S&T International Cooperation Network for Eastern European and Central Asian Countries

D2.1: Analytical paper on S&T as part of ENPI/Four Common Spaces

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Abstract
This paper addresses the EU Neighbourhood Policy (ENP) and the Four Common Spaces (4CS) with Russia. Special attention will be paid to the identification of mechanisms for the implementation of the S&T EU policy.

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Executive Summary

The report analyses the existing Science and Technology (S&T) cooperation between the European Union and the countries of Eastern Europe and Central Asia (EECA). Current documents concerning S&T cooperation between the EU and EECA provide a starting point for the analysis. Through the assessment of existing instruments and mechanisms of the ENP as well as the implementation of its programmes, the report evaluates the importance of S&T in the ENPI for EECA and the Four Common Spaces (4 CS) framework with Russia. Key actors and responsible administrative agencies will be identified. The role of S&T in the ENPI/4CS will be determined, and the implementation status of ENPI and the 4CS in regards to S&T will be formulated. This is followed by conclusions.

The report concludes that the focus on cooperation activities between the EU and the countries in EECA that is linked to S&T is rather weak. The main focus lies on the country programs, i.e. fostering the implementation of political, economic and social reform programs in the individual partner countries. S&T is not adopted in all Annual Action Plan and the bilateral financial support for S&T can be improved. At the regional level, ENPI provides a wide range of programs that can be regarded relevant for S&T cooperation. The major area of priority, though, is in the energy sector or the water/wastewater management. Further, S&T is mostly supported at legislative and administrative management level. This could be expanded towards STI projects including enterprises and industry (e.g. PPPs).

A major success story is the adoption of the Bologna Declaration including enhanced mobility of students and academic staff as well as the modernization of the higher education systems.

Further, the implementation and impact of S&T cooperation within the current financial instruments made available to support the 4CS is also rather limited. The situation is further aggravated by the absence of new, ambitious and instrumental PCA and S&T agreement between Russia and the EU. The budget for common activities is not used effectively. The Russian side has made it clear that mechanisms, which are currently in force, are not built on equal footing and do not satisfy the Russian interests. Therefore, the planned contribution by Russian Federation often remains unallocated. Programmes and projects planned under ENPI often remain unrealised. At the same time the European Studies Institute in Moscow can be viewed as a good practice as well as an example of a co-funded activity, which is a step to the changing attitude toward international co-operation that is increasingly based on equal sharing of funds and responsibilities. Another example of a successfully functioning 4CS instrument is the “Industry dialogues”.

As of today, one of the main instruments of S&T cooperation between the EU and Russia as well as the countries in EECA is the Framework Programmes, especially since the introduction of co-ordinated calls. Nevertheless, by recognising the existing opportunities and by continuing a productive and balanced political dialogue, a more effective framework for the implementation of S&T cooperation can be facilitated. Therefore, the extension of the European Research Area by deepening the integration and strengthening the participation in available programmes under ENPI of the Russian Federation and the Eastern Partnership countries must be a goal of the European Union.
### Abbreviations

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<tr>
<td>AAP</td>
<td>Annual Action Programmes</td>
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<td>AIR-Q-GOV</td>
<td>Air quality governance in the ENPI East countries</td>
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<td>CBC</td>
<td>Cross-Border Cooperation</td>
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<td>CIP</td>
<td>Competitiveness and Innovation Programme</td>
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<td>CIS</td>
<td>Commonwealth of Independent States</td>
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<td>CIUDAD</td>
<td>Cooperation in Urban Development and Dialogue</td>
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<td>COST</td>
<td>European Cooperation in Science and Technology</td>
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<td>CREST</td>
<td>Scientific and Technical Research Committee</td>
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<td>CSF</td>
<td>Common Spaces Facility</td>
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<td>CSP</td>
<td>Country Strategy Paper</td>
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<td>DG DEVCO</td>
<td>European Commission Development and Cooperation - EuropeAid</td>
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<td>DG RELEX</td>
<td>Directorate-General for External Relations</td>
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<td>DG RTD</td>
<td>Directorate-General for Research and Technology Development</td>
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<td>EACEA</td>
<td>Education, Audiovisual and Culture Executive Agency</td>
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<td>EAST</td>
<td>ENPI Regional East Programme</td>
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<td>EC</td>
<td>European Community</td>
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<td>ECW</td>
<td>External Cooperation Window</td>
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<td>EDC</td>
<td>European Documentation Centre</td>
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<td>EEA</td>
<td>European Environmental Agency</td>
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<td>ENA</td>
<td>Europe and North Asia</td>
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<td>ENBF</td>
<td>European Neighbourhood Fund</td>
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<td>ENP</td>
<td>European Neighbourhood Policy</td>
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<td>ENPI</td>
<td>European Neighbourhood and Partnership Instrument</td>
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<td>ERA</td>
<td>European Research Area</td>
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<td>ERAC</td>
<td>European Research Area Committee (formerly CREST)</td>
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<td>ERDF</td>
<td>European Regional Development Fund</td>
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<td>ESI</td>
<td>European Studies Institute</td>
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<tr>
<td>EUREKA</td>
<td>European Programme of Cooperation in Science &amp; Technology in the Sphere of High Technologies and Innovation</td>
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<td>FASI</td>
<td>Federal Agency of Science and Innovation; merged in 2010 with the Russian Ministry for Education and Science</td>
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<td>FLEG</td>
<td>Forest Law Enforcement and Governance</td>
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<td>FP</td>
<td>Framework Programme</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>IBPP</td>
<td>Institution Building Partnership Programme</td>
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<td>IFI</td>
<td>International Financial Institution</td>
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<td>INOGATE</td>
<td>International Energy Cooperation Programme between the EU, Eastern Europe, the Caucasus and Central Asia</td>
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<td>IPR</td>
<td>Intellectual Property Rights</td>
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<td>IRP</td>
<td>Interregional Programme</td>
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<td>IRS</td>
<td>Industrialists’ Round Table</td>
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<td>ISTC</td>
<td>International Science and Technology Centre</td>
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<td>IUNC</td>
<td>International Union for the Conservation of Nature</td>
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<tr>
<td>MEDA</td>
<td>Mesures D’Accompagnement (French for accompanying measures)</td>
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<td>MEDT</td>
<td>Ministry of Economic Development and Trade</td>
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<td>MFA</td>
<td>Ministry of Foreign Affairs</td>
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<td>MGIMO</td>
<td>Moscow State Institute of International Relations</td>
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<td>MID</td>
<td>Russian Ministry of Foreign Affairs</td>
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<td>MS</td>
<td>Member States</td>
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<td>NIF</td>
<td>Neighbourhood Investment Fund</td>
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<td>NIP</td>
<td>National Indicative Programme</td>
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<td>NP</td>
<td>Neighbourhood Programmes</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PCA</td>
<td>Partnership and Co-operation Agreement</td>
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<td>PMF</td>
<td>Partnership for Modernisation Facility</td>
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<td>PPC</td>
<td>Permanent Partnership Council</td>
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<td>RCBI</td>
<td>Regional Capacity Building Initiative</td>
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<td>RSP</td>
<td>Regional Strategy Paper</td>
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<td>RTD</td>
<td>Research and Technology Development</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>SCOPE-EAST</td>
<td>Scenarios for a co-ordinated approach to sustainable S/T co-operation with the Eastern Neighbours of the EU</td>
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<td>SFIC</td>
<td>Strategic Forum for International S&amp;T Cooperation</td>
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<td>SIGMA</td>
<td>Support for Improvement in Governance and Management</td>
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<td>SME</td>
<td>Small and Medium Enterprises</td>
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<td>S&amp;T</td>
<td>Science and Technology</td>
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<tr>
<td>TACIS</td>
<td>Technical Assistance for the Commonwealth of Independent States</td>
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<td>TAIEX</td>
<td>Technical Assistance and Information Exchange instrument</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>TRACECA</td>
<td>Transport Corridor Europe-Caucasus-Asia</td>
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<td>WWF</td>
<td>World Wildlife Fund for Nature</td>
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<td>4CS</td>
<td>Four Common Spaces</td>
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1 S&T as Part of the European Neighbourhood Policy (ENP/ENPI)

1.1 General Goals of the European Neighbourhood and Partnership Instrument

The European Neighbourhood and Partnership Instrument (ENPI) is the financial instrument of the EU supporting the European Neighbourhood Policy (ENP) as well as the Four Common Spaces (4CS) with Russia through a wide range of activities. It came into force in 2007 and is legally based on EC Regulation No 1638/2006 of the European Parliament and of the Council from October 24, 2006.

When reforming the external aid of the EU, the geographical and thematic EU assistance programs – i.e. the Technical Aid to the Commonwealth of Independent States instrument (TACIS) for the Eastern Neighbours and Russia, and Mésures d’accompagnement financières et techniques (MEDA) for the Southern Mediterranean Neighbours - were replaced with a single instrument: ENPI (Figure 1).

![ENPI Structure Diagram]

The main goal of ENPI is to support partner countries with reforms and needs by providing EC assistance and, therefore, the main responsibility lies within DG RELEX (External Relations) and DG DEVCO (formerly EuropeAid), as well as the EU delegations to the

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1 Russian Federation was not included in the European Neighbourhood Policy. Instead, a Strategic Partnership based on 4 “common spaces”, on which special dedicated Road Maps were agreed in May 2005, at Moscow EU–Russia Summit (http://eeas.europa.eu/russia/common_spaces/index_en.htm).

specific countries\(^3\). The scope of the ENPI-Regulation is specified in Article 2 of the EC Regulation. It aims at promoting good governance and social development in the European Neighbourhood countries: closer political links, partial economic integration, support to meet EU standards and assistance with economic and social reforms\(^4\). The field of S&T is mainly represented by the issues (t) and (u):

“Community assistance shall be used to support measures within the following areas of cooperation: … (t) promoting participation in Community research and innovation activities; (u) promoting cooperation between the Member States and partner countries in higher education and mobility of teachers, researchers and students;…..”\(^5\).

The ENPI is the main source of EU funding for 17 partner countries, ten Mediterranean (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Palestinian Authority, Tunisia) and six Eastern European countries (Armenia, Azerbaijan, Georgia, Moldova, Ukraine, plus Russia). For Belarus, Libya and Syria there are no ENP agreements in force. ENPI is more flexible and policy driven than the former TACIS and MEDA programs, as the allocation of funds depends on a country’s needs and absorption capacity as well as its level of implementation of agreed reforms.

### 1.2 ENPI Regional Programs - Eastern Partnership

To complement the single policy of the EU with each individual neighbour and to develop regional synergies and responses to the specific geographic, economic and social challenges of each region, regional and multilateral co-operation initiatives were included: the Eastern Partnership (EaP; launched in Prague in May 2009 at the Joint Declaration of the Prague Eastern Partnership Summit\(^6\)), and the Union for the Mediterranean (the Southern Euro-Mediterranean Partnership, formerly known as the Barcelona Process, re-launched in Paris in July 2008). They build on the different historical legacies of past EU policies towards these regions\(^7\). To ensure continuity with the Regional Cooperation Program 2000-2006, and the associated assistance under the TACIS Regional Program, the five Central Asian Republics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan may also benefit from funding through the ENPI Eastern Regional Program on the basis of Art. 27 of the ENPI Regulation\(^8\).

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\(^8\) [http://ec.europa.eu/world/enp/pdf/country/enpi_eastern_rsp_en.pdf](http://ec.europa.eu/world/enp/pdf/country/enpi_eastern_rsp_en.pdf). "To ensure the coherence and effectiveness of Community assistance, the Commission may decide when adopting action programmes of the type referred to in Article 12 or the special measures referred to in Article 13, that countries, territories and regions eligible for Community assistance under the Pre-Accession Instrument or the financing instrument for development and
The bilateral cooperation of the EU with each neighbour of the EaP specifically aims at pursuing

1. *Democracy, good governance and stability (platform 1)*;
2. *Economic integration and convergence with EU policies through Association Agreements including Deep and Comprehensive Free Trade Area (DCFTA), (platform 2)*;
3. *Energy security (platform 3)*;
4. *Contacts between people (platform 4)*.

Meetings are held at least twice a year at the level of senior officials engaged in the reform work in the relevant policy areas. The platforms report to the annual meetings of Ministers of Foreign Affairs of the EaP. The work of the platforms may occasionally be promoted through sector-specific Ministerial meetings. Each platform can establish panels in order to support its work in specific areas.

There are separate ENPI Regional Programs for the Eastern and Southern Region, as well as for the interregional cooperation within ENPI. These Regional Programs address issues of regional scope, i.e. issues or problems that exist similarly throughout one specific region and cannot be handled on a national level.

In conformity with the programming process of the ENPI the basic strategic documents underlying cooperation between the EU and the ENPI Eastern region are the *Regional Strategy Paper 2007-2013 (RSP)*, which was adopted by the European Commission in March 2007, and the ENPI *Eastern Regional Indicative Program 2007 – 2010* (legal base (EC) 1638/2006). They indicate the priority areas of cooperation and the size of funding.

The RSP is intended to complement the Country Strategy Papers (CSPs) produced for each country in the region (Armenia, Azerbaijan, Belarus, Georgia, Moldova, the Russian Federation and Ukraine). These CSPs are the primary strategy documents for the EC’s engagement with ENPI Eastern Countries, and so this RSP is primarily concerned with assistance at regional level. Specific areas mentioned that include S&T cooperation are development and environmental protection on the one hand and diversification and security of energy supplies on the other hand. However, S&T activities in general are not mentioned as economic cooperation and the overseas countries and territories associated with the Community are eligible for measures under this Regulation where the project or programme implemented is of a global, regional or cross-border nature." The principles for funding the Central Asian Republics’ participation in ENPI Programmes through the ENPI Eastern regional programme will be that, in each case (Ref: ENPI Eastern Regional Indicative programme 2007-2010):

1) There should be clear added value in cross-regional cooperation in terms of building on existing linkages, activities or structures, or on increasing cooperation between the regions.

2) Where the ‘centre of gravity’ of the activity is in the ENPI Eastern region, with the majority of activities taking place within the ENPI Eastern region, it may be funded through the ENPI Instrument.

3) Where activities primarily take place in, or primarily benefit the Central Asian republics, they should be funded from the DCI Instrument.

4) There must be a clear and coherent link with the DCI Central Asia Regional Strategy and Indicative Programme.

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*ENPI Eastern Regional Strategy Paper for 2007 to 2013:*

main objectives of the RSP, but are more seen as a way “to foster better understanding between populations, policies and people”\textsuperscript{10}. Moreover, with respect to support of S&T activities or networking activities, the RSP refers to the Framework Programs (FPs) as the main instrument\textsuperscript{11}.

The ENPI Eastern Regional Indicative Program 2007 – 2010\textsuperscript{12} has a budget of € 223.5 million and is managed by DG RELEX, Unit E/2.

There are five strategic priority areas:
1. Networks (transport, energy, SME regional cooperation\textsuperscript{13});
2. Environment and forestry\textsuperscript{14};
3. Border and migration management\textsuperscript{15}; fight against transnational organised crime and customs;
4. People-to-people activities, information and support;
5. Anti-personnel landmines, explosive remnants of war, small arms light weapons.

### 1.3 ENPI Programming

Eligible measures for each recipient country are individually adapted to their special requirements and are consequently subjected to a comprehensive programming process. The programming follows consecutive steps:

- Country Reports,
- ENP-Action Plans,
- National Indicative Programs (NIP), and
- Annual Action Programs (AAP) (Table 1).

#### Table 1 - ENPI Programs and Key Players of ENPI Programming

|------------------------|-----------------------------------|-----------------------------|


\textsuperscript{11} Ibid, p. 10.

\textsuperscript{12} The structure of the Regional Indicative Program for 2010-2013 changed in some aspects, although without significantly modifying the basic strategic targets and will not be regarded separately. There are four priority areas: Democracy, Good Governance and Stability; Economic Development; Climate Change, Energy and Environment; Advancing Integration with the EU and Regional Cooperation. The overall budget has been raised to € 348.57 million for 2010-2013 compared to the budget € 223.5 for the period of 2007-2010.


\textsuperscript{14} [http://eeas.europa.eu/eastern/initiatives/docs/fs_civil_protection_canciani_en.pdf](http://eeas.europa.eu/eastern/initiatives/docs/fs_civil_protection_canciani_en.pdf)

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<tr>
<th>DG RELEX:</th>
<th>DG RELEX:</th>
<th>DG DEVCO:</th>
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<tr>
<td>• 7 years: 2007-2013</td>
<td>• Mid-term strategy: 3-4 years</td>
<td>• Defines which projects are funded and the amount of money allocated</td>
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<tr>
<td>• Strategy for overall period</td>
<td>• Contains key documents</td>
<td>• Programming of tenders and projects:</td>
</tr>
<tr>
<td>• Defines instruments</td>
<td>• For every individual country</td>
<td>1. Country projects (bilateral)</td>
</tr>
<tr>
<td>• Defines NIP</td>
<td>• Defines AAP</td>
<td>2. Regional/interregional projects:</td>
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| | | |
| | | 3. Cross-Border-Cooperation (CBC) |

**Country Reports** are prepared by the EU and cover the political, economic, social and institutional situation in each country plus the progress made in implementing the bilateral agreements and reforms. They are sent to the Council of Ministers (EU-MS Governments) which then decide if the EU shall go ahead with the subsequent Action Plan.\(^\text{16}\)

The **ENP-Action Plan** is a political document laying out the strategic objectives of the agreed economic and political reform with short and medium term priorities. The Action Plan covers a period of 5 years. Priorities identified by the EU and the respective country may differ for each country, all cover, however, political dialogue and economic reform, sectoral issues such as transport, energy, information, society, environment, research, development, people-to-people contacts. The Action Plan is regularly updated and checked for its implementation status.

The **Country Strategy Papers** between the EU and the respective countries are derived from the ENP-Action Plan and constitute the Framework for the ENPI. The leading role plays the DG RELEX. It is responsible not only for the Strategy Papers, which define the actions’

\(^{16}\) [http://ec.europa.eu/world/enp/documents_en.htm#2](http://ec.europa.eu/world/enp/documents_en.htm#2).
strategy for the forthcoming 7 years and gives an overview of all priorities of the Commission assistance as well as containing all existing instruments, but also for the National Indicative Programs (NIP).

NIPs have a medium-term planning horizon of about 3 to 4 years. They are the key documents, setting the planning and identification of the EU’s financial cooperation with every individual partner country.

In case of the Annual Actions Programs (AAP), the DG DEVCO holds responsibility for the programming. The AAP implement the NIP. They define, in the short-term, several project actions for ENPI implementation and identify the amounts allocated to these actions. The AAPs are approved by the representatives of the EU-MS in non-open ENPI – Program Panels. DG DEVCO is also responsible, together with the respective EU-COM country delegations, for the programming of tenders and projects17.

Types of programs covered by the Annual Action Programs include the:

- bilateral country programs dealing with assistance to one specific partner country
- multi-country programs addressing Eastern regional and interregional cooperation between two or more partner countries, and in which MS may participate, as well
- cross-border cooperation programs dealing with cooperation between one or more MS and one or more partner countries sharing a common land or sea border (Table 1)18.

