no
HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)	○	○
ERA-NETs (Supports the coordination of national research programmes accross countries)	○	○
JPIs (Joint Programming Initiatives)	○	○
ETP (European Technology Platforms)	○	○
JTI (Joint Technology Initiatives)	○	○
EIT (European Institute of Technology)	○	○

15 [Q4]How well are you informed about HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

16 [Q9]

How well are you informed about calls for proposals launched by HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

17 [Q10A]

In how many proposals or funded projects have you been personally involved in the 7th Framework Programme for Research and Technological Development (2007-2013)?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer(s) here:

Number of proposals submitted in FP7:	
Number of funded projects in FP7:	

18 [Q11]

In how many proposals have you been personally involved so far in HORIZON 2020, the EU Framework Programme for Research and Innovation (2014-2020)?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer(s) here:

Number of proposals submitted in HORIZON 2020	
Number of funded proposals in HORIZON 2020	

19 [Q13a]What kind of difficulties did you face when preparing and implementing the project(s)?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer here:

20 [Q13b]Have you ever tried to establish contacts with European researchers to get involved in HORIZON 2020 applications?

Only answer this question if the following conditions are met:
((**Q18.NAOK** != "7"))

Please choose **only one** of the following:

- ○ Yes
- ○ No

21 [Q13]

How difficult is it for you to establish contacts with European researchers to get involved in HORIZON 2020 applications?

Only answer this question if the following conditions are met:
Answer was NOT 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!) *and* Answer was 'Yes' at question '20 [Q13b]' (Have you ever tried to establish contacts with European researchers to get involved in HORIZON 2020 applications?)

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

1=very difficult, 5=very easy

22 [Q14]

Which tools would facilitate your participation in HORIZON 2020 projects?

Please check any that apply!

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose **all** that apply:

- [ ] Participation in Scientific Conferences
- [ ] Partner search support
- [ ] Participation in brokerage events (partnering meetings that allow to present ideas)
- [ ] Project management trainings
- [ ] Language courses to improve communication with foreign partners
- [ ] "Twinning" schemes (structural cooperation with a similar organisation in an European country in terms of research agendas, research management etc.)
- [ ] Information about calls launched under HORIZON 2020
- [ ] Participation in information sessions to get informed about HORIZON 2020
- [ ] A dedicated National Contact Point system informing about funding opportunities in HORIZON 2020
- [ ] Mobility schemes to visit ad hoc research organisations in other countries to discuss and prepare joint HORIZON 2020 proposals
- [ ] Information about intellectual property right rules in HORIZON 2020
- [ ] Other: _____

Perception of the importance of cooperation with selected countries

QUESTIONGROUP: Perception of the importance of cooperation with the EU MS and in EU FP, also in comparison with other global cooperation partnering countries (US, JP)

23 [Q15]How did research cooperation of your country develop in the last 2 years with the following countries or regions?

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose the appropriate response for each item:

	NOT RELEVANT	reducing	stable	increasing	I DO NOT KNOW
Research cooperation with single European countries (bilateral cooperation)	○	○	○	○	○
Research cooperation within more European countries in the EU Programmes (such as FP7 or HORIZON 2020)	○	○	○	○	○
Research cooperation with Russia	○	○	○	○	○
Research cooperation with the USA	○	○	○	○	○
Research cooperation with Japan	○	○	○	○	○
Research cooperation with South Korea	○	○	○	○	○
Research cooperation with China	○	○	○	○	○
Research cooperation with India	○	○	○	○	○
Research cooperation with Turkey	○	○	○	○	○
Research cooperation with the neighbouring countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine)	○	○	○	○	○

24 [Q17a]

Please, indicate 5 EU countries and organisations with whom you have the most advanced STI cooperation!

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer(s) here:

Country 1	
Country 2	
Country 3	
Country 4	
Country 5	

Example: *Spain, Institute of Chemistry, University of Madrid*

25 [Q16]What is your opinion for the likelihood of the following trends in the next 3 years in your country:

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please choose the appropriate response for each item:

	very unlikely	rather unlikely	rather likely	most likely	I do not know
Researchers will develop more international cooperation activities	○	○	○	○	○
Increased use of funding opportunities for international cooperation of researchers	○	○	○	○	○
Stronger strategic cooperation of my own country with the European Union as a whole	○	○	○	○	○
Stronger coordination of funding instruments and funding priorities of my own country with European countries	○	○	○	○	○
More cooperation in applied research, technology development and innovation across borders	○	○	○	○	○

26 [Q17]

In your opinion, which countries will be important for research cooperation with your country in the next 3 years? -

Please move the button to indicate importance from - 5 to +5

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer(s) here:

Russia	
USA	
European Countries	
Japan	
South Korea	
China	
India	

27 [Q17aa]In the next 3 years, International Science, Technology and Innovation cooperation with European countries will be important for...

Only answer this question if the following conditions are met:
((Q18.NAOK != "7"))

Please write your answer(s) here:

my country	
my organisation	
me personally	

General Information

28 [Q6]How well are you informed about the "STI International Cooperation Network for Eastern Partnership Countries" - IncoNet EaP project?

Please choose **only one** of the following:

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

1..not at all 5...very well Please move with your mouse the dark blue "Scroll thumb"

29 [Q6a]Have you already been contacted and/or invited by the INCO-NET EaP to participate in events or other activities?

Only answer this question if the following conditions are met:
Answer was at question '28 [Q6]' (How well are you informed about the "STI International Cooperation Network for Eastern Partnership Countries" - IncoNet EaP project?)

Please choose **only one** of the following:

- ○ Yes
- ○ No

30 [Q6b]If you wish to subscribe to our newsletter please indicate your e-mail address here!

Please write your answer here:

31 [Q21]Would you be ready to provide more information in a moderated group discussion/interview (phone or skype)?

Only answer this question if the following conditions are met:
Answer was NOT 'I am from another country' at question '1 [Q18]' (Please choose your country! (Country of permanent residence) Note: This question is compulsory!)

Please choose **only one** of the following:

- ○ Yes
- ○ No

32 [Q25]Please provide contact details in the text field and indicate phone number or skype address, e-mail for contacting you!

Only answer this question if the following conditions are met:
Answer was 'Yes' at question '31 [Q21]' (Would you be ready to provide more information in a moderated group discussion/interview (phone or skype)?)

Please write your answer here:

33 [Q19]I would like to receive information about the results of the survey and have provided my e-mail address above... *

Please choose **only one** of the following:

- ○ Yes
- ○ No