Similar to the regional program, the main goal of the ENPI Interregional Program (IRP) is to provide effective support for the implementation of the ENP as well as the Strategic Partnership with Russia and, at the same time, complement the regional and national programs. Where the ENPI regional programs for the eastern and southern neighbourhood focuses on one of the two regions, the IRP is meant to finance activities that are most effectively implemented for both regions in the same way. This is done for diverse reasons such as enhancing visibility and scope as well as strengthening cooperation and dialogue between all three regions, i.e. the EU, the southern and the eastern neighbouring countries. The IRP covers CIUDAD, Erasmus Mundus and TEMPUS, NIF, SIGMA and TAIEX.

All programmes of the ENPI - Country, Regional, and Interregional Programme, except for the CBC Programmes, are subject to comitology. The influence of member states of the European Union is possible within comitology through examination procedures, although this procedure is under discussion to modify it into an advisory one in the future19. As for the CBC, partners from the eligible areas, through a bottom-up process, will develop programmes, the objectives and content of these individual programmes. Thus, local and regional actors from both sides will work together on the joint programmes.

Projects funded by the multi-country programs are:

19 Interview with a delegate from the Federal Ministry for Foreign Affairs, 15.12.2010
the Erasmus Mundus/External Cooperation Window (ECW) program offers financial support for academic cooperation (institutions and individuals); the External Cooperation Window (ECW) is a relatively new programme and was initiated by DG DEVCO. It specifically aims to increase the mobility in the higher education sector between the EU and external partner countries such as the ENP countries and Russia.

TEMPUS (Trans-European Mobility Scheme for University Studies) supports the modernization of higher education.

Both programmes are managed by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Commission under the supervision of DG DEVCO and the DG for Enlargement (DG ELARG); the maximum grant contribution of the EC is in both cases (TEMPUS and ECW) 95% of the total project budget (with some exceptions possible).

The Jean Monnet Program fosters understanding of European integration and wider relations with the European Union.

Both, the Governance Facility (GF) and the Neighbourhood Investment Facility (NIF) are new instruments of the EU to support governance and promote investment and SME development, respectively. GF is not addressed in this report.

NIF is an innovative financial instrument aimed at mobilising additional funding to cover the investment needs of the Neighbouring Region for infrastructures in sectors such as transport, energy, the environment and social issues (e.g. construction of schools or hospitals). NIF provides grant support to lending operations by the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), the Council of Europe Development Bank or the Nordic Investment Bank. The NIF pursues three objectives:

- Establishing better energy and transport infrastructure interconnections between the EU and neighbouring countries and among neighbouring countries themselves
- Addressing threats to the environment, including climate change
- Promoting equitable socio-economic development and job creation through support for Small and Medium-sized Enterprises (SMEs) and the social sector.

It provides co-financing through direct grants, loan guarantees, interest rate subsidies, and technical assistance for project preparation and supervision. Under the NIF, € 25 million in both 2007 and 2009 as well as € 40 million in 2010, for a total of € 90 million, was allocated by the EU toward the ENPI Eastern Region. The NIF Board (United EuropeAid A/6 “Multi-country programmes”) confirms projects hoping to access NIF funds.

NIF operates bilaterally and regionally. Bilateral NIF funds are currently only accessed by Armenia, Georgia, Moldova and Ukraine.

The EaP countries are also eligible for regional NIF funds. It is, however, not clear to what extent SMEs in the individual countries benefit from this fund and whether the provision of venture capital is linked to S&T projects. In 2010, NIF approved 15 operations in the Eastern and Southern partner countries, making a total contribution of over € 107 million to new investments worth around € 3.3 billion, in transport, energy, water and sanitation, and support


21 National European development banks of EU MS can be eligible to the NIF in some cases (e.g. KfW).

22 Data for 2008 are not available.

to the private sector\textsuperscript{24}. In terms of geographical distribution, amounts allocated to the South and the East were fairly balanced, with seven projects approved in the South for a total NIF contribution of € 60 million (56%), and eight projects approved in the East for a total NIF contribution of € 47.5 million (44%).

**TAIEX, Twinning and SIGMA** are institution-building programs to train policy-makers.

**TAIEX** (Technical Assistance and Information Exchange) was set up in 1996 and introduced to the ENP regions in 2006 to provide short-term, targeted technical assistance to the Central and Eastern European candidate countries. TAIEX helps the partner countries to understand, draft and implement EU legislation related to the ENP-Action plans or to the National Indicative Programs. It provides information on EU laws, arranges study visits to the European Commission and Members States, and provides a team of experts to offer advice on accession-related issues (seminars, workshops, expert missions).

**SIGMA** (Support for Improvements in Governance and Management) is a joint European Commission and OECD initiative. Principally financed by the EU, SIGMA supports European Neighbourhood countries in their public administration reforms: strengthening public management in areas such as administrative reform, public procurement, public sector ethics, anti-corruption, and external and internal financial control. SIGMA is not considered in this report.

**Twinning** is one of the most efficient tools for implementing administrative reform including S&T policy or innovation policy in regard to S&T\textsuperscript{25}. It is a cooperation instrument between a Public Administration in a Neighbouring Country and the equivalent institution in an EU-MS with the aim to provide public sector expertise. The projects should refer to the ENP Action Plan and National Indicative Program; the results are mandatory and are based on a common agreement. Twinning projects include seminars, workshops, internships, study visits, training as well as training of trainers.

The NCPs of the MS have an important role in the promotion, development and co-ordination of Twinning activities. Twinning may be implemented as classic Twinning (up to 24 months) or as light Twinning (up to 6 months). The budget to be requested is up to € 2 million per project.

Currently, Twinning projects are eligible to Armenia, Azerbaijan, Georgia, Moldova and the Ukraine. For Belarus and Russia, contractual agreements are under negotiation\textsuperscript{26}. For 2007-2013, Twinning (ENPI) has a total budget of € 11,967 billion\textsuperscript{27}.

**TRACECA** (Transport Corridor Europe-Caucasus-Asia) project started in 1993. It aims at developing a West-East transport corridor from Europe through South Caucasus to Asia. This project is not included in the report.

**INOGATE** projects specifically promote (1) good and sound energy regulatory practices, (2) sustainable energy development (energy efficiency, renewable energy and demand side management), (3) attract investment towards energy projects of common and regional interest, and (4) training and education of governments, the public as well as research and academic institutions. INOGATE projects can support S&T cooperation for SMEs (e.g. energy

\textsuperscript{24} http://www.enpi-info.eu/main.php?id=25087&id_type=1
\textsuperscript{26} http://www.bmwi.de/BMWi/Redaktion/PDF/E/eu-twinning-aufgaben,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf
\textsuperscript{27} http://www.berlin.de/rbmskzl/europa/europapolitik/twinning.html
companies) or greater participation of institutes in energy-related research for innovation. Thirteen projects are currently funded for EaP countries with a total budget of € 46 million.

CIUDAD (Cooperation in Inter Urban Development and Dialogue) projects promote cooperation between local and regional authorities in capacity building for improved governance in sustainable urban development and planning. CIUDAD is one of the first programs that has encouraged ENP countries to implement projects across the two ENPI regions. Thematic issues discussed within CIUDAD include environmental sustainability, energy efficiency, social cohesion and good governance. EU Climate Action calls for a 20% reduction in CO$_2$ emissions over 1990 levels, as well as a 20% increase in energy efficiency and 20% increase in energy from renewable energy sources (20-20-20). EU city municipalities actively participate in this process by joining the Covenant of Mayors, a voluntary agreement signed by cities that are willing to contribute to this plan by means of sustainable energy planning. In general, CIUDAD provides capacity building measures for the purpose of modernization and strengthening of local and regional governments. Between 2009 and 2012, 21 projects in the southern and eastern region are to be carried out and are co-financed with € 14 million by CIUDAD. Technical assistance for implementation is provided through the CIUDAD Supporting Mechanism.

Cross-Border-Cooperation (CBC) projects aim to promote economic and social development in border areas and to address common challenges within the region, such as environmental issues, public health or fight against organized crime. Originally, the first CBC was funded under TACIS in 1996 and it included separate instruments for different groups of countries. The projects were highly successful and made a real impact at the local level. The programme brought together regions of the EU Member States and ENP countries sharing a common land or sea border. The vast majority of these projects were finished by the end of 2009. Since 2007, the ENPI pulled together separate instruments together into a single CBC programme. In conformity with the programming process of the ENPI a single document combines the directives: a CBC Strategy Paper (2007-2013) and a CBC Indicative Programme (2007-2010 and 2011-2013). Both are based on the ENPI Regulation and the associated Implementing Rules.

Due to the kind of border, two main categories of programmes are established under ENPI-CBC:

- Programmes covering a common land border or short sea crossing; and
- Programmes covering a sea basin

Since 2007, 15 CBC programs (9 land borders, 3 sea crossings and 3 sea basin programs) have been established along the Eastern and Southern external borders of the European Union.

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with a total funding of 1,118,434 million EUR for the 7-year period 2007-2013 (Table 2). Cross-Border Cooperations are co-financed by the European Regional Development Fund (ERDF).

Assistance and training activities for CBC is provided by Interact ENPI and the Regional Capacity Building Initiative (RCBI). Interact ENPI helps institutions such as the Joint Managing Authorities, Joint Technical Secretariats or their branch offices with the day-to-day management of the ENPI Cross Border Cooperation programmes. Additionally, a series of network and Lab Group meetings were organised to stimulate discussions between different programme authorities on various subjects of common interest. RCBI deals with organizing training activities and partner search forums for potential applicants.

### 1.4 Budget

The overall allocation for the ENPI instrument amounts to almost € 12 billion for the seven-year period 2007-2013. This represents an increase of 32%, in real terms, compared to the amount available over the period 2000-2006 for the MEDA and TACIS programs. The Commission made a concrete decision on the breakdown of these funds for the period 2007-2010, and 2011-2013 (Table 2). The main focus lies on the country programs, i.e. fostering the implementation of political, economic and social reform programs in the individual partner countries. For 2011-2013, 67% of the € 5.7 billion available are earmarked to support the implementation of the ENP and the Common Spaces Road Maps for Russia, respectively. The secondary focus is on multi-country cooperation activities. For 2011-2013 a total of € 1155, 53 million will be available for all regional and interregional programs. The smallest amount, € 293 million, is allocated to support Cross-Border Cooperation. For the new instruments GF and NIF around € 600 million are foreseen to support governance and to promote investment, respectively. For the EaP initiative, the Commission has earmarked € 600 million for the period 2010-2013.

Table 2 - ENPI, multi-annual allocations for the period 2007-2010 and 2011-2013, in million €

<table>
<thead>
<tr>
<th>Programs</th>
<th>ENPI Total 2007-2010</th>
<th>ENPI Total 2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin expenses (BA)</td>
<td>46,46</td>
<td>162,35</td>
</tr>
<tr>
<td>Multi-country program</td>
<td>201,80</td>
<td>262,67</td>
</tr>
<tr>
<td>CBC</td>
<td>[+ 308 ERDF]</td>
<td>292.86</td>
</tr>
<tr>
<td>GF</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>NIF</td>
<td>250</td>
<td>450</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Multi-country activities</th>
<th>1155,53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Allocations</td>
<td></td>
</tr>
<tr>
<td>Total South</td>
<td>2801,80</td>
</tr>
<tr>
<td>Armenia</td>
<td>97,40</td>
</tr>
<tr>
<td>157,32</td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>68,00</td>
</tr>
<tr>
<td>122,49</td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td>31,00</td>
</tr>
<tr>
<td>80,26</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>222,40</td>
</tr>
<tr>
<td>180,29</td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>225,30</td>
</tr>
<tr>
<td>273,14</td>
<td></td>
</tr>
<tr>
<td>Russia35</td>
<td>62,50</td>
</tr>
<tr>
<td>45,00</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>522,60</td>
</tr>
<tr>
<td>470,05</td>
<td></td>
</tr>
<tr>
<td>Total Country Program</td>
<td>582,80</td>
</tr>
<tr>
<td>1328,54</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td></td>
</tr>
<tr>
<td>Regional Allocation East</td>
<td>247,75</td>
</tr>
<tr>
<td>262,32</td>
<td></td>
</tr>
<tr>
<td>Total East</td>
<td></td>
</tr>
<tr>
<td>1590,86</td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>5,621.20</td>
</tr>
<tr>
<td>5,710.54</td>
<td></td>
</tr>
</tbody>
</table>

These grants are direct financial contributions from the EU budget or the European Development Fund. As these funds are used as donations to third parties engaged in external aid activities and are used to implement projects or activities that relate to the EU’s external aid programs. Grants are based on the reimbursement of the eligible costs, meaning costs effectively incurred by the beneficiaries that are deemed necessary for carrying out the activities in question. The results of the action thereby remain the property of the beneficiaries.

### 1.5 Outlook: A new response to a changing Neighbourhood

A new approach to the ENP was released for final endorsement (both Council and European Parliament) by the EU-COM and the High Representative of the European Union for Foreign Affairs and Security Policy in May 2011\(^{36}\). It is built on a review finalized in summer 2010 with the objective to strengthen the EU’s foreign policy and to co-operate with Neighbouring Countries in a more effective manner, i.e. better targeted, greater flexibility, focus on a smaller number of priorities, backed with more precise benchmarks (key deliverables within a mutually agreed timeframe). Priorities are focused on furthering democratization, sustainable economic and social development as well as strengthening the two regional dimensions of

\(^{35}\) The insistence of Russia on a reciprocal framework for financial co-operation, including the possibility for the Commission to guarantee that Russia could implement projects in the EU member States on similar terms, has made it very difficult to arrive at an agreed basis for the implementation of financial co-operation. As a result, only a part of the funds programmed for the period 2007-2010 have actually been committed. For this reason we plan to reduce the existing allocation to € 15 million per year. The amount will be added to the envelope of the Inter-regional Program to continue support for activities such as Erasmus Mundus, TAIEX and TEMPUS.

ENP (Eastern Partnership and Southern Mediterranean). Bilateral Cooperations shall be fostered with respect to academic mobility and institution building (Erasmus Mundus, TEMPUS), opening of future new EU programs such as Lifelong Learning (LLL) to EaP countries, full integration of the research and education communities into ERA, and towards the Eastern Europe Energy Efficiency and Environment Partnership (E5P).

Additional resources of up to EUR 1,242 million until 2013 are assigned to this new response. These resources are in addition to the EUR 5,700 million already granted for the period 2011-2013 (Table 2). These top up funds shall be mobilized from the NIF, bilateral partners, and International Financial Institutions (IFI) such as the European Investment Bank (EIB) or the European Bank for Reconstruction and Development (EBRD).

Planning for 2013 and beyond seek at promoting more flexible and simpler aid delivery, synchronize coordination between the EU, its MS and other key IFIs and bilateral donors. The key source of funding for bilateral, regional and CBC programs will be managed by the new European Neighbourhood Instrument (ENI).
2 S&T AS PARTS OF THE ENPI WITH EASTERN EUROPE AND CENTRAL ASIAN COUNTRIES (EECA)

2.1 Armenia

EU relations with Armenia are governed by the Partnership and Cooperation Agreement (PCA) signed in 1996 and entered into force in July 1999. The PCA forms the legal basis of EU-Armenian cooperation in a wide range of areas including political dialogue, trade and investment, economic and legislative cooperation, and cultural and scientific cooperation. S&T relevant areas are governed by Article 51. Both parties agree to promote cooperation in civil scientific research and technological development (RTD) on the basis of mutual benefit and, taking into account the availability of resources, adequate access to their respective programs and subject to appropriate levels of effective protection of intellectual, industrial and commercial property rights (IPR).

The political dialogue between EU and Armenia is conducted on a regular basis through Summits, Co-operation Councils, Ministerial and Political Directors’ meetings.

ENP-Action Plan

The Action Plan reflects the specificity of the country, and contains concrete goals and actions to be achieved in the short and medium term. The ENP-AP for Armenia was adopted in Brussels at the EU-Armenia Cooperation Council on November 14, 2006 for a period of five years. It focuses especially on democratization, human rights, socio-economic reform, poverty alleviation, energy, conflicts and sectoral issues.

As far as S&T is concerned, the Action Plan specifically aims to:

• develop Armenia’s capacity in R&D to support the economy and society
• develop reforms in the scientific system of Armenia and in the relevant regulatory framework
• increase investment in research by the public and private sector
• establish an independent expert body for competitive selection of scientific programs in Armenia
• prepare and encourage Armenia’s integration into the ERA and into Community R&D Framework Programs on the basis of scientific excellence (e.g. Marie-Curie fellowships including support of the appropriate return mechanisms).


Based on the ENP-AP of cooperation, the Country Strategy Paper for 2007-2013 was set in force. The main objectives of the Country Strategy Paper (CSP) are to

1. promote Armenia’s reform agenda

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2. Implement the European Neighbourhood Policy (ENP) and the EU-Armenia ENP Action Plan

3. Tackle security challenges, and

4. Development policy objectives

Important in terms of S&T co-operation is the intended partnering of the Armenian National Research and Education Network (ARENA) with the European Network GEANT 2 in order to foster the participation of the Armenian Science Community into FP7, namely participation in research-related activities, joint research projects, the Marie-Curie Instrument and practical training for scientists.

National Indicative Program (NIP) 2007-2010

The priority areas mainly address the democratic and economic development; S&T co-operation is not addressed:

- Support for Democratic Structures and Good Governance,
- Support for Regulatory Reform and Administrative Capacity Building,
- Support for Poverty Reduction Efforts.

National Indicative Program (NIP) 2011-2013

The NIP 2011-13 was adopted in March 2010 based on a Mid-Term Review of the EU-COM in late 2008. The program focuses on the key policy objectives as outlined in the ENP-Action Plan:

1. Democratic structures and good governance
2. Trade and investment; regulatory alignment and reform, and

S&T related areas are addressed—to some extent—to Sub-priority 3.2: Support for the development of infrastructure in the areas of transport, energy, the environment, electronic communications with the aim to improve the local infrastructure in the area of transport and environment, and to improve energy efficiency.

Significant for S&T cooperation is Sub-priority 3.3 Human development, including education and science, social services. The specific priorities address (i) the modernization of the education and training systems in order to enhance socio-economic development, (ii) to facilitate integration into the European Higher Education Area, and (iii) further involvement into the European Research Area.

Expected results are:

- Improved quality and capacity of education and training systems in line with European standards and practices; this includes also greater participation in relevant exchange programs.
- Reforms undertaken in the area of higher education in accordance with the principles of the Bologna process.
- Stronger capacity of research structures (human and material resources), and increased involvement of Armenian researchers in European R&D programs.

The indicative budget for 2011-2013 is €157.3 million.
Annual Action Programs (AAP) 2007 to 2010

The AAPs for 2007, 2008, 2009 and 2010 do not cover S&T topics. They rather focus on the implementation of the ENP-AP through Twinning and TAIEX and on the support of the Justice Reform. The multi-annual budget is € 97.4 million.

2.1.1 Multi-country cooperation programs (regional and inter-regional)

Support to investments in the field of water supply and sanitation

Participating countries: Armenia, Georgia, Ukraine
Timeframe: 2006-2010
Budget: € 10 million (€ 3 million in Ukraine - € 7 million in Armenia and Georgia)

The project supports the Integrated Water Resources Management (IWRM) in the Partner Countries: improved water governance and management, capacity-building and awareness.

The project particularly finances investments that enhance the quantity and quality of water and waste water service delivery. In Armenia, the target is the Lake Sevan Basin Environmental project, co-funded with the European Bank for Reconstruction and Development (EBRD). It specifically helps funding of three wastewater treatment plants and rehabilitating the wastewater networks in five towns located near Lake Sevan in order to reduce the amount of untreated water flowing into the Lake Sevan basin.

Forest Law Enforcement and Governance (FLEG)

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine
Timeframe: 2008-2011
Budget: € 7 million; € 6 million EC contribution and € 1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)

As for managing and implementing FLEG, the World Bank will take the lead role, with representatives from the EC and the beneficiary states, particularly Russia, involved. The ENA-FLEG International Steering Committee is co-chaired by Russia and the World Bank.

FLEG supports governments, civil society and the private sector in the development of sound and sustainable forest management practices, including the prevention of illegal forestry activities, and the introduction of markets for alternative forest products.

ENPI FLEG Program activities in Armenia started in July 2009. The specific activities with regard to S&T are:

- conduction of analytical studies on illegal forest activities

• transfer of knowledge in the field of sustainable forest management (alternatives for forest use; private sector/local population access to wood and non-wood resources; recommendations on responsible use of forests by the private sector)
• development of a program to help integrate forest law and governance issues in the academic curricula of the State Agrarian University of Armenia.

Transboundary river management for the Kura river - Phase II
Participating countries: Armenia, Azerbaijan, Georgia
Timeframe: 2008–2011
Budget: € 4.0 million + € 1.2 million for equipment

The Transboundary river management project aims at strengthening regional cooperation in monitoring and managing water resources to improve the water quality in the Kura river basin. The major objectives are:
• conduct training and workshops on river basin management and monitoring
• organize a study tour to Europe to learn about the Water Framework Directive.
• carry out quarterly monitoring missions with laboratories from all three Caucasus countries
• prepare a baseline report and river basin management plans for selected sub-basins
• translate major EU directives and guidelines.
• prepare communication and public participation tools.

2.1.2 INOGATE Projects

Armenia participates in three projects:

1. Support to Kyoto Protocol Implementation, SKPI
Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine, and the CA countries Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Team Leader: Russia
Timeframe: 2008-2011
Budget: € 5 million

The project supports the fight against climate change through the extension of the flexible mechanisms of the UNFCCC/Kyoto Protocol as well as the development of appropriate mitigation and adaptation strategies. The major objectives are:
• to reinforce awareness and institutional capacity in relation to climate change (Kyoto Protocol mechanisms)
• to strengthens the responsiveness of the economic stakeholders (particularly industry and energy utilities) to climate change related issues
• to support the use of the funding mechanisms available under the Kyoto Protocol, focusing particularly on energy efficiency
• to ensure that climate change mitigation and adaptation strategies are formulated and implemented whenever requested by the beneficiary countries.

2. Support to Energy Market Integration and Sustainable Energy (SEMISE)

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

Timeframe: 2009-2012

Budget: € 5,670 million

The project supports the development of sustainable energy policies and a regional energy infrastructure: supporting energy investments, establishing collaborative links with energy companies, lending institutions and representatives of the business sector, identifying project opportunities and making project preparation services available to financing institutions such as the EIB, EBRD and selected local FIs.

3. Energy saving in the building sector in Eastern Europe and Central Asia

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan

Timeframe: 2010-2014

Budget: € 5 million

The project promotes the use of renewable energies in the building sector: awareness raising of renewable energy opportunities and transfer of best practice, capacity development in building technologies and design.

2.1.3 NIF-Bilateral:

Project: Armenian Small Municipalities Water project

Budget: € 20.8 million; NIF grant: € 7.6 million

Lead: EBRD; other IFI: EIB

Status: signed

The project targets the improvement of municipal water supply and the rehabilitation of water treatment plants and sewerage collectors in a number of municipalities in Armenia.

Project: Kotayk Solid Waste Environmental and Social Due Diligence project

Stats: planned

This project received provisional approval in 2010. It is co-financed by the EBRD-Canadian Technical Cooperation Fund, and executed by the Armenian Ministry of Urban Development (MUD). The project aims at modernizing Armenia’s’ waste management, and would be the

first solid waste project in Armenia. The MUD has approached the EBRD with a request to prepare and finance a regional sanitary landfill in Kotayk.

**NIF-Regional (Eastern neighbourhood)**

- **Countries:** Eastern Neighbourhood
- **Project:** Energy Efficiency Programme in the Corporate Sector
- **Lead:** EBRD
- **Budget:** € 302 million; NIF grant: € 2 million

This Technical Assistance aims at improving energy efficiency and energy savings in the corporate sector in a number of countries of the Eastern Neighbourhood.

### 2.1.4 Twinning, TAIEX

**Twinning**

Twinning has been made accessible to Armenia from early 2007. Up to now, there is one project with relevance to S&T:

- **Project:** Strengthening the Ministry of Nature Protection of the Republic of Armenia in Introduction of the Integrated Pollution Prevention and Control
- **Beneficiary:** Normative-methodological Department of the Ministry of Nature Protection

The project is currently under tendering. The anticipated duration is 27 months and the indicative budget is € 1 million.

**TAIEX**

Since its introduction to Armenia in 2007, three projects with regard to S&T were implemented:

- **November 2010:** Workshop on water supply, sanitation and water treatment
  - **Beneficiaries:** State Committee of Water System of RA, Ministry of Territorial Administration, Ministry of Territorial Administration of RA, Ministry of Nature protection, Ministry of Health

- **February 2010:** Workshop on Quality assurance in higher education
  - **Objective:** to provide experience of the EU MS in the field of quality assurance of the higher education institutions
  - **Beneficiary:** Ministry of Education and Science of Armenia

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June 2009: **Expert mission on Energy efficiency**

**Objective:** the aim of the assistance is the development and gaining knowledge of policies covering energy efficiency and renewable energy development, including legal issues standards. Topics to be covered will also be financial/tax incentives and instruments for promotion of energy efficiency and renewable energy.

**Beneficiary:** The Ministry of Energy and Natural Resources

### 2.1.5 CIUDAD

**MODEL:** Management of Domains related to Energy in Local authorities

**Participating countries:** Armenia, Georgia, Moldova, Ukraine

**Theme:** Environmental Sustainability (Sector: Energy Efficiency)

**Lead Partner:** Municipality of Lviv (Ukraine)

In 2008 the EU adopted its Climate and Energy Package (CEP) aimed at cutting CO$_2$ emissions, and increasing energy efficiency and use of energy from renewable sources, all by 20% over 1990 levels (20-20-20). In the ENPI Eastern countries, artificially low energy prices have resulted in a poor culture of energy efficiency. The EU is now looking to extend to ENPI countries the Covenant of Mayors, a voluntary initiative of local authorities committed to helping achieve the 20-20-20 targets. The focus is on building greater energy management capacities and levels of awareness both within local authorities, and in the wider communities. Pilot projects are to be developed that enhance the energy efficiency of public buildings at reasonable cost and so demonstrate the savings potential.

### 2.1.6 Erasmus Mundus and TEMPUS

Higher education reform in Armenia continued to benefit from participation in TEMPUS, with four projects selected under the third Call for Proposals of Tempus IV. The third call addresses S&T for the first time: *Curricula Reformation and Harmonisation in the field of Biomedical Engineering*. Under TEMPUS I+II, and III social work and policy as well as the establishment of a Student Career Service Centre were focus of funding.

Armenia also continued its active participation in the Erasmus Mundus programme in the academic year 2010-11. Six scholarships for Erasmus Mundus Masters Courses under Action 1 were awarded and a further 29 mobility grants for students and academics under Action 2. Three scholarship in European Integration Studies in European Universities and 6 Scholarship to the College of Europe were awarded. Armenia also participated in the Erasmus Mundus Action II/External Cooperation Window (ECW) between 2007 and 2009 (€ 2,7 Mio). For the first time, in 2010 a Jean Monnet interdisciplinary module was awarded to Yerevan State University to increase understanding of EU relations with the Southern Caucasus in the

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context of the ENP. Jean Monnet programs support institutions and actions in favor of European integration.

2.1.7 Cross Border Cooperation projects

Black Sea Basin Joint Operational Programme\textsuperscript{45}

Participating countries: Armenia, Azerbaijan, Georgia, Moldova, Russia, Ukraine, and Bulgaria, Greece, Romania, Turkey

Timeframe: 2007-2013

Budget: € 21.3 million

The main priorities of this program (call for proposals) are to:

1. support cross-border partnerships for economic and social development based on combined resources
2. share resources and competencies for environmental protection and conservation
3. support cultural and educational initiatives to establish a common cultural environment in the Basin.

S&T is addressed under the second priority area: (a) promoting research, innovation and awareness in the field of conservation and environmental protection, and (b) promotion of cooperation initiatives aimed at innovation in technologies and management of solid waste and wastewater management systems.

2.2 Azerbaijan

EU relations with Azerbaijan are governed by the EU-Azerbaijan Partnership and Cooperation Agreement (PCA) signed in 1996 and entered into force in 1999. Azerbaijan became part of ENP in 2004. S&T is addressed under Article 52\textsuperscript{46}. The Parties agree to promote cooperation in “civil scientific research and technological development (RTD) on the basis of mutual benefit and, taking into account the availability of resources, adequate access to their respective programs and subject to appropriate levels of effective protection of intellectual, industrial and commercial property rights (IPR)”. Areas of mutual interest are:

- the exchange of scientific and technical information;
- joint RTD activities;
- training activities and mobility programs for scientists, researchers and technicians engaged in RTD on both sides.


ENP Action Plan:
The ENP Action Plan was adopted in November 2006 by the EU Commission and the Azerbaijani Government. The Action plan sets out 10 areas of priority, e.g. strengthening democracy and human rights, rule of law, economic development, poverty reduction, support of the sectoral areas energy, transport and environment as well as regional cooperation.

EC assistance over the period covered by this strategy aims at supporting Azerbaijan’s reform agenda on the basis of the policy objectives defined in the PCA and the ENP-AP. The focus is on the priority areas:
1. Democratic development and good governance
2. Socio-economic reform (with emphasis on regulatory approximation with the EU acquis), fight against poverty and administrative capacity building
3. Support for legislative and economic reforms in the transport, energy and environment sectors.
4. Support for S&T cooperation is provided towards (i) fuller participation in research-related activities such as FP7, (ii) joint research projects, (iii) the Marie Curie international mobility scheme for scientists and (iv) practical training at the seven institutes of DG Joint Research Centre (DG JRC).

National Indicative Program (NIP) 2007-2010
The NIP 2007-2010 sets out the priority areas of the EC bilateral assistance to Azerbaijan over this period. The indicative budget is € 92 million.

The focus is on the three areas of priority as outlined in the CSP 2007-2013.
S&T cooperation is addressed under Sub-priority 4: Education, science and people-to-people contacts/exchanges with the aim to: (1) improve the education and training systems, (2) to increase the participation of students and researcher into exchange programmes, (3) closer integration into the European Research Area (joint activities and projects), and (4) the direct linking of the Azerbaijan National Research and Education Network (AzRENA) to the European backbone GÉANT2.

Under Sub-priority 3: Environment, it is planned to improve the legislative and administrative management of environmental challenges in Azerbaijan, e.g. the development of environmental plans (waste and water management, air pollution, etc.), to be incorporated in government policies.

National Indicative Program 2011-2013

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The NIP 2011-2013 builds on the preceding National Indicative Program for 2007-2010, and supports the implementation of the key objectives under the PCA and the ENP Action Plan as well as the priorities of the Eastern Partnership.

Main priorities and goals are:

- Priority Area 1: Democratic structures and good governance
- Priority Area 2: Socio-economic reform and sustainable development, trade and investment, regulatory approximation and reform
- Priority Area 3: PCA and ENP AP implementation, including in the area of energy security, mobility and security

S&T cooperation is addressed under Sub-priority 2.3 Environment and environmental governance. It aims at achieving an environmental and sustainable development, integration of climate change considerations into the country’s sectoral policies and to strengthen environmental governance.

Under Sub-priority 2.4 Human capital development, including education and training, public health the priorities are the modernization and upgrading of the education and training systems (TEMPUS), the better integration into the European Higher Education Area (Erasmus Mundus), and increase involvement of Azerbaijan with the European Research Area (FP7).

The indicative amount for the 2011-13 NIP is €122.5 million.

Annual Action Programs 2007 to 2010

As regards S&T, the AAPs of 2007 (€ 19 Mio) and 2008 (€ 22 Mio) assist the Energy Reform Support Program: energy efficiency and renewable energies.

Fields of S&T co-operation in the AAPs of 2009 (€ 20 Mio) and 2010 (€ 7 Mio) are (1) support for legislative and economic reforms in the transport, energy and environment sector, (2) promotion of sustainable agricultural and rural development.

2.2.1 Multi-country cooperation projects (regional and inter-regional)

Forest Law Enforcement and Governance (FLEG)

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine

Timeframe: 2008-2011

Budget: € 7 million; € 6 million EC contribution and € 1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)

ENPI FLEG Program activities in Azerbaijan started in June 2010. The specific activities with regard to S&T are:

- development of a set of FLEG indicators
- identification of high-risk illegal logging and sensitive regions;
• development and implementation of training programs for lawyers, foresters, local authorities and rural communities on the prevention of illegal logging and promoting sustainable use of local forest resources;

Further regional projects are:
1. Transboundary river management for the Kura river - Phase II together with Armenia, and Georgia.
Further description see Armenia.

2.2.2 INOGATE

Of the INOGATE projects, Azerbaijan participates in three projects related to energy efficiency and renewable energies:
1. Support to Kyoto Protocol Implementation, SKPI together with Armenia, Belarus, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
2. Energy saving in the building sector in Eastern Europe and Central Asia together with Armenia, Belarus, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.
3. Support to Energy Market Integration and Sustainable Energy (SEMISE) together with Armenia, Belarus, Georgia, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.
Further description see Armenia.

2.2.3 NIF- BILAT

No participation of Azerbaijan.

NIF-Regional (Eastern neighbourhood)
Together with the other EaP countries, Azerbaijan is eligible to participate in the Energy Efficiency Programme in the Corporate Sector (see Armenia).

2.2.4 Twinning, TAIEX49

Twinning
So far, Azerbaijan participated in one ENPI-Twinning project in the field of S&T:

Project: Support to the improvement of legal and technical aspects of food quality and safety assurance and certification requirements of Azerbaijani fishery products

Beneficiary: State Office for the Control of Consumer Market (SOCCM) at the Ministry of Economic Development

MS: Netherlands Food and Consumer Product Safety Authority and Food and Veterinary Service of the Republic of Latvia.

Timeframe: 2008-2010

Budget: € 1 million

The project focused on: (1) awareness raising and institutional building; (2) harmonization of Azerbaijan food legislation with that of the EU; (3) strengthening Laboratory Services; and (4) Strengthening Inspection Services ensured by the beneficiary.

This project is considered one of the best Twinning projects funded by the EU in the Eastern Partnership Countries. The result of this project was the Commission’s Decision 2009/951/EU on December 14, 2009 to give Azerbaijan the permission to export black caviar to the EU countries from January 1, 2010.

TAIEX

The Republic of Azerbaijan participates in TAIEX since 2008. With regard to S&T, the first project will start the end of 2011.

November 2011: Expert Mission on Assessment of Existing Legislation on Regulation of Higher Education System in Azerbaijan

Aim: To carry out monitoring and evaluation of the current higher education system and its relevant legal regulations with the aim of further harmonizing this system with the best EU standards in line with the Bologna Process

Beneficiary: Ministry of Education

2.2.5 CIUDAD

No participation of Azerbaijan

2.2.6 Erasmus Mundus and TEMPUS

Azerbaijan participates in the TEMPUS program since 1995. So far, about 20 universities benefited from TEMPUS. S&T curriculum development was pursued for engineering (in particular, oil and gas), the environmental sciences, and information technology. Higher education reform in Azerbaijan continued to benefit from cooperation under TEMPUS, with two projects selected under the third Call for Proposals of Tempus IV (Curricula Reformation and Harmonisation in the field of Biomedical Engineering). For the first time a project will be

51 http://www.tempus-az.org/
coordinated by an Azerbaijani higher education institution (Azerbaijan University of Languages).

One Azerbaijani student received a scholarship for an Erasmus Mundus Masters Course under Erasmus Mundus Action 1 for the academic year 2010-11. Academic and student mobility was further facilitated under Erasmus Mundus Action 2 during the same period through the award of 30 mobility grants. Three scholarship in European Integration Studies in European Universities and 5 Scholarship to the College of Europe were awarded. For the first time, a Jean Monnet grant for an interdisciplinary module was awarded to the Azerbaijan Diplomatic Academy, providing a basis for future quality public service training. Azerbaijan is encouraged to make full use of the available opportunities under Erasmus Mundus.

Azerbaijan also participated in the Erasmus Mundus Action II/External Cooperation Window between 2007 and 2009 (€ 2,7 Mio, 36 months duration).

Yet Azerbaijan is encouraged to make full use of the available opportunities under Erasmus Mundus.

2.2.7 Cross Border Cooperation projects

Azerbaijan participates in the Black Sea Basin Joint Operational Program together with Armenia, Georgia, Moldova, Russia, Ukraine, and Bulgaria, Greece, Romania, Turkey. Further details see Armenia.

2.3 Belarus

No Partnership and Cooperation Agreement was signed between the EU and Belarus, and hence no Country Report and ENP Action Plan are in force detailing the cooperation priorities. Although Belarus does not participate fully in the ENP, a Country Strategy Paper for 2007-2013 and its National Indicative Programme for 2007-2011 was released and documents the major areas for cooperation. The NIP covers only support through the national ENPI envelope, and does not represent a programming document for the other instruments available for Belarus such as the thematic programme on democracy and human rights. EU-Belarus relations are governed by successive Council Conclusions stating, for example, that contacts “will be established solely through the Presidency, SG/HR, the Commission and the Troika” and that “Community and Member States’ assistance programmes will support the needs of the population and democratisation, notably by humanitarian, regional, cross-border cooperation and by projects supporting directly or indirectly democratisation and democratic forces in Belarus”. The principal objectives of EU cooperation with Belarus are therefore to support the needs of the population, to directly and indirectly support democratisation, and to mitigate the effects of the self-isolation of Belarus on its population.

Country report: Azerbaijan

National Indicative Program 2007-2011
The National Indicative Program (NIP) for 2007-2011 translates these objectives into two priority areas:
1. Social and economic development, including actions to alleviate the consequences of the Chernobyl catastrophe, and
2. Democratic development and good governance.
For the period of 2007-2011, a total of € 46.07 million will be allocated to Belarus.
ENPI multi-country programs\textsuperscript{54} are open to Belarus for a limited number of priorities relevant for Belarus but having a genuine regional dimension both in terms of joint implementation and regional impact. This relates in particular to transport, energy (transit of hydrocarbons, energy efficiency and renewables and facilitating investment in energy) and the environment (e.g. targeting the regional dimension of the EU Water Initiative and regional aspects of the protection and sustainable management of forests/FLEG initiative).
ENPI-wide programs such as TAIEX, TEMPUS and Cross-Border-Cooperations shall also be available for Belarus.

Annual Action Plans
Concerning S&T cooperation, the AAPs of 2007 (€ 5 Mio) and 2010 (€ 10 Mio) aim at supporting the Implementation of a Comprehensive Energy Policy (energy efficiency and saving).
The AAP 2008 focuses on environmental protection and the establishment of a comprehensive framework for international environmental co-operation (€ 5 Mio). The AAP 2009 targets food safety and quality (€ 10 Mio).

2.3.1 Multi-country cooperation programs (regional and inter-regional)

Forest Law Enforcement and Governance (FLEG)
Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine
Timeframe: 2008-2011
Budget: € 7 million; € 6 million EC contribution and € 1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)
Following approval of the FLEG Program country workplan in December 2009, a range of core activities for Belarus have been identified and consolidated in 4 main areas:

\textsuperscript{54} Details will be elaborated in a separate Regional Strategy Paper/Regional Indicative Program.
• improvement of the FLEG regulatory framework and efficiency of its enforcement;
• improvement of the system of forest management, protection and utilization of forest products recording;
• integration of concrete FLEG processes in local forest management and utilization practices;
• improvement of information transparency of the FLEG processes.

2.3.2 **INOGATE**

Of the INOGATE projects, Belarus participates in three projects related to energy efficiency and renewable energies:

1. **Support to Kyoto Protocol Implementation, SKPI** together with Armenia, Azerbaijan, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

2. **Energy saving in the building sector in Eastern Europe and Central Asia** together with Armenia, Azerbaijan, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.

3. **Support to Energy Market Integration and Sustainable Energy (SEMISE)** together with Armenia, Azerbaijan, Georgia, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

Further details see Armenia.

2.3.3 **NIF**

Belarus is not involved in NIF projects.

2.3.4 **TAIEX, and Twinning**

Belarus is not involved in Twinning projects.

Belarus participates in TAIEX since 2007; so far, nor project with relevance to S&T was conducted.

2.3.5 **CIUDAD**

**SURE Sustainable urban energy in the ENPI region – towards the Covenant of Mayors**

Participating countries: Belarus and Morocco + Germany (Lead) and Spain

Timeframe: 2009-2013

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55 [http://www.bmwi.de/BMWi/Redaktion/PDF/E/eu-twinning-aufgaben.property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf](http://www.bmwi.de/BMWi/Redaktion/PDF/E/eu-twinning-aufgaben.property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf)
Budget: € 791,721 (EU contribution 616,725)

This project supports two cities in Belarus (Polotsk) and Morocco (Salé) to establish transnational networks and develop the capacity to elaborate their own sustainable energy action plans (SEAP). It aims at preparing and implementing pilot actions and organizing public awareness activities to help a broad range of stakeholders and beneficiaries understand what options are available to them. Two EU cities, Murcia (Spain) and Friedrichshafen (Germany), both of which have extensive experience in sustainable urban energy planning, will guide the project.

2.3.6 Erasmus Mundus and TEMPUS

Exchange of academic staff, curriculum development and training of teachers play an important role within the EU-Belarus cooperation. Between 2004 and 2011, 39 Master students and 4 Erasmus Mundus scholars have been supported. Four scholarship in European Integration Studies in European Universities and 8 Scholarship to the College of Europe were awarded. Belarus also participated in the Erasmus Mundus Action II/External Cooperation Window between 2007 and 2009 (€ 5.3 million, 48 months).

Belarus also benefits from participation in the TEMPUS program since 1994. However, the political conditions in Belarus affect all spheres, including education, which is strictly controlled and regulated by the government. Responding to the negative evaluation of parliamentary and presidential elections by the democratic international organizations, such as the OSCE and Council of Europe, the Belarus government has reduced the university participation in international educational programmes. Presently, Tempus remains as the almost only donor organization left in the field of education in the country. Between 1994 and 2006 the total budget allocated was € 12, 8 million.

2.3.7 Cross-Border Cooperation

Belarus participates in two Land-Border Programs (The Latvia-Lithuania-Belarus Program and The Poland-Belarus-Ukraine Program) as well as in two Sea-Basin Programs (Black Sea Program and The Baltic Sea Region Program)

I. Land-Border Programs

59 The Ministry of Education regulates all university and faculty activities, using a license system as a tool to close private universities. All international contacts, including permission for studying or travelling abroad as well as a permission to make use of an awarded Tempus grant, are also regulated by the Ministry of Higher Education. Although the initial adjustment of Belarus to the academic principles of the Bologna process was successful, in 2005 the country’s participation in the process was suspended because of the breach to fundamental principles of higher education, in particular the observance of the university’s autonomy and development of student self-management.
The Latvia-Lithuania-Belarus Program is not addressing S&T but rather targets at promoting sustainable cross border development and social development (tourism, cultural infrastructure).

The Poland-Belarus-Ukraine Program

Participating countries: Belarus, Ukraine and Poland
Timeframe: 2007-2013
Budget: € 186 million

The main priorities of this program are to:
1. increase the competitiveness of the border area including tourism development and improving access to the region
2. improve the quality of life including: natural environment protection in the borderland), and
3. People-to-People cooperation.

II. Sea-Basin Programs

The Baltic Sea Region Program

Participating countries: Belarus, and Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland and Sweden
Timeframe: 2007-2013
Budget: € 22 million

The main priorities of this program are to:
1. support innovations in the field of natural and technical science (but also to selected non-technical services), linkage of innovations to SMEs, and transnational transfer of technology and knowledge
2. improve the external and internal accessibility of the Baltic Sea region.
3. environmental protection of the Baltic Sea: sustainable management of the Sea resources.
4. promote co-operation of metropolitan regions, cities and rural areas with the aim to enhance its attractiveness for citizens and investors. These will be particularly promoted in cooperation projects with Russia and Belarus.

Belarus participates also in the Black Sea Basin Joint Operational Programme together with Armenia, Azerbaijan, Georgia, Moldova, Russia, Ukraine, and Bulgaria, Greece, Romania, Turkey. Details see Armenia.
2.4 Georgia

The Partnership Cooperation Agreement between the EU and Georgia was concluded in 1996, and entered into force in 1999. The inclusion of Georgia in the European Neighbourhood Policy in June 2004 marked a significant step forward in the EU - Georgian relations.

ENP Action Plan

The ENP Action Plan was adopted in November 2006. Areas of priorities addressed in the Action Plan are political reforms, socio-economic development or participation in regional cooperation initiatives. Areas of priority within S&T are: research and innovation, good environmental governance, protection of natural resources, integration into ERA and enhanced participation in the Framework Program, reforming of the education system (TEMPUS) or exchange of the scientific community (Erasmus Mundus). Further, linkage of the Caucasian Research and Education Networks with their European counterparts via GEANT is envisaged in order to support scientific collaboration.


Priorities for EU assistance under the CSP are based on the ENP Action Plan. Four priority areas are specified: (1) support for democratic development, the rule of law and governance, (2) support for economic development and ENP AP implementation, (3) support for poverty reduction and social reforms, and (4) support for peaceful settlement of Georgia's internal conflicts 60.

In terms of S&T cooperation, an increasing participation in FP7 (research projects and Marie-Curie actions), practical training at the institutes of the Joint Research Centre DG (DG JRC) is planned. Scientific cooperation at the regional level will be encouraged through the Black Sea Economic Cooperation (BSEC).

National Indicative Program 2007-2010 61

The multi-annual financial assistance is indicated with € 120 million and targets the four areas of priorities specified in the CSP.

National Indicative Program 2011-2013

The focus of the EU-Georgian cooperation as outlined in the NIP 2011-2013 pursues (1) democratic development, rule of law, good governance, (2) trade and investment, regulatory alignment and reform, (3) regional development, sustainable economic and social development, poverty reduction, and (4) support for peaceful settlement of conflicts.

S&T is addressed under sub-priority 3.2: Regional development and sustainable development, including environmental protection: to integrate environmental and climate change considerations within development programs and policy structures. Sub-priority 3.3: Education, skills development and mobility emphasizes the improvement of research


structures (human and material resources), reforms in higher education according to the Bologna principles, increased participation in EU programs (TEMPUS and Erasmus Mundus) as well as closer integration of Georgia within ERA and FP7 (increased number of proposals). For the period of 2011-2013, Georgia will receive € 180 million.

Annual Action Plans 2007-2010
S&T is not included in AAPs 2007 to 2010. The bilateral focus of cooperation rather concentrates on the public finance management reforms, the criminal justice systems, the vocational training and education, Twinning to implement ENP Action Plan, and rehabilitation of conflict zones.

2.4.1 Multi-country cooperation projects (regional and inter-regional)

Support to investments in the field of water supply and sanitation
Participating countries: Armenia, Georgia, Ukraine
Timeframe: 2006-2010
Budget: € 10 million (€ 3m in Ukraine - € 7m in Armenia and Georgia)
The project supports the Integrated Water Resources Management (IWRM) in the Partner Countries: improved water governance and management, capacity-building and awareness.
The project particularly finances investments that enhance the quantity and quality of water and waste water service delivery. In Georgia, the target is the Poti Municipal Water project, co-funded with the European Bank for Reconstruction and Development (EBRD). The project aims at (i) improving the water services in the City of Poti, the country’s primary port, (ii) refurbishing and extending the existing urban distribution network, and (iii) capacity development of the local administration (monitoring the quality of water supply services).

Forest Law Enforcement and Governance (FLEG)
Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine
Timeframe: 2008-2011
Budget: € 7 million; € 6 million EC contribution and € 1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)
The main objectives of the Program in Georgia are to contribute to (i) establishing legal and sustainable forest management and practices, (ii) strengthening the rule of law, and (iii) enhancing local livelihoods.
Further, Georgia takes also part in the Transboundary river management for the Kura river - Phase II together with Armenia, and Azerbaijan. Details see Armenia.
2.4.2 INOGATE

Of the INOGATE projects, Georgia participates in three projects related to energy efficiency and renewable energies:

1. **Support to Kyoto Protocol Implementation, SKPI** together with Armenia, Azerbaijan, Belarus, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

2. **Energy saving in the building sector in Eastern Europe and Central Asia** together with Armenia, Azerbaijan, Belarus, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.

3. **Support to Energy Market Integration and Sustainable Energy (SEMISE)** together with Armenia, Azerbaijan, Belarus, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

Details see Armenia.

2.4.3 NIF-Bilateral

Three projects funded under NIF are currently operating in Georgia:

Project: **Enguri/Vardnili Hydro Power Cascade Rehabilitation**

- Total cost: € 40 million; NIF grant: € 5 million
- Lead: EBRD; other IFI: EIB
- Status: signed

The project supports the rehabilitation of the Enguri-Vardnili hydro power cascade. It improves the energy security in the region and helps reducing CO₂ and other harmful gas emissions by replacing fossil fuel-fired power generation units currently in use.

Project: **Water Infrastructure Modernization**

- Total cost: € 86 million; NIF grant: € 6 million
- Lead: EIB
- Status: disbursing

The project targets a number of water supply and sanitation investment schemes throughout Georgia. It aims at improving access to safe water and contributing to the environmental protection of the Black and Caspian Seas.

Project: **Water Supply and Sewerage of Batumi and Surrounding Villages (Phase III)**

- Total cost: € 44 million; NIF grant: € 4 million
- Lead: KfW
- Status: approved
The project aims at rehabilitating the water distribution network and the wastewater system in Batumi and surrounding villages, including the installation of a wastewater treatment plant. The objective of the project is to make a contribution to the socio-economic development of the area and to the protection of natural resources, limiting the environmental impact on the Black Sea ecosystem.

**NIF-Regional (Eastern neighbourhood)**

Together with the other EaP countries, Georgia is eligible to participate in the Energy Efficiency Programme in the Corporate Sector. Details see Armenia.

### 2.4.4 TAIEX and Twinning:

**Twinning:**

Since its implementation in 2007, two Twinning projects in the field of S&T have been conducted in Georgia. The first Twinning project in Georgia started in 2009 and is related to the Higher Education reform.

#### Project: Capacity Enhancement for Implementing the Bologna Action Lines in Georgia (CEIBAL)

**Beneficiaries:** Ministry of Education and Science of Georgia and the National Education and Accreditation Centre (for the Implementation of the Bologna Process Action Lines)

**Cooperating MS:** The German Federal Ministry of Education and Research (BMBF), The French Centre International D’Études Pedagogiques (CIEP), The German Academic Exchange Service (DAAD) and the German GIZ

**Timeframe:** 2009-2010

**Budget:** € 1 million

The project aims at improving Georgia’s Higher Education System by supporting key institutions in assimilating the Bologna process. The effectiveness of the Bologna process implementation will prepare Georgia’s access into the European Higher Education Area (EHEA).

#### Project: Strengthening the Capacities of the Ministry of Environmental Protection and Natural Resources in Development and Improvement of Waste Management System in Georgia

**Beneficiary:** Ministry of Environmental Protection and Natural Resources of Georgia

**Timeframe:** 2010-2012

**Budget:** € 1, 2 million
The project is currently under contract negotiation. It wants to improve the solid and hazardous waste management. It is planned to develop a National Waste Strategy and a National Waste Management Plan.

**TAIEX:**
Under TAIEX, three S&T relevant project were concluded:

**June 2009:**  
**Workshop on waste management**  
Aim: To harmonise the national waste management legislation with EU standards and requirements  
Beneficiary: Ministry of Environment Protection and Natural Resources

**July 2008:**  
**Expertise on Effective implementation of the Bologna process reforms**  
Aim: To define priorities in terms of better implementation of the Bologna Process objectives  
Beneficiary: Ministry of Education and Science

**October 2007:**  
**Expert Mission on Sustainable Land Management**  
Aim: The aim of the mission is to share Spanish experience in Sustainable Land Management; learn the Spanish approach to combat desertification and land degradation and to study links between UNCCD and National Legislation  
Beneficiary: Ministry of Environment Protection and Natural Resources of Georgia

2.4.5 **CIUDAD**

Georgia participates in the **MODEL project (Management of Domains related to Energy in Local authorities)** together with Armenia, Moldova and the Ukraine. Details see Armenia.

2.4.6 **Erasmus Mundus and TEMPUS**

Higher education reform in Georgia continued to benefit from participation in TEMPUS, with five projects selected under the third Call for Proposals for Tempus IV (*Curricula Reformation and Harmonisation in the field of Biomedical Engineerings*) including one led by a Georgian university.

Georgia participates since 1994 in the TEMPUS program. Since then around 31 projects (Joint European Projects and Individual Mobility Grants) were funded (total budget € 13
million). Currently, 14 Georgian universities are involved in twelve on-going TEMPUS projects. So far, 12 Georgian central and regional universities have established partnerships with 56 EU universities for the joint implementation of Curriculum Development, University Management, Student Mobility and Institutional Building projects. These projects covered areas such as the medical sciences, engineering, economics, law, psychology, education and teacher training, environment, agriculture, social work, and EU studies.

Georgia also continued its active participation in Erasmus Mundus in the academic year 2010-11. Seven scholarships for Erasmus Mundus Master’s Courses and 1 Joint Doctorate Candidate under Action 1 and a further 56 mobility grants for students and academics under Action 2 was granted. Ten scholarship in European Integration Studies in European Universities and 4 Scholarship to the College of Europe were awarded. Tbilisi State University received continuing support for its Jean Monnet chair in European law.

Georgia also participated in the Erasmus Mundus Action II/External Cooperation Window between 2007 and 2009 (€ 2, 7 Mio). About 192 students and academics could pursue studies in EU universities for up to three years.

2.4.7 Cross Border Cooperation

Georgia also participates also in the Black Sea Basin Joint Operational Programme together with Armenia, Azerbaijan, Belarus, Moldova, Russia, Ukraine, and Bulgaria, Greece, Romania, Turkey. Details see Armenia.

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2.5 Moldova

The Republic of Moldova and the European Union first established contractual relations in 1994 through the Partnership and Cooperation Agreement, which entered into force in 1998. On that basis, an ENP Action Plan was adopted in February 2005 for a period of three years and was extended by mutual agreement from February 2008 onwards. In 2010, the EU and Moldova started negotiations on an EU-Moldova Association Agreement to further the political dialogue and deepen the sectoral cooperation.

In September 2010 an additional protocol to the PCA for opening the participation in EU programs was signed. The protocol will allow the Republic of Moldova to participate in different EU programs and agencies, such as the Seventh Framework Program for Research and Technological Development, the European Environment Agency and the European Center for Disease Prevention and Control. Currently, Moldova negotiates the association to FP7.

ENP Action Plan

The ENP Action Plan is an extensive political document and covers all areas of political dialogue and reform, cooperation on foreign and security policy, conflict prevention and crisis management, regional cooperation, cooperation for the settlement of the Transnistria conflict, economic and social reform and development, standards, technical regulations and conformity assessment procedures (EU harmonized areas), transport, energy, telecommunications, environment, as well as research, development and innovation.


EC assistance over the period covered by this strategy focuses on three strategic categories: (1) democratic development and good governance, (2) regulatory reform and administrative capacity building, and (3) poverty reduction and economic growth. S&T is addressed under sub-priority 1.4: Education, Science and People-to-people contacts/exchanges.

National Indicative Program 2007-2010

The NIP 2007-2010 basically reflects the priority areas of cooperation between the EU and Moldova as outlined in the Country Strategy Paper.

Specific objectives related to S&T target on the integration of Moldova into the European Research Area. Expected results are greater capacity of research structures (human and material resources) with a focus on scientific excellence and stronger links between scientific and research communities in the EU and Moldova, including educational institutions or networks contributing to the development of business matchmaking in the context of trade support (Private-Public Partnerships in technology licensing and transfer).

The indicative budget for 2007-2010 is € 209.7 million.

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National Indicative Program 2011-2013

EC assistance for Moldova in 2011-2013 targets: (1) Good governance, rule of law and fundamental freedoms, (2) Social and human development, and (3) Trade and sustainable development. S&T is addressed under sub-priority 3: Environment & energy efficiency / renewable energy and diversification. The latter focuses on the development and implementation of environment policy and legislation, and the sustainable management of natural resources.

Moldova is encouraged to increase investment and capacity in research and development, in particular through increased involvement in the Seventh Framework Program (FP7).

The indicative budget for the NIP 2011-2013 is €273.14 million.

The Annual Action Plans 2007-2010


In the AAPs of 2009 and 2010 two areas in the field of S&T are specified: (i) reforms in the water and sanitation sector (EU Water Initiative in the Republic of Moldova), and (ii) on secure, competitive and sustainable energy production (Energy and Biomass project). The multi-annual indicative budget is €118 million.

2.5.1 Multi-country cooperation projects (regional and inter-regional)

Forest Law Enforcement and Governance (FLEG)

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine

Timeframe: 2008-2011

Budget: €7 million; €6 million EC contribution and €1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)

The main objectives of the Program in Moldova are to (i) enhance the capacity for forest management at the community level and forestry enterprises, (ii) conduct analytical studies (forest marketing, illegal logging), and (iii) address key stakeholders in sustainable forest management (government, local communities, private sector, NGOs).

Sustainable integrated land use of Eurasian steppes

Participating countries: Moldova, Russia, Ukraine (Coordinator)

Timeframe: 2007-2009

Budget: €2.4 million

The project aimed at promoting and facilitating the restoration, conservation and sustainable management of the Eurasian steppes ecosystem. It further encouraged trans-boundary
cooperation between states in the management of steppe resources. A further aspect was on lobbying and promoting the issue of sustainable steppe land use management at legislative level. The project was awarded an honourable award in the environment category from the association 'British Expertise' (2008).

2.5.2 **INOGATE**

Moldova participates in 4 projects:

1. **Energy efficiency investments in Ukraine & Moldova**
   
   Participating countries: Moldova, Ukraine  
   Timeframe: 2006 - 2011  
   Budget: € 9.5 million
   
   Within the framework of the EBRD's Sustainable Energy Initiative, the project makes available financial resources for technical assistance and incentive payments in support of energy efficiency and renewable energy projects. It provides technical, financial, legal and environmental expertise to potential beneficiaries. At the same time it encourages spillover effects in the banking, industry and household sectors.

   Further projects are:

   2. **Support to Kyoto Protocol Implementation, SKPI** together with Armenia, Azerbaijan, Belarus, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

   3. **Energy saving in the building sector in Eastern Europe and Central Asia** together with Armenia, Azerbaijan, Belarus, Georgia, Russia, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.

   4. **Support to Energy Market Integration and Sustainable Energy (SEMISE)** together with Armenia, Azerbaijan, Belarus, Georgia, Ukraine as well as Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

   Details see Armenia.

2.5.3 **NIF-Bilateral**

Two projects in the water sector are funded by NIF:

1. **Feasibility Study for the Improvement of Water and Sanitation System in Chisinau**

   Total cost: € 59 million; NIF grant: € 3 million  
   Lead: EBRD; other IFI: EIB & KfW  
   Status: disbursing
The study is the basis for a large investment program aimed at the improvement of water supply and sewage collection and treatment in Chisinau. Herewith, the living conditions of the Chisinau's population will be improved and environmental impacts reduced.

2. Water Utilities Development Programme

Total cost: € 31.5 million; NIF grant: € 10 million
Lead: EBRD; other IFI: EIB
Status: disbursing

The project, targeting six selected municipal utilities, focuses on the improvement of the Republic of Moldova's water supply and wastewater treatment services through the expansion of water supply and wastewater treatment infrastructure outside the capital Chisinau.

NIF-Regional (Eastern neighbourhood)
Together with the other EaP countries, Moldova is eligible to participate in the Energy Efficiency Programme in the Corporate Sector (see Armenia).

2.5.4 TAIEX and Twinning

Twinning
The Republic of Moldova participates in ENPI-Twinning since 2008. Ongoing and tendered Twinning projects so far give support in the fields of norms and standards, good governance, penal reforms, or IPR. S&T is currently not addressed.

TAIEX:
Three projects with regard to S&T were conducted:

May 2010: **Expert Mission on SME - technological innovation and a guide development**
Aim: To assist in the field of technological innovation and skill enhancement to SMEs through a development of a guide on the implementation of innovative clusters
Beneficiary: Agency of Innovation and Technology of ASM

April 2010: **Expert Mission on Preparation of Memorandum of Understanding on terms and conditions for association of Moldova to the Seventh Framework Programme on Research and Technological Development (FP7).**
Aim: The aim of this event is to help Republic of Moldova with regard to the approximation of national legislation and application of EU legislation: Preparation of Memorandum of Understanding on terms and conditions for Association of the Republic of Moldova to Seventh

66 [http://support-md-eu.md/tw_pipeline.html](http://support-md-eu.md/tw_pipeline.html)
Framework Programme on Research and Technological Development (FP7).

Beneficiary: Academy of Sciences of Moldova (ASM)

October 2009: Workshop on FP7 - Opportunities for SMEs

Aim: The aim of the workshop is to inform stakeholders (public officials, entrepreneurs, etc) and provide them with relevant guidelines on financial opportunities available in the framework of existing and upcoming calls for proposals under Capacities programme of FP7 programme. Particular theme to be addressed is research for the benefit of SME

Beneficiary: Academy of Sciences of Moldova (ASM)

2.5.5 CIUDAD

Moldova participates in the project MODEL (Management of Domains related to Energy in Local authorities) together with Armenia, Georgia and Ukraine (see Armenia).

Further, Moldova takes part together with Ukraine in the project:

Energy Efficient Municipalities: Increasing energy efficiency of Chisinau and Sevastopol municipalities based on existing positive experience

Participating countries: Moldova (Lead Partner), Ukraine + Union of Municipalities of the Marmara Region (Turkey), ICLEI European Secretariat GmbH (Germany)

Theme: Environmental Sustainability (Sector: Energy Efficiency)

Timeframe: 28 months

Budget: € 673,000 (€ 538,000 EU contribution)

The projects targets at developing municipal energy efficiency (EE) strategies, developing a system for monitoring energy use, and preparing feasibility studies. The project will also organize competitions and trade fairs and prepare information materials to encourage energy efficiency and promote best practices and EE technologies.

2.5.6 Erasmus Mundus and TEMPUS

TEMPUS is the largest and longest running program supporting higher education reform and cooperation in Moldova, with no other program covering the same range of subjects.

Since 1994, the Republic of Moldova participates in TEMPUS. Five projects were selected under the third Call for Proposals for TEMPUS IV, including support for the creation of doctoral studies in line with policy commitments under the Bologna Process. Since 2000, Moldovan non-academic actors — in particular government organizations, and to a lesser extent, enterprises — have gradually become more active in TEMPUS projects. The program continues to facilitate implementation of Bologna reforms with all 17 public universities
taking part\(^67\). So far, about 1000 students and teachers visited EU universities for training and documentation programs.

Higher education institutions in Moldova also participate in the Erasmus Mundus program since 2007 (Lot 6 of the Erasmus-Mundus External Cooperation Window together with Belarus and Ukraine). Six Moldovan students were awarded scholarships for Erasmus Mundus Masters Courses under Action 1. In 2010, Moldova State University became the first Moldovan University to be selected as a full partner in an Erasmus Mundus Action 1 project, delivering a masters course on migration with EU partner universities. Student and academic mobility was further enhanced under Action 2 with an award of 66 scholarships. Three scholarships in European Integration Studies in European Universities and 10 Scholarship to the College of Europe were awarded. The Academy of Economic Studies received a Jean Monnet project to increase the understanding of the Eastern Partnership by public servants, students and academics.

### 2.5.7 Cross Border Cooperation

Moldova is involved in two CBC programs: a trilateral land-border programme with Ukraine and Romania, and the multilateral Black Sea Programme. The latter is in cooperation with Armenia, Azerbaijan, Georgia, Ukraine, Russia and Bulgaria, Greece, Romania, Turkey. Further details see Armenia.

#### The Land-border program: The Romania-Ukraine-Republic of Moldova Program

- **Participating countries:** Moldova, Ukraine + Romania
- **Timeframe:** 2007-2013
- **Budget:** € 126,718 million

Priorities are:

- competitiveness of the border economy (diversification and modernisation)
- environmental challenges and emergency preparedness: water supply, sewerage and waste management
- people to people co-operation: educational, social and cultural exchanges.

2.6 Ukraine

The Partnership and Cooperation Agreement between the EU and Ukraine entered into force in March 1998. It provides a comprehensive framework for cooperation between the EU and Ukraine. Cooperation in S&T is outlined in Article 58, and covers (1) the exchange of scientific and technical information, (2) joint R&D activities, and (3) training activities and mobility programs for scientists, researchers and technicians. The EU is the largest donor to Ukraine. Total assistance since 1991 amounted to more than €1 billion.

The ENP Action Plan was adopted in February 2005 and is a comprehensive document outlining the areas of cooperation between the EU and Ukraine. The following areas are prioritized: (1) political dialogue and reform, (2) economic and social reform and development: emphasis is on further economic integration towards an EU-Ukraine Free Trade Area following Ukraine’s accession to the WTO, (3) trade, market and regulatory reform, (4) co-operation in Justice and Home Affairs, (5) transport, energy, information society and environment, and 6) people-to-people contacts. The latter addresses cooperation in science and technology, and emphasizes the integration of Ukraine into ERA (through Ukraine national S&T information centres, Marie-Curie fellowships, participation in FP7).

Association Agreement EU-Ukraine:

Ukraine is a priority partner country within the ENP. At the Paris Summit in September 2008 an agreement was reached to start negotiations on an EU-Ukraine Association Agreement, which is to be the successor agreement to the PCA. Several negotiating Rounds have since been organized (in Brussels and Kiev). In November 2009, the Cooperation Council adopted the EU-Ukraine Association Agenda. This Agenda replaces the former Action Plan, and will prepare for and facilitate the entry into force of the new Agreement. For 2010, a list of priorities for action was jointly agreed by Ukraine and the EU: policy dialogue, combating corruption, foreign and security policy, co-operation on justice, freedom and security issues, trade and trade related matters, energy co-operation including nuclear issues, and other co-operations. The latter addresses S&T cooperation, namely to “renew and activate the EU-Ukraine S&T cooperation agreement in order to enhance the participation of Ukrainian research entities in FP7 projects”. The Association Agreement will significantly deepen Ukraine’s political association and economic integration with the EU. As Ukraine became a member of the World Trade Organization (WTO) in May 2008, negotiations on the establishment of a Deep and Comprehensive Free Trade Area (DCFTA) could be launched, as an integral part of the Association Agreement. Negotiations for this DCFTA will continue in 2010/2011.

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69 The EU is the largest donor to Ukraine. Total assistance since 1991 amounted to more than €1 billion.

EC assistance for 2007-2013 aims at supporting Ukraine’s reform agenda on the basis of the policy objectives defined in the PCA of April 1998 and the ENP Action Plan of February 2005. The Country Strategy Paper for Ukraine has been developed in close consultation with the Ukrainian authorities and reflects national priorities. Areas of priority are:

1. support for Democratic Development and Good Governance;
   - cooperation in S&T is outlined under sub-priority 4: Education, Science and People-to-people contacts/exchanges. Anticipated is a greater participation in research-related activities such as the 7th Framework Program, joint research projects, the Marie Curie international mobility scheme for scientists and practical training at the seven institutes of DG Joint Research Centre (DG JRC).

2. support for Regulatory Reform and Administrative Capacity Building

3. support for Infrastructure Development, including energy, transport, environment, border management.

The National Indicative Program 2007-2010

The NIP for 2007-2010 defines in greater detail the focus of operations under ENPI. It is intended to guide planning and project identification by defining a limited number of priority areas, together with the objectives and results to be achieved. For 2007-2010 the three areas of priority are already outlined under the CSP.

The indicative budget for Ukraine under NIP for the period 2007-2010 is € 494 million.

The National Indicative Program 2011-2013

Based on a mid-term review of the CSP in 2008, the NIP for 2011-2013 will target on: (1) Good Governance and the Rule of Law, (2) Facilitation of the entry into force of the EU-Ukraine Association Agreement (including a Deep and Comprehensive Free Trade Area), and (3) Sustainable Development.

S&T is addressed under sub-priority 3.1: Energy, Environment and Climate Change and Transport and sub-priority 3.2: Social Cohesion: Regional and Rural Development: Increased regional economic dynamism through increased innovative and research and development (R&D) capability.

The indicative budget for this period is € 470.05 million.

Annual Action Programs 2007-2010

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72 Country Strategy Paper 2007-2013 for Ukraine:

73 ENPI Ukraine. National Indicative Programme 2007-2010:

74 http://ec.europa.eu/europeaid/work/ap/index_en.htm#2

75 http://ec.europa.eu/europeaid/work/ap/index_en.htm
S&T is not addressed in the AAP 2007.
In 2008 (€ 138 million) one focal area is “Support to the implementation of Ukraine's strategy in the area of energy efficiency and renewable sources of energy”. In 2009 (€ 116 Mio) the EU gives support in the sectoral areas transport and environment, and in 2010 (€ 66 Mio) energy efficiency and environmental sustainability are one of the prioritized areas of financial assistance.

2.6.1 Multi-country cooperation programs (regional and inter-regional)

Ukraine takes part in several multi-country projects of the Eastern Partnership:

- the FLEG project (Forest Law Enforcement and Governance) together with Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Russia.
- Support to investments in the field of water supply and sanitation together with Armenia and Georgia.
- Sustainable integrated land use of Eurasian steppes (Lead Partner) together with Moldova and Russia.

Details see Armenia.

2.6.2 INOGATE

Of the INOGATE projects, Ukraine participates in four projects related to energy efficiency and renewable energies:

1. **Energy efficiency investments in Ukraine & Moldova** (see Moldova)
2. **Support to Kyoto Protocol Implementation, SKPI** together with Armenia, Azerbaijan, Belarus, Georgia, Russia as well as Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
3. **Energy saving in the building sector in Eastern Europe and Central Asia** together with Armenia, Azerbaijan, Belarus, Georgia, Russia, and Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.
4. **Support to Energy Market Integration and Sustainable Energy (SEMISE)** together with Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

Details see Armenia.

2.6.3 NIF-Bilateral

**Technical Assistance Support for Ukrainian Municipalities Sector**

- Total cost: € 135 million; NIF grant: € 5 million
- Lead: EBRD; other IFI: EIB
- Status: disbursing
- Duration: 2008-2013
The project supports several investments of the EBRD in Ukrainian municipalities in the field of S&T: water and wastewater, district heating and urban transport sub-sectors.

**NIF-Regional (Eastern neighbourhood)**

Together with the other EaP countries, Ukraine is eligible to participate in the Energy Efficiency Programme in the Corporate Sector (see Armenia).

**2.6.4 TAIEX and Twinning**

**Twinning**

Ukraine benefited from the implementation of the ENPI Twinning. Since its implementation in 2007, 44 projects have been completed or are currently being implemented and/or under tendering. The majority of the Twinning projects support in the field of norms and standards, State Aid Policy, Financing, Energy Regulation, Transport or Aviation. Only one project with relevance to S&T is under progress:

- **Project:** Support to the Ministry of Environmental Protection of Ukraine for the implementation of the Law on Ecological Audit
  
  - **Beneficiary:** Ministry of Environment of Ukraine (MoE)
  - **Cooperating MS:** Environment Agency Austria and Austrian Standards Institute, Ministry of the Environment of the Czech Republic
  - **Timeframe:** Sept 2010-Feb 2012
  - **Budget:** € 1,05 million

  The project aim is to improve the legal and methodological basis for ecological audit in Ukraine and to improve the system for certification and accreditation of auditors.

**TAIEX:**

Technical Assistance and Information Exchange to Ukraine is very comprehensive. The Ukraine benefits and participates in a broad range of fields covering norms and standards, transport, aviation, investment and so forth. As regards S&T, seven expert missions or workshop have been conducted:

- **September 2011:** Expert mission on European practice as regards crop rotation for soils rational usage and preservation
  
  - **Aim:** Improving and ensuring soil's rational use and preservation via efficient application of crop rotation procedure

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<tr>
<th>Date</th>
<th>Activity Description</th>
<th>Beneficiary</th>
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<tr>
<td>February 2011</td>
<td><strong>Workshop on radioactive waste management</strong></td>
<td>Ministry of Ukraine of Emergencies and Affairs of Population Protection</td>
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<td><strong>Aim:</strong> Exchange of experience with countries concerning state management in the sphere of radioactive waste management</td>
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<td>September 2010</td>
<td><strong>Expert mission on energy efficient technologies, including the technologies of mine methane extraction</strong></td>
<td>The National Agency of Ukraine on Ensuring of Efficient Use of Energy Resources Management (NAER)</td>
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<td><strong>Aim:</strong> The aim of this assistance is the exchange of experience regarding technologies and equipment using alternative and renewable energy sources, EU countries experience in mine methane extraction and using</td>
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<td>February 2010</td>
<td><strong>Workshop on Floods prevention in mountain forests</strong></td>
<td>The State Forestry Committee of Ukraine</td>
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<td>May 2009</td>
<td><strong>Legal and Institutional Framework for the participation of Ukrainian Research Institutions in the EU’s seventh framework programme: ICT-related research</strong></td>
<td>State Committee for Information of Ukraine</td>
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<td><strong>Aim:</strong> The aim of the assistance is to provide a general overview of the Seventh Framework Programme: what are its priority activities, its structure and the specific programmes it entails. To discuss what is the legal and the institutional framework for participation in the FP7 and to provide recommendations and guidance on the preparation and the submission of applications for the funding of projects.</td>
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<td>January 2009</td>
<td><strong>Expert mission on key features of implementation of national forest inventory</strong></td>
<td>State Forestry Committee</td>
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<td><strong>Aim:</strong> The aim of this expert mission is to foster methodological assistance in preparation of national forest inventory and determination of some aspects of its introduction</td>
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<td>July 2007</td>
<td><strong>Workshop on the promotion of energy efficiency and renewable energy sources</strong> and <strong>Workshop on energy efficiency for buildings</strong></td>
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Aim: Help in achieving the priorities mentioned in the ENPI Action Plan as regards energy
Beneficiary: National Agency for Energy and Resources

2.6.5 CIUDAD

Ukraine participates in three CIUDAD projects:

1. **SPIN-Energy efficiency & urban development planning**
   - Participating countries: Russia, Ukraine + Croatia, Serbia (Lead Partner), Italy, Turkey
   - Timeframe: 30 months
   - Total budget: € 752,581
   - This project aims at facilitating the integration of renewable energy sources (RES) and energy efficient (EE) technologies and materials into the renovation of historical buildings in order to reduce both energy consumption and CO$_2$ emissions.

Further projects with participation of Ukraine are:

2. **MODEL** (Management of Domains related to Energy in Local authorities) together with Armenia, Georgia and Moldova (see Armenia).

3. **Energy Efficient Municipalities project** (Increasing energy efficiency of Chisinau and Sevastopol municipalities based on existing positive experience) together with Moldova and the Union of Municipalities of the Marmara Region (Turkey) + ICLEI European Secretariat GmbH (Germany) (see Moldova).

2.6.6 Erasmus Mundus/External Cooperation Window and TEMPUS

Ukraine continued to benefit substantially from its active participation in TEMPUS. Five new projects were selected under the third Tempus IV Call for Proposals, including support for the development of doctoral studies.

Since 2004, 190 Master students were awarded a Erasmus Mundus master scholarship. A total of 28 Ukrainian students benefited from Erasmus Mundus Masters Course scholarships during the 2010-11 academic year. Student and academic mobility to the EU continued to develop through the award of 99 individual mobility grants under Erasmus Mundus Action 2, for the 2010-11 academic year. Ten scholarship in European Integration Studies in European Universities and 9 Scholarship to the College of Europe were awarded. The financial contribution under the Erasmus Mundus Action II/External Cooperation Window between 2007 and 2009 to Ukraine was € 5,3 Mio.

Three new Ukrainian projects were selected under the Jean Monnet Programme in 2010, including, for the first time, two Jean Monnet Chairs in Kyiv (Kyiv-Mohyla Academy) and Donetsk (State University) — on EU relations and economic issues, respectively.
2.6.7  Cross Border Cooperation

Ukraine is involved in four CBC programs: three Land-Border and one Sea-Basin Programs.
Under the Land-Border Programs, Ukraine takes part in the following projects:

The Hungary-Slovakia-Romania-Ukraine Program
Participating countries:  Ukraine + Hungary, Romania, Slovakia
Timeframe:  2007-2013
Budget:  € 68.6 million
The priorities are to:
• promote economic and social development (tourism, SME development)
• enhance environmental quality (sustainable use and management of natural resources air, water, soil, forestry and energy)
• increase border efficiency and management on the Ukrainian border
• support people-to-people cooperation.

Further programs with participation of the Ukraine are:
•  Poland-Belarus-Ukraine Program (see Belarus)
•  Romania-Ukraine-Republic of Moldova Program  (see Moldova)

Of the Sea-Basin Programs, Ukraine takes part in the multilateral Black Sea Programme
together with Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Romania, Russia, and Turkey
and (see Armenia).
2.7 EU Cooperation with Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

The European Union’s relations with Central Asian (CA) countries have a similar contractual basis to those with countries under the ENPI. The EU concluded Partnership and Cooperation Agreements with Central Asia similar with Russia and the New Independent States of Eastern Europe and the Southern Caucasus: Kazakhstan (1999), Kyrgyzstan (1999), Uzbekistan (1999) and Tajikistan (2010). The PCA with Turkmenistan is still in the process of ratification. The aims of these partnerships are to provide a framework for political dialogue, accompany their transition to a market economy, encourage trade and investment and provide a basis for cooperation in the legislative, economic, social, financial, scientific, civil, technological and cultural fields.

Cooperation in S&T is stipulated under Article 51 and shall promote cooperation in civil scientific research and technological development (RTD): (1) exchange of scientific and technical information, (2) joint RTD activities, and (3) training activities and mobility programs for scientists, researchers and technicians engaged in RTD on both sides. Special attention shall be devoted to the redeployment of scientists, engineers, researchers and technicians which are or have been engaged in research and/or production of weapons of mass destruction.

With EU enlargement, the inclusion of the Southern Caucasus into the ENP and the Black Sea Synergy Initiative, Central Asia and the EU are moving closer together.

Therefore, in 2007 the EC has adopted “The EU and Central Asia: Strategy for a New Partnership 2007-2013 (CA RSP)” which serves as an overall framework for the EU policies in the region of Central Asia. The priorities for its cooperation for the period 2007-2013 with each Central Asian state is according to its specific needs, requirements and performance, including human rights, good governance, democracy and social development. The strategic objectives of the Central Asia Strategy operate in synergy with those of the ENPI East Regional Strategy.

The multi-annual indicative budget is € 750 million plus an annual allocation of € 58-139 million under the Development Cooperation Instrument (DCI).

The CA RSP 2007-2013 focuses on:

1. Central Asia regional cooperation and good neighborly relations (30-35% of total budget)
   - Networks (e.g. energy dialogue)
   - Environment
     - support of EU Water Initiative EUWI-EECCA
     - implementation of the Kyoto Protocol mechanisms at regional level

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78 http://europa.eu/legislation_summaries/external_relations/relations_with_third_countries/eastern_europe_and_central_asia/r17002_en.htm
− UN Conventions on Biological Biodiversity
− combat Desertification
− sustainable management of forests and other natural resources in Central Asia (e.g. indicative actions under the Forest Law Enforcement and Governance/FLEG)

• Border and migration management, the fight against international crime, and customs
• Education, scientific and people-to-people activities (“European Education Initiative”)

2. Reduce poverty and increase living standards (40-45 % of total budget)
3. Promote good governance and economic reform (20-25% of total budget)

Instruments to be employed to foster the cooperation with Central Asian States are

• Twinning staff between EU and Central Asian administrations or companies
• mobilizing Higher Education Cooperation through the new Erasmus Mundus and TEMPUS
• promoting the development of the regional infrastructure in the fields of transport, energy and trade under the INOGATE (Baku Initiative) and TRACECA, funded through DCI and ENPI
• support Public-private partnership initiatives
• increase the interaction with International Financial Institutions (IFI).

Central Asia Indicative Program 2007-2010

The priorities for Central Asia regional cooperation are mostly aligned with the priorities and objectives for the Regional Strategy-East 2007-2013 of the ENPI and its associated Indicative Program 2007-2010, and will thus enable Central Asian states to participate in the regional cooperation mechanisms put in place to implement the ENPI regional programs. In this way, Central Asian countries will continue to be anchored to the framework of the ENP and the 4CS with Russia. One of the conditions for successful regional cooperation is the government’ commitments as a stakeholder to engage and develop its policy and capacity at national level to facilitate the implementation of these programs.

The focal priorities with regard to S&T are the sectoral areas energy and environment (water) as well as educational, science and people-to-people activities. Higher education systems shall be reformed (Erasmus Mundus and TEMPUS) and the scientific and technological cooperation be enhanced through increased participation in the 7th Framework Programme projects.

EC assistance to CA is financed under the DCI. DG RELEX (External Relations, Unit E/3) holds responsibility. The indicative budget for 2007-2010 is € 314 million. Seventy% of the total resources are allocated to bilateral cooperation: Kazakhstan receives € 44 million (20%), Kyrgyzstan € 55 million (25%), Tajikistan € 66 million (30%), Turkmenistan € 22 million (10%), and Uzbekistan € 32, 8 million (15%).

Central Asia DCI Indicative Program 2011-2013

The principal objectives and areas of priority for regional cooperation and bilateral assistance programs adopted under the CA RSP and the Indicative Program 2007-2010 remain essentially the same.

The DCI indicative budget for 2011-2013 is € 321 million. The bilateral allocation is as follows: Kazakhstan receives € 30 million (14%), Kyrgyzstan € 51 million (24%), Tajikistan € 62, 1 million (29%), Turkmenistan € 30, 9 million (14%), and Uzbekistan € 42 million (19%).

Annual Action Programs 2007-2011

The bilateral AAPs for assistance to each of the five CA States are mostly within the two strategic priority areas “poverty reduction and increasing living standards”, and “good governance and economic reform”.

Bilateral cooperation in the field of S&T is addressed occasionally:

- 2007 for Turkmenistan: support to the modernization of the education system
- 2008 for Kyrgyzstan: support to the Kyrgyz education sector
- 2008 for Turkmenistan: further improvement of quality and relevance of professional education
- 2010 for Kazakhstan: effectiveness of central state administration in four sectors Education, Environment, Agriculture and Industry/Innovation
- 2010 for Turkmenistan: rational and sustainable use of natural resources in the energy-environment sectors.

Multi-country cooperation programs

The CA countries are eligible to take part in the INOGATE program. Projects with CA participation are:

1. **Support to Kyoto Protocol Implementation, SKPI** together with Armenia, Azerbaijan, Belarus, Georgia, Russia and the Ukraine.

2. **Energy saving in the building sector in Eastern Europe and Central Asia** together with Armenia, Azerbaijan, Belarus, Georgia, Russia and the Ukraine.

3. **Support to Energy Market Integration and Sustainable Energy (SEMISE)** together with Armenia, Azerbaijan, Belarus, Georgia and the Ukraine.

Details see Armenia.

Erasmus Mundus and TEMPUS

**Erasmus Mundus**

All five CA countries benefit from the Erasmus Mundus program. They take part in three Erasmus Mundus Action 2 projects and profit from scholarships: Uzbekistan: 38, Turkmenistan 4, Tajikistan 6, Kyrgyzstan 17 and Kazakhstan 20.

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TEMPUS

Kazakhstan\textsuperscript{83}:

TEMPUS has supported the internationalisation and quality of the Kazakh education system and the use of information technologies. Since 2000, TEMPUS has supported study programs of 20 public and 8 private universities in the fields of (only S&T): applied sciences, engineering and technology, information technology, computer science, software engineering, energy efficiency, the environmental sciences, agricultural and food sciences, and agribusiness. Kazakhstan has adopted some principles of the Bologna process, by introducing the three level degree system and implementing the credit system. The other aspects of the Bologna process are being developed.

Kyrgyzstan\textsuperscript{84}:

To date, Kyrgyzstan is no Bologna signatory country but the intention to join the Bologna process is supported at government level.

TEMPUS has been effective in establishing international cooperation between Kyrgyz and EU higher education institutions. Out of the 55 Kyrgyz higher education institutions, 23 have participated in TEMPUS projects. Between 1995 and 2006, 17 large-scale Tempus projects have been implemented, corresponding to approximately € 5 million of funding spent. The subject areas covered by TEMPUS projects have included economics, university management, engineering, and public health. S&T was not addressed.

Tajikistan\textsuperscript{85}:

To date, Tajikistan is no Bologna signatory country. The TEMPUS program was opened to Tajikistan in 2004, although by June 2006, only 4 projects had been fully implemented. In August 2006, € 2,738,172 million in total was allocated to projects in Tajikistan. Unfortunately, only a very limited number of Tajik teachers have been able to avail of the Individual Mobility Grants. According to the beneficiaries, this is mainly due to difficulties in finding EU institutions which have confirmed their invitations to host the visitors.

S&T projects funded under TEMPUS in Tajikistan are: Biomedical Engineering in Tajikistan (TEMPUS III), and Plan to Establish Research-Science-Enterprise oriented Universities for the benefit of Society (Medicine, Veterinary, other sciences ) (TEMPUS IV).

Turkmenistan\textsuperscript{86}:

TEMPUS has been effective in promoting international academic cooperation between Turkmen and EU universities. The program opened to Turkmenistan in 1997, and by June 2006, 32 TEMPUS projects (€ 7.5 million) have been supported. The S&T subject areas covered have been: environmental sciences and geographical information systems, water resources, regional environmental policy, agricultural and food sciences, information technology, computer science and software engineering, The main actors in TEMPUS

\textsuperscript{83} http://eacea.ec.europa.eu/tempus/participating_countries/kazakhstan_en.php
\textsuperscript{84} http://eacea.ec.europa.eu/tempus/participating_countries/kyrgyzstan_en.php
\textsuperscript{85} http://eacea.ec.europa.eu/tempus/participating_countries/tajikistan_en.php
\textsuperscript{86} http://eacea.ec.europa.eu/tempus/participating_countries/turkmenistan_en.php
projects have been 10 higher education institutions, the Ministry of Education, the Supreme Council for Science and Technologies under the President of Turkmenistan, the Ministry of Economy and Finance, the State Committee for Sports and Tourism, the Ministry of Nature Protection and the Ministry of Culture, the Ministry of Agriculture.

Uzbekistan

TEMPUS is the largest international program supporting higher education reform in Uzbekistan. Measures are underway to enhance higher education institution autonomy and to adopt new quality assurance approaches. The main obstacle to reform is the low level of pay for teachers. Although Uzbekistan is not officially a signatory of the Bologna process, international standards (the two-tier degree system, credits, quality assurance, etc.) are being incorporated into higher education programmes.

Since 1994 a total of 43 higher education institutions and 25 non-academic organisations (ministries, chambers of commerce, enterprises, etc.) have participated in TEMPUS project consortia, and some 96 European universities and organisations from 18 EU member states have cooperated with higher education institutions in Uzbekistan.

The S&T subject areas covered by TEMPUS projects have been: agriculture, the food sciences, water resources, natural resource management, environmental engineering, environmental sciences, applied sciences, technology and the medical sciences.

3 IMPACT OF ENP/ENPI FOR THE S&T LANDSCAPE IN EASTERN EUROPE AND CENTRAL ASIAN COUNTRIES (EECA)

Since the implementation of ENPI in 2007, the countries in Eastern Europe and Central Asia have benefited substantially from the program at both national and regional level (Table 2). For the period of 2011-2013, Ukraine receives the largest financial support (€ 470 million) of the EaP countries, followed by Moldova (€ 273 million). The financial assistance for Armenia, Azerbaijan, Belarus and Georgia increased significantly over this period.

Yet the focus on cooperation activities that are linked to S&T is rather weak. The main focus lies on the country programs, i.e. fostering the implementation of political, economic and social reform programs in the individual partner countries. But also institution building and good governance including training for officials, harmonising standards and legislation or tackling regional cooperation are focal issues.

S&T policy is included in all Partnership and Cooperation Agreements, to foster cooperation in civil scientific research and technological development. The Country Strategy Papers and the National Indicative Programs, though, address S&T mainly as sub-priorities in the field of tertiary education, energy and the environment (water, waste water, Kyoto protocol implementation, sustainable management of forest resources):

- modernization of the education and training systems in line with European standards
- integration into ERA and the Community R&D Framework
- improving the legislative and administrative management of environmental challenges, e.g. development of water and waste management plans or the securing of energy supply

Bilateral financial cooperation regarding S&T can be improved. Thus, S&T is not adopted in the AAPs 2007-2010 of Armenia and Georgia as well as in the AAPs 2007 and 2008 of the Republic of Moldova. Financial assistance for Azerbaijan and Belarus mainly supports the legislative and economic reform in the energy sector. Similarly, for Moldova the focus is – among others - on the reformation of the water and sanitation sector or the sustainable energy production. Concerning the bilateral cooperation with Ukraine, energy efficiency and environmental sustainability are one of the areas of financial priority.

At the regional level, ENPI provides a wide range of cooperation programmes that can be regarded relevant for S&T cooperation. All EaP countries benefit from the regional cooperation programs in the field of sustainable management of forests (FLEG) or sustainable water and energy supply (Table 5, Annex). Belarus even has an interregional cooperation with Morocco through CIUDAD.

As for the energy sector (including support for the implementation of the Clean Development Mechanism under the Kyoto Protocol), the EU and the EaP countries consolidated their cooperation. Several ENPI energy projects (INOGATE, CIUDAD, NIF, TAIEX) are currently operating (Table 5, Annex). Further, cooperation towards sustainable management of natural resources (water, air, forests) is improving. Several regional projects are financially supported (Water Supply and Sanitation Project, Transboundary River Management, FLEG and several Cross-Border Cooperation projects). Support at the governance level is provided through TAIEX and Twinning Operations. Good examples are Armenia (1 Twinning and 2 TAIEX projects), Georgia (1 Twinning and 2 TAIEX projects) and Ukraine (1 Twinning and 6 TAIEX projects). These already existing instruments could be expanded to other countries as well as further areas of S&T relevance.
All EaP countries benefited substantially from the Higher Education programs. Armenia, Azerbaijan, Georgia, Moldova and Ukraine are formal signatories to the Bologna Declaration. The EaP countries advanced on quality assurance and on the adaptation of higher education provision to the three-cycle system (bachelor, master, doctorate). TAIEX and Twinning operations supported these positive tendencies. Good examples are Georgia (1 TAIEX and 1 Twinning on Higher Education Implementation of Bologna Reform), Armenia (1 TAIEX on Quality Assurance in Higher Education), Azerbaijan (1 TAIEX on Regulation of Higher Education Systems) and Moldova (1 TAIEX on S&T Innovation for SMEs). Student and academic mobility also benefited from Erasmus Mundus scholarships. There was also a significant increase in participation from EaP countries in the Jean Monnet Program in 2010. For the first time ever, one Jean Monnet teaching module each was selected from universities in Armenia and Azerbaijan, and two new Chairs were selected in Ukraine. Yet strengthening partnership with enterprises and industry remains critical in order to ensure the relevance of taught programs and to enhance the employment prospects of higher education graduates.

Regarding integration into ERA and the participation in EU’s science funding programs the countries are encouraged to increase investment in S&T development, i.e. investments in research by the public and private sector. For most countries, investment in research and innovation remains at relatively modest levels and the overall number of applications within FP7 still remains relatively low. To better understand ERA and the Community R&D Framework, TAIEX and Twinning are beneficial instruments to make use of. Good examples are Ukraine which had 1 TAIEX workshop on Participation in FP7 and the Republic of Moldova where 2 TAIEX workshops were conducted (Workshop on FP7-Opportunities for SMEs and Preparing MoU for Association of Moldova to FP7).

The EaP countries also profit from TAIEX and Twinning operations under ENPI. However, Twinning is not used for S&T cooperation between Belarus and Moldova, and the EU. Between 2005 and 2010, for example, 96 Twinning projects were launched. Yet the majority of projects were mostly support in the field of norms and standards, financing, transport or aviation, rule of law or good governance. Thus, under TAIEX, 3% of the projects were in the energy sector, 4% in the transport sector and 16% in the field of environment/agriculture. Similarly, 6% of the Twinning projects were in the field of environment and 4% in the energy sector.

Concerning the NIF, all EaP countries, except for Azerbaijan and Belarus, benefit from this facility: Armenia (€ 120 million) and Ukraine (€ 135 million) have one project each in the water sector. Two projects worth € 100 million are currently running in Moldova (water) and three projects (€ 200 million) in Georgia (water and energy). Since its implementation in 2007, the overall NIF contribution to 9 projects approved for EaP amounts to € 47, 5 million. The total amount for these projects is approximately € 0, 75 billion: 32% in the environment sector, 28% for energy projects and 26% for transport.

In conclusion, the focus on cooperation activities that is linked to S&T is rather weak. Bilateral financial support for S&T can be improved. At the regional level, ENPI provides a wide range of programs that can be regarded relevant for S&T cooperation. The major area of

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priority, though, is in the energy sector and the water/wastewater management. Further, S&T is mostly supported at legislative and administrative management level. This could be expanded to STI projects including enterprises and industry (e.g. PPPs).

A major success story is the adoption of the Bologna Declaration including enhanced mobility of students and academic staff and the modernization of the higher education systems.
4 S&T as Parts of the Four Common Spaces with Russia

4.1 General Goals of the Four Common Spaces

The legal framework of EU-Russia relations has a long history since the first agreement between the Soviet Union and the EU. Since the first years after the Russian Federation appeared on the political map, the process of establishing formal relations with the EU was underway. The first Partnership and Cooperation Agreement (PCA) was signed in 1997. The Agreement sets out the principal common objectives for trade and economic cooperation, political dialogue, and, to a limited extent, for cooperation in justice and home affairs.

In May 2003 relations between the European Union and the Russian Federation were given a new incentive and framework, namely the Four Common Spaces (4CS). These spaces, created under the Partnership and Co-operation Agreement, are:

• Common Economic Space;
• Common Space on Freedom, Security & Justice;
• Common Space on External Security; and
• Common Space on Research, Education & Culture.

Although the general goals of this reinforcement must be obtained separately within the single common space, they could be summarized as ‘common values’ and ‘shared interests’ covering not only economic and environmental issues but also science, technology and education or human rights. Moreover, the overall objective of all 4CS is to strengthen the strategic partnership between the EU and Russia. Thus, in 2005, Road Maps detailing the objectives and actions of the partnership were created. These Road Maps set out shared objectives for EU-Russia relations and the actions necessary to reach the planned objectives. All new projects conducted in the Russian Federation will also follow the priorities set out in the Road Maps. North West Russia and Kaliningrad Oblast are the priority geographic regions for EU-Russia cooperation programmes. The themes, objectives and priorities for projects are drawn not only from the common spaces but also from the Northern Dimension framework, which goes beyond the common spaces and covers additional issues including public health and social well-being, environment and cross border cooperation.

The most recent development in EU-Russia relations is the Partnership for Modernisation signed in summer 2010.

In terms of S&T cooperation between EU and Russia, other tools play a significantly greater role than the ENPI. This applies to several internationally designed research programmes such as the European Framework Programmes (FP7), EUREKA or COST.

During the research within this report, all 4CS, as stipulated in key documents, are analysed in terms of potential activities dealing with fostering scientific cooperation or research.


 Depending on how one defines the scope of “S&T” at least three Common Spaces include S&T activities. Nevertheless, the most relevant is the Common Space on Research, Education & Culture. Regarding S&T it is stated that activities in other spaces “shall be carried out in the context of the Common Space on Research and Education, including Culture.” Therefore, the conduct of R&D activities takes place exclusively within the framework of the 4th Common Space.

Legal Framework and S&T relevant documents

EU-Russia Partnership & Cooperation Agreement (PCA), in force since 1997

The PCA is a central document on which EU-Russia co-operations are based. For this report, Art. 62 (S&T) is the most relevant one. This article serves as the legal basis for the EU-Russian bilateral cooperation in civil scientific research and technological development as well as offers access to resources, respective programmes or protection of intellectual, industrial and commercial property rights (IPR). Further S&T cooperation should cover exchange of S&T information, joint RTD activities and exchange of human resources (training or mobility programmes).

However, since 2004 it has proved impossible to convene most PCA sub-committees for several years. Since June 2008, an agreement to replace the current PCA has been under negotiation.


The purpose of this agreement was to strengthen S&T cooperation between the EU and Russia, prior to the creation of 4CS. The activities should be of mutual benefit and the realisation should be evenly balanced between the European and Russian sides. Thus, action plans, agreed on annually by the EU-S&T Cooperation Committee, should enhance Science and Technology cooperation between the strategic partners. The targeted thematic issues and principals in the S&T Cooperation Agreement were determined in later agreements.

Road Maps for the Common Spaces

The Road Map specify the particular activities that are to be undertaken within the general areas of cooperation outlined in the four Common Spaces and all areas of cooperation interests. With regard to the field of S&T it defines the objectives, directions and instruments for research, science and technology to intensify links and exchanges in the field of research and education. This Road Map should function as a more general framework for individual S&T cooperation initiatives between EU and Russia. It is reviewed annually through the EU-Russia Common Spaces Progress Report.


95 Interview with a delegate from the Federal Ministry for Foreign Affairs

S&T related actions in the Common Economic Space (1st space) stipulated in the Road Map are:

- Improvement of the framework conditions for industrial and R&D cooperation with the objective to foster industrial cooperation regarding design, production and exploitation of aerospace products.
- Implementation of the work programme of the EU-Russia Energy Technology Centre. Expansion of technological exchanges in the framework of the activities of the Centre, carrying out joint activities on the development and use of new energy technologies may also be considered.

Further, the Road Map does not mention any S&T related activities in the Common Space of Freedom, Security and Justice (2nd space).

S&T related actions named in the Road Map for the Common Space of External Security (3rd space) are:

- Exchange of relevant experts of the EU Institute for Security Studies and the network of Russian academic bodies with a view of possible joint research projects concerning security problems.
- Strengthening the EU-Russia academic networking in the field of crisis management through exchange of research fellows between the EU Institute for Security Studies and the network of Russian academic bodies for the purpose of joint studies.

S&T related objectives in the Road Map for the Common Space of Research and Education, including Cultural Aspects (4th space), are:

- Structuring a knowledge-based society in the EU and Russia;
- Promoting a high rate of competitiveness and economic growth by modernization of the national economies and implementation of advanced scientific achievements;
- Strengthening and optimizing the links between research and innovation;
- Maintaining small and medium size entrepreneurship in the field of research and innovation;
- Adopting comparable degrees for higher education;
- Adopting as soon as possible a three-tier “bachelor-master-doctorate” education system;
- Promoting academic mobility;
- Introducing integrated curricula at higher education institutions;
- Modifying the management of the higher education institutions with a view to adapting; and
- Increasing the attractiveness of the higher education systems in Russia and in the EU.

European Community-Russia Scientific and Technological Cooperation. A Road Map for Action 2009-2011 / 2010-2012

97 However, all actions dealing with fostering scientific cooperation or research activities shall be carried out in the 4th CS, see Road Map for the Common Economic Space, p.14-18, available under: http://www.eeas.europa.eu/russia/docs/Road_Map_economic_en.pdf

98 Road Map for the Common Spaces, available under: http://www.eeas.europa.eu/russia/docs/Road_Map_economic_en.pdf
The focus of the Road Map lies within the EC Research Framework Programmes, since Russia has been the most successful, non-associated, third-country partner. Further, a substantial step toward more common research agendas and increasingly common decision-shaping processes was made with the creation of permanent joint European Commission-Russia research groups under the Science and Technology Agreement. Therefore, ‘coordinated calls’ were established by the DG RTD and the Russian Federal Agency for Science and Innovation (FASI) as co-funded activities in S&T cooperation moving toward an equal partnership based on sharing funds and responsibilities, which also shall play an important role in the recently launched EU-Russia Partnership for Modernisation.

**Partnership for Modernisation**

Under the EU-Russia Common Spaces dialogue, the new initiative called Partnership for Modernisation was launched in June 2010 at the Summit in Rostov-on-Don. The new Partnership will help the Russian Federation remodel and diversify its economy, and to give new energy to the bilateral EU-Russia relations concentrating on technical, environmental or social cooperation, which is independent from political issues. The work plan for this partnership was published in December 2010 in the form of an informal rolling working tool that will be updated regularly on the progress in implementation of the undertaken activities within the priorities. The supervision of the updates is the responsibility of the coordinators of the Progress Reports. The measures are planned for the 2010 to 2013 period.

The Partnership is supported through the Partnership for Modernisation Facility (PMF), a new instrument for enhancing joint activities between Russia and the EU with regards to the objectives of the Partnership for Modernisation and the Four Common Spaces, respectively. The PMF is a support instrument directly linked to the political guidelines originating with the EU-Russia Partnership for Modernisation. Further, it aims at pushing forward the strategic goals of the Four Common Spaces between Russia and the EU, and also, among others, to strengthen the ties between the EU and Russia in the sphere of S&T.

There are five main priorities in the Work Plan. These priorities are the first results that can be noted since the launch of the Partnership in summer 2010.

1. Creation of diversified, competitive and sustainable low-carbon economy;
2. Facilitating and liberalising trade in the global economy, enhancing and deepening bilateral trade and economic relations;
3. Enhancing cooperation in innovation and research and development (R&D), including space and nuclear research;

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101 Ibid, p. 28.

102 The former is built on the Four Common Spaces and is meant to activate the EU-Russian dialogues in all relevant spheres.

4. Ensuring rule of law, strengthening the legal environment, improving investment and the social climate; and

5. Promoting people-to-people links and enhancing dialogue with civil society.

Moreover, with respect to S&T, the Progress Report agreed by the coordinators of the EU-Russia Partnership for Modernisation summarizes the priorities. Within the area of expanding opportunities for investment in key sectors driving growth and innovation (industrial and technological sectors) both sides agreed to step up cooperation promoting SMEs. On energy-efficiency a Road Map for cooperation shall enhance the energy dialogue in a common, long-term perspective. Pilot projects in this field should be supported, in particular through cooperation with International Financial Institutions (IFIs). Education and training should also be undertaken in specific areas with increased willingness to share best practices and to improve the regulatory framework. Further, it was agreed that the active role of Russia in EU Framework Programmes and, conversely, of the EU in Russian Federal Targeted Programmes (FTPs) should be strengthen. Examples here include, in particular, space cooperation and cooperation on global navigation satellite system (Galileo & Glonass). Focusing on different innovative sectors, the EU-Russian Industrialists’ Round Table (IRT) will hold workshops focusing on themes like pharmaceuticals/ health, energy efficiency, environment and transport, inviting representatives of both business and science from both Russia and the EU. Here concrete participation in projects of the Centre of Research and Commercializing of New Technologies in Skolkovo should foster commercialization of new technologies. Promoting people-to-people contacts, the entrenched higher education cooperation and youth exchange programmes should be continued. The coordinators of the work plan also welcomed the IRT with its workshops at this point. The EU “pledged to make available € 1.5 million by the end of 2010” for the agreed projects.

Institutional Framework- key players of the European Union and the Russian Federation

The institutional framework of political dialogue between the European Union and the Russian Federation contains two approaches: top down and bottom up.

**Top down**

- Semi-annual summits at the Presidential level: President of the Russian Federation, President of the EU Council, and President of the EU Commission
- Meetings of the Russian Government and the EU Commission

Further, there are three committees ensuring the observation and implementation of the provisions:

- The Cooperation Council was replaced in 2003 with the EU-Russia Permanent Partnership Councils (PPC), designed for political dialogue with sessions at the ministerial level once a year: PPC on the level of Foreign Ministers as well as other Ministers; PPC on Research met in May 2008 in Slovenia; Cooperation Committee: senior EU and Russian civil servants meet in order to assist the PPC.

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Parliamentary Cooperation Committee: meetings of members of the EU Parliament and the Federal Assembly of the Russian Federation result in recommendations to the PPC.

There is a Joint EC-Russia S&T Cooperation Steering Committee, which consists of:

- Sectoral dialogues of the Russian Federal Ministries as well as agencies and the EC DG directorates; and
- Joint EU-Russia Thematic Working Groups in priority areas (DG directorate Level – 8 WG, e.g. EU-Russia Coordinating Committee for the Fusion Agreement, Joint Euroatom-Russia Working Group on nuclear fission energy research).

Moreover, with regard to S&T there are two major advisory bodies:

- ERAC (European Research Area Committee; formerly CREST) – advisory body assisting Commission and Council.
- SFIC (Strategic Forum for International Cooperation): consists of one representative per Member State and the Commission with the possibility to nominate alternate and be accompanied by experts where necessary.

Additionally, the EU-Russian dialogue consists of:

- Senior officials’ and expert level political dialogue within regular MFA Political Directors’ meetings.
- Monthly meetings between the Russian Permanent Representative to the EU and the leadership of the Political and Security Committee.
- Expert consultations
- EU Delegation to the Russian Federation in Moscow.
- Permanent Mission of the Russian Federation to the European Union.

**Bottom up**

- Political & scientific dialogue: scientific advisory council and committees.
- Expert advice to governments; joint evaluation committees; peer reviews; joint projects & publications; scientific conferences; research visits.

### 4.2 Relevance of S&T in Documents related to the 4CS

**Country Strategy Paper**

The Country Strategy Paper 2007-2013 for the Russian Federation is an extensive document, describing the main objectives of the EU cooperation with Russia regarding the Four Common Spaces and declaring that ENPI is the main financial instrument for achieving these objectives. As far as S&T is concerned, the Country Strategy Paper refers to the objectives in the Common Space on Research, Education and Culture, which are “…to create and

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reinforce bonds between the EU and Russian research and education communities and to build on a shared cultural and intellectual heritage\textsuperscript{109}. This major political guideline frames the scientific cooperation in diverse spheres of interaction between the EU and the Russian Federation.

Yet, S&T issues seem to play a minor role within the ENPI. Although, the Country Strategy Paper indeed states a range of policy objectives directly linked to S&T, it often points towards the FP\(\text{S}\) and better involvement of Russian scientists into European research projects, which are mostly conducted in other context than the ENPI. Further, specific programmes addressed within the ENPI, which are directly linked to the 1\textsuperscript{st} and 4\textsuperscript{th} Common Space (Cross-border cooperation, TEMPUS and Erasmus Mundus), focus on educational issues than on science and research\textsuperscript{110}.


The current NIP for the Russian Federation was developed for the 2007 to 2010 period. The legal base is the ENPI Regulation and the programming service is DG RELEX E1. The identified actions in the NIP are mainly aimed at fostering the objectives and strategies set out under the Four Common Spaces\textsuperscript{111}. Based on the Road Maps for the Common Spaces and the Country Strategy Paper, the Russian NIP focuses on two priority areas:

- Priority area I: Support for the implementation of the Common Space Road Maps
- Priority area II: Kaliningrad oblast\textsuperscript{112}

Priority area I: Support for the implementation of the Common Space Road Maps

In contrast to priority area II, the first priority area of the NIP does not resemble a classic programming document. Rather, it provides a summary of objectives of the Common Space Road Maps. Only a limited selection of the wide range of objectives associated with the Road Maps of the Four Common Spaces is tackled through financial cooperation and needs further discussion and implementation through the annual programmes. Therefore, the selection of objectives considered for financial support arises from discussions between the European Commission and the representatives of the Russian Government.

The specific objectives named in the NIP, directly related to the field of S&T, are:

1. Reinforcing links between EU and Russian research and education communities by building on Russian participation in EU R&D activities, including areas of relevance to the Common Spaces and in university exchange;
2. Reinforcing links between research and innovation; and
3. Successfully operating a jointly funded European Studies Institute (ESI)\textsuperscript{113}.

\textsuperscript{109} Ibid, p. 5.

\textsuperscript{110} Ibid, p. 17 ff.


\textsuperscript{112} The second priority area specifically focuses on the Kaliningrad Oblast due to its geographical location between EU MS. Since there is no relation to S&T at all, it will not further be mentioned here.

Expected outcomes from the cooperation under the 4th Common Space are: an increased Russian participation in the European Framework Programmes, a strengthened link between research and innovation, improved competitiveness of EU-Russian enterprises and an increase in academic and scientist exchanges. In this context the NIP named the following indicative activities to be funded under priority area I:

i) Improving cooperation between EU and Russian researchers, research institutions and industry partners;

ii) Increasing compatibility between educational institutions and systems of lifelong learning;

iii) Supporting exchange programmes with Russian civil servants, at federal, regional and/or local levels;

iv) Establishing a second phase of support for the European Studies Institute;

v) Supporting cooperation in the cultural and audiovisual fields; and

vi) Increasing Russian participation in a range of Community programmes (e.g. the Seventh Framework Programme, Erasmus Mundus, and Youth programmes)\(^\text{114}\).

The total funding for country programmes within ENPI in the period 2007-2010 is € 4.12 billion. The Russian Federation will receive € 120 million; only five other countries (Armenia, Azerbaijan, Belarus, Israel, and Libya) receive less financial support\(^\text{115}\). Therefore, Russia is allocated € 30 million p.a. over the four years\(^\text{116}\), which is less than half the average annual allocation to Russia under the TACIS Programme\(^\text{117}\). The largest part, around 85% of the allocation for Russia, will be used for priority area I, i.e. € 102 million are available for its implementation.

In contrast to typical EU programming documents, the NIP for the Russian Federation does not identify specific priorities and indicators of achievement for the programming period. This is due to the rejection by the Russian side to decide on the prioritization of objectives in advance\(^\text{118}\). Thus, the document remains very general and actual implementation limited.

### 4.2.1 Country Program

#### Annual Action Programmes 2009-2010


\(^{115}\) The Russian Federation receives 2.92% of the whole ENPI budget for country programmes 2007-2010.


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Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (Article 75)\textsuperscript{120} and the Article 90 of Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 200\textsuperscript{121} providing detailed rules for the implementation of the financial regulation applicable to the general budget of the European Communities.

### Annual Action Programme 2009\textsuperscript{122}

\textit{a) Support to the Development of the European Studies Institute (ESI)}

- **Total cost:** € 3 million EC contribution, € 3 million Russian Government
- **Duration:** September 2009 – August 2012
- **Institutions:** EC Brussels, Moscow State Institute of International Relations (University) of the Ministry for Foreign Affairs of Russia (MGIMO)

The founding of the European Studies Institute at the Moscow State Institute of International Relations in September 2006 sought to promote studies in the field of European law, European economy and European politics. The ESI offers 18-month Master’s programmes in these three areas. Moreover, the ESI offers three-week training programmes for civil servants from ministries, agencies, services and regional public administration to upgrade their knowledge in European Studies\textsuperscript{123}. The Institute was founded within the framework of the Common Space of Science and Education. While in the 2006 to 2009 period the ESI concentrated on education and training in European Studies, for the period 2009 to 2012 it plans to foster policy oriented joint research programmes\textsuperscript{124}.

\textit{b) Support to the Establishment of EU Centres in the Russian Federation}

- **Total cost:** € 1.5 million EC contribution
- **Duration:** Three-year activity period planned (2010-2012)
- **Institutions:** EC Delegation in Russia, Russian universities, Russian Ministry of Education and Science

Besides founding the ESI, it is planned to promote knowledge about the EU through establishing EU Centres at existing universities in the Russian Federation (but outside Moscow). These centres seek to develop curricula in European Studies and increase interest in policy oriented research work on EU related topics. In this context the EU centres will be built

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\textsuperscript{122} The AAP 2007 does not contain any S&T relevant issues and is therefore not considered. No AAP was available for 2008.


\textsuperscript{124} Ibid, p. 3.
on TEMPUS projects, which operated from 1994 to 2006, and on existing European Documentation Centres (EDCs). Priority regions for the EU Centres are North West Russia and the Black Sea Region (both regions of Cross-border Cooperation programmes) as well as Central Russia, the Volga region and Western Siberia\textsuperscript{125}. It is planned to develop a policy orientated PhD research programme on EU related topics at every EU Centre\textsuperscript{126}.

c) **Common Spaces Facility (CSF)**

**Total cost:** € 5 million EC contribution (no other contributions foreseen)

**Duration:** since 2006

**Institutions:**
- Programme coordinator/Contracting Authority: EC Delegation in Moscow (requests here)
- Russian partners: TACIS/ENPI National Coordinating Unit located at the Ministry of Economic Development (MED) and Russian Ministry for Foreign Affairs (MFA) (participated in project selection)
- Beneficiaries: The Directorates General of the European Commission, Russian ministries, agencies and services that are carrying out negotiations in the framework of the Common Spaces dialogues

The Common Spaces Facility\textsuperscript{127} is based on the agreement on the 4CS from the EU-Russia summit 2003, the Road Maps for the realisation of the four Common Spaces, which were adopted at the EU-Russia summit in 2005, and on the priority area I of the Russian NIP. The CSF allows, among others, for funding policy studies, research papers, and seminars/workshops, etc. The EU and Russia designed the CSF in 2005. In 2006 the CSF was activated for the first time, through the TACIS\textsuperscript{128}. Although the EC Delegation in Russia manages the CSF, all proposals need to be jointly agreed upon with the Russian side (MED and MFA)\textsuperscript{129}. In this context the Common Spaces Facility is a demand driven instrument that facilitates authorities from both the EU and Russian sides to work together with the aim of supporting the common spaces’ implementation. In 2006 (TACIS National Action Programme for Russia 2006\textsuperscript{130}) and 2007, the available budget for the CSF amounted to € 5.5 million each year. There was no agreement for the AAP 2008. Consequently the 2009 CSF budget was reduced to € 5 million and was meant to be shared between individual actions in the four Common Spaces, with the breakdown as follows\textsuperscript{131}:

\textsuperscript{125} Ibid, Annex2, p. 1 ff.

\textsuperscript{126} Ibid, Annex2, p. 3.

\textsuperscript{127} It should be mentioned that currently funding under the CSF has been halted. At the same time, a new instrument, which is very similar to the CSF, namely the Partnership for Modernization Facility, was established in October 2010.


\textsuperscript{129} Ibid, Annex 4, p. 5.


Overall, the AAP 2009 for Russia is financed from the general budget of the European Communities for 2009. The contribution of the European Commission for the country programme budget was thereby limited to € 14.5 million – with € 3 million for the European Studies Institute (ESI), € 1.5 million for EU Centres in Russia, € 5 million for the Institution Building Partnership Programme (IBPP) and € 5 million for the Common Spaces Facility (CSF).

This implies that although an EC contribution of € 30 million for the Russian Federation in 2009 was initially foreseen by the NIP, only € 14.5 million was actually allocated by the AAP. This means that only 48.3 % of the available EC budget for national programmes in Russia was allocated. The rest remained unutilised.

Annual Action Programme Russia 2010

The AAP 2010 focuses solely on the Common Space of Research, Education and Culture, and supports the EU-Russian partnership with just one single action:

Support for the establishment of EU Centres in the Russian Federation, phase II

Total cost: € 1.5 million EC contribution
Duration: Three-year activity period planned
Institutions: EC Brussels, Russian universities, Russian Ministry of Education and Science

The establishment of EU Centres should help to develop further education in EU studies at Russian universities and ensure that new activities such as research on EU matters can be carried out (see phase I, AAP 2009). Moreover, the project is complementary to the EC funded Jean Monnet Programme, which supports university-level teaching and research projects in European integration studies as well as to the Erasmus Mundus Actions 1, 2 and 3.

Even though, there were many activities in the past, the AAP 2010 mentions only one: the only objective that EU and Russian authorities could agree upon is the continuation of promoting education and training in European Studies in Russia through further support for the establishment of EU Centres in the Russian Federation. Consequently, the contribution of the European Commission to the Russian country programme was reduced to € 1.5 million for 2010. This makes up only 5 % of the planned 2010 budget of € 30 million outlined in the NIP 2007-2010.

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133 The IBPP is not separately described here, since it does not include S&T activities.
4.2.2 Multi-country programs (regional and interregional)

With regards to 4CS, the Country Strategy Paper 2007-2013 states that regional programme “and areas eligible for support 2007-2010 are of clear relevance to the realisation of at least three of the Common Spaces\(^{135}\),” in particular the 1\(^{st}\) and 2\(^{nd}\).

S&T related issues are identified principally in priority areas 1, 2 and 3, although often not explicitly named, but rather shifted to the FPs (e.g. concerning environmental problems\(^{136}\)). Fostering regional cooperation between SMEs also includes technology transfer and can, therefore, be counted as S&T relevant. This includes the so-called “people-to-people” activities aimed at enhancing networks and contacts at a transnational level, between researchers, for instance\(^ {137}\). However, it remains unclear to what extent such activities are really included in the specific projects running under EuroEast and how strongly Russia is involved in those projects. In fact, both the level of S&T relevance as well as Russian participation remains unclear.

Forest Law Enforcement and Governance (FLEG) in the ENP East Countries and Russia

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine

Timeframe: 2008-2011

Budget: € 7 million; € 6 million EC contribution and € 1 million co-finances from the World Wildlife Fund for Nature (WWF), the World Bank and the Union for the Conservation of Nature (IUCN)

As for managing and implementing FLEG, the World Bank will take the lead role, with representatives from the EC and the beneficiary states, particularly Russia, involved. The ENA-FLEG International Steering Committee is co-chaired by Russia and the World Bank.

FLEG supports governments, civil society and the private sector in the development of sound and sustainable forest management practices, including the prevention of illegal forestry activities, and the introduction of markets for alternative forest products.

Specific activities of certain S&T relevance are the conduction of analytical studies on illegal forest activities and government responses, and transfer of knowledge in the field of sustainable forest management\(^ {138}\).

ENPI Waste Governance and Management of Environmental Data\(^ {139}\)

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Participating countries: Azerbaijan, Armenia, Belarus, Georgia, Moldova, Russia, and Ukraine
Timeframe: 2009-2013
Budget: € 9 million

The programme includes activities such as feasibility studies and exchanges of know-how and experience concerning the focal points of waste governance and monitoring/assessment of environmental data. Target groups are ministries and the administration of municipalities. The implementation of the latter is supervised and managed by the European Environmental Agency (EEA).

**Air quality governance in the ENPI East countries**

Participating countries: Azerbaijan, Armenia, Belarus, Georgia, Moldova, Russia, and Ukraine
Timeframe: 2010-2014
Budget: € 7 million

The project aims at improving the beneficiary countries’ standards concerning air quality management toward EU standards and to raise awareness on this issue. The funded activities mainly cover legal and communication aspects, although it includes diverse studies and analysis (scientific support).

**Protection of freshwater and marine environments in the wider Black Sea region**

The most recent program, which is planned to start in early 2011, deals with the protection of the Black Sea region and is laid down in the Regional East AAP 2010. It is supported with an overall EC contribution of € 13 million and consists of two components:

A. Environmental protection of the Black Sea region

Participating countries: Georgia, Russia, and Ukraine
Timeframe: 2011-
Budget: € 4,5million

B. Environmental Protection of International River Basins

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, and Ukraine
Timeframe: 2011-
Budget: € 8,5million

Key objectives are a better availability of related chemical, biological and hydromorphological data as well as an enhanced and sustainable implementation and management system for the respective river basins and the Black Sea.

**Sustainable integrated land use of Eurasian steppes**

Participating countries: Moldova, Russia, Ukraine (Coordinator)

Timeframe: 2007-2009
Budget: € 2.4 million

The project aimed at promoting and facilitating the restoration, conservation and sustainable management of the Eurasian steppes ecosystem. It further encouraged trans-boundary cooperation between states in the management of steppe resources. A further aspect was on lobbying and promoting the issue of sustainable steppe land use management at legislative level. The project was awarded an honourable award in the environment category from the association 'British Expertise' (2008).

4.2.3 INOGATE Projects

Russia participates in two projects:

1. Support to Kyoto Protocol Implementation, SKPI

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine, and the CA countries Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

Team Leader: Russia
Timeframe: 2008-2011
Budget: € 5 million

The project supports the fight against climate change through the extension of the flexible mechanisms of the UNFCCC/Kyoto Protocol as well as the development of appropriate mitigation and adaptation strategies. The major objectives are:

- to reinforce awareness and institutional capacity in relation to climate change (Kyoto Protocol mechanisms)
- to strengthen the responsiveness of the economic stakeholders (particularly industry and energy utilities) to climate change related issues
- to support the use of the funding mechanisms available under the Kyoto Protocol, focusing particularly on energy efficiency
- to ensure that climate change mitigation and adaptation strategies are formulated and implemented whenever requested by the beneficiary countries.

2. Energy saving in the building sector in Eastern Europe and Central Asia

Participating countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine, and Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan,

Timeframe: 2010-2014
Budget: €5 million

The project promotes the use of renewable energies in the building sector: awareness raising of renewable energy opportunities and transfer of best practice, capacity development in building technologies and design.
4.2.4 NIF-Bilateral

No Russian participation.

NIF-Regional (Eastern neighbourhood)\(^{141}\)

Countries: Eastern Neighbourhood
Project: Eastern Partnership-SME Finance Facility (approval in 2010)
Lead: EIB, ERBD
Other: KfW
Budget: € 300 million; NIF grant: € 15 million

The SME Finance Facility is one of the flagship initiatives of the Eastern Partnership. The Facility aims at offering a wide range of financial services and products to SMEs and financial intermediaries throughout the region in the areas, increasing the availability of long-term funding to the SME sector and helping the economies to recover from the economic and financial crisis.

No details are provided for which sectoral area the financial support is provided.

Countries: Eastern Neighbourhood
Project: Energy Efficiency Program in the Corporate Sector
Lead: ERBD
Budget: € 302 million; NIF grant: € 2 million

This Technical Assistance aims at improving energy efficiency and energy savings in the corporate sector in the countries of the Eastern Neighbourhood.

4.2.5 TAIEX and Twinning

TAIEX is not relevant for S&T cooperation with Russia\(^{142}\).
Currently, contractual agreements for Twinning projects with Russia are under negotiation\(^{143}\).

4.2.6 CIUDAD

SPIN-Energy efficiency & urban development planning

Participating countries: Russia, Ukraine + Croatia, Serbia (Lead Partner), Italy, Turkey
Timeframe: 30 months

\(^{141}\) http://ec.europa.eu/europeaid/where/neighbourhood/regional-cooperation/irc/nif_regional_en.htm
\(^{142}\) See TAIEX-Website (events database), available under: http://ec.europa.eu/enlargement/taix/index_en.htm
\(^{143}\) http://www.bmwi.de/BMWi/Redaktion/PDF/E/eu-twinning-aufgaben.property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf
This project aims at facilitating the integration of renewable energy sources (RES) and energy efficient (EE) technologies and materials into the renovation of historical buildings in order to reduce both energy consumption and CO₂ emissions.

4.2.7 TEMPUS and Erasmus Mundus

The most obvious and important priority area concerning S&T cooperation is the one aimed at the exchange and mobility of academic staff. A significant impact on the Russian higher education landscape can be observed, a result of TEMPUS I-III. The participation of Russian higher education institutions in the programme visibly increased between 1999 and 2005. According to various impact assessments, this participation helped update study programmes in many science fields and has therefore contributed to the modernisation of higher education institutions in Russia.\textsuperscript{144} However, there are visible shortcomings in terms of involving students and increasing awareness among employers.\textsuperscript{145} For the past several years Russia was among the top countries concerning receiving Erasmus Mundus scholarships\textsuperscript{146}. Between 2004 and 2009 the number of Russian students and scholars participating in the programme steadily increased\textsuperscript{147}.

In the AAP 2007 of the ENPI Interregional Programme, the EC provided a contribution of €29 million for the Erasmus Mundus External Cooperation Window (ECW). €5 million of the total was to cover at least 175 mobility flows for Russia. The External Cooperation Window was again considered for funding in the AAP 2008, where €33 million was allocated by the EC, of which €20 million was allocated to the Eastern neighbourhood; in the AAP 2009 €16 million was to stimulate academic mobility in the Eastern neighbourhood (total budget was €29 million). In 2009 the ECW programme was fully included into the wider Erasmus Mundus 2009-2013 programme and the "Erasmus Mundus II - Partnerships Action 2\textsuperscript{148}\). The AAP 2011 shows a total budget of €36 million, €21 million of which is allocated toward the Eastern neighbourhood. For the first time a separate Russian contribution of €6 million is specified, so that the EC contribution for the Eastern neighbourhood is €15 million.

As mentioned above, complementary to Erasmus Mundus, the TEMPUS programme for fostering reform in the higher education sector plays an important role for Russian-EU cooperation in the field of S&T. The budget for TEMPUS IV laid down in the AAP 2007 was in €38 million, of which €28 million stems from the envelope of the ENPI Interregional Programme (€14 million for each region, South and East) and an additional amount of €10 million due to bilateral agreements with Russia (€5 million p.a. are projected along with a special transfer of another €5 million in 2007). The AAP 2009 lays down a total budget of €39.4 million, 16.7 million of which is being used for the Eastern neighbourhood including €4 million as transfer from the bilateral agreements with Russia. For 2010 (AAP 2010) the total

\textsuperscript{144} See TEMPUS-Webpage, available under: 

\textsuperscript{145} Common Spaces Progress Report 2009, available under: 

\textsuperscript{146} Ibid.

\textsuperscript{147} See EACEA-Website (statistics for Erasmus Mundus), available under: 

\textsuperscript{148} ENPI Interregional Programme, Annual Action Programme 2010: p.18, available under: 
budget of TEMPUS IV was € 30.4 million; for the Eastern neighbourhood the EC contribution was € 12.7 million plus € 5 million from Russia’s bilateral allocation.

### 4.2.8 Cross-border Cooperation (CBC)

The Russian Federation is able to participate in 5 Land-border programmes:

- The Kolarctic-Russia Programme
- The Karelia-Russia Programme
- The South-East Finland-Russia Programme
- The Estonia-Latvia-Russia Programme
- The Lithuania-Poland-Russia Programme

and 2 Sea-basin programs:

- Black Sea Programme
- The Baltic Sea Region Programme

For the seven year period between 2007 and 2013, these 7 programmes correspond to a Commission contribution of € 307.49 million\(^{149}\). In November 2007 the Russian Federation announced at the Mafra Summit a contribution of € 122 million for these 7 CBC programmes, bringing the overall amount to € 429.49 million (in addition to some further pledges made by Member States)\(^{150}\).

A first draft for the programming documents was developed at the end of 2007 and endorsed by the Commission in June 2008. In the following years, the European Commission and Russian Ministry of Regional Development negotiated the Financing Agreement. With regard to both Sea-Basin-Programmes, the Baltic Sea Region and the Black Sea Programme, no agreement was achieved by the end of 2008, i.e. Russia did not sign the Financing Agreement of the Baltic Sea Programme on time and withdrew from the Black Sea programme in the same year. At the end of 2009 the last remaining technical obstacles were cleared and agreements for the other five land-border programs with Russian participation were signed at the Stockholm summit. The Russian government confirmed a contribution of € 103.722 million beforehand\(^{151}\).

The Kolarctic-Russia Programme\(^{152}\)

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Participating countries: Finland: Lappi, adjoining area: Oulu Region; Sweden: Norrbotten; adjoining area: Västerbotten; Norway: Finnmark, Troms, Nordland; Russia: Murmansk, Archangelsk, Nenets, adjoining areas: Republic of Karelia, Leningrad Oblast

Managing Authority: Regional Council of Lapland, Finland

Timeframe: 2007-2013

Budget: € 56.36 million;
EU contribution: € 28.24 million; Norwegia: € 7.0 million, and the national co-financing from EU Member States (Sweden and Finland) is € 14.1 million.

No direct contribution from the Russian side has so far been provided: “The Russian co-financing is to be determined later”.

The project targets at (1) economic and social development, (2) common challenges, and (3) people-to-people co-operation and identity building.

S&T is mentioned under the first and third area, i.e. to foster the implementation of educational and research activities as well as to support innovation and new technologies.

The South-East Finland-Russia Programme

Participating countries: Finland (South Karelia, Kymenlaakso, South Savo; adjoining areas: Northern Savo, Päijät-Häme, Itä-Uusimaa); Russia (Leningrad Oblast with St Petersburg; adjoining areas: Republic of Karelia)

Managing Authority: Regional Council of South Karelia, Finland

Budget: € 54.28 million
EU funding is € 36.19 million; co-financing of Finland is stated at 25% and no financial contribution of the Russian Federation can be determined.

The programme deals with the transfer of competences and the flow of goods as well as the diffusion of innovation over the border. As far as S&T is concerned, the objectives are to improve the state of the environment, living standards and welfare of the citizens as well as to foster research and education.

The Estonia-Latvia-Russia Programme

153 Ibid, p.46.
155 Ibid, p. 42.
Participating countries: Latvia (Latgale, Vidzeme; adjoining areas: Riga City, Pieriga); Estonia (Kird-Eesti, Lõuna-Eesti, Kesk-Eesti; adjoining areas: Põhja-Eesti); Russia (Leningrad oblast, Pskovoblast, St.-Petersburg City)

Managing Authority: Ministry of Regional Development and Local Governments, Latvia.

Budget: € 55.88 million

EU: € 47.78 million and € 8.1 million is the national public co-financing. There is no specific Regulation for Russia.

The project targets at improving (1) socio-economic development, (2) common challenges, and promotion of People-to-People Cooperation. Within the first priority area, one subordinate objective is the “Development of know-how and promotion of innovations, research and technology”\textsuperscript{158}. In addition, research studies in the fields of environment pollution and management are named as common challenges.

Three out of five CBC programmes with Russia include S&T activities, principally as subordinate objectives. Moreover, three programmes have launched their first calls for proposals in January-February 2010 with a suspensive clause pending the ratification of the Financing Agreements by the Russian Federation.

<table>
<thead>
<tr>
<th>CBC Programme</th>
<th>EC Funding</th>
<th>Co-financing</th>
<th>Russian Co-financing</th>
<th>S&amp;T relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolarctic-Russia Programme</td>
<td>€ 28.24 million</td>
<td>€ 14.12 million</td>
<td>not determined yet</td>
<td>yes</td>
</tr>
<tr>
<td>Karelia-Russia Programme</td>
<td>€ 23.20 million</td>
<td>€ 11.60 million</td>
<td>not determined yet</td>
<td>no</td>
</tr>
<tr>
<td>South-East Finland-Russia Programme</td>
<td>€ 36.18 million</td>
<td>€ 18.09 million</td>
<td>not determined yet</td>
<td>yes</td>
</tr>
<tr>
<td>Estonia-Latvia-Russia Programme</td>
<td>€ 47.78 million</td>
<td>€ 8.1 million</td>
<td>not determined yet</td>
<td>yes</td>
</tr>
<tr>
<td>Lithuania-Poland-Russia Programme</td>
<td>€ 132.12 million</td>
<td>€ 11.89 million</td>
<td>not determined yet</td>
<td>no</td>
</tr>
</tbody>
</table>

5 IMPACT OF 4CS AND ENPI FOR THE S&T LANDSCAPE IN RUSSIA

Although Russia is not a member country of the ENP, the ENPI is, in principal, open for Russian participation, since it is one major instrument for the implementation of the Four Common Spaces. Yet Russian participation in the ENPI programmes remains at relatively low levels compared to other neighbouring countries. Between the start of the ENPI in 2007 and

\textsuperscript{157} Ibid., p.60

\textsuperscript{158} Ibid, p. 28.
2010 the financial resources allocated to Russia under its Country Programme were not effectively used. The analysis of single programmes/instruments of the ENPI even showed a decline in Russian participation. As one can see in Table 4, the ENPI country programmes in Russia are running suboptimal. In fact, only €16 million of the allocated budget for Russia (€120 million) were actually used by the Annual Action Programmes. Russia no longer is willing to be regarded as a recipient of technical support, but rather aims at being an equal and a strategic partner of the EU.

Two major reasons are the existence of abundant national sources of funding and the political decision not to engage in any technical cooperation programs. Under both TACIS and ENPI, delays in obtaining Russian signatures to the Financing Agreements have caused delays in the implementation of projects, in particular regarding CBC programmes\(^\text{159}\). This observation highlights that within the ENPI the focus on cooperation activities that are linked to science and research is rather weak. Instead, ENPI provides a wide range of cooperation programmes that aim at diverse priorities such as institution building and good governance including training for officials, harmonising standards and legislation or tackling regional/interregional issues that concern one or more ENPI region and can therefore not be properly addressed at the national level.

<table>
<thead>
<tr>
<th>Planned Budget (NIP)</th>
<th>Allocated Budget (AAP)</th>
<th>Allocated Budget 4(^\text{th}) CS (S&amp;T)</th>
<th>National main actions S&amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ 30 million</td>
<td>€ 8 million</td>
<td>€ 0 million</td>
<td>No S&amp;T</td>
</tr>
<tr>
<td>€30 million</td>
<td>€ 0 million</td>
<td>€ 0 million</td>
<td>No S&amp;T</td>
</tr>
<tr>
<td>€ 30 million</td>
<td>€ 14,5 million</td>
<td>€ 8 million</td>
<td>ESI, EU Centres, CS Facility</td>
</tr>
<tr>
<td>€ 30 million</td>
<td>€ 1,5 million</td>
<td>€ 1,5 million</td>
<td>EU Centres</td>
</tr>
<tr>
<td>€ 120 million</td>
<td>€ 24 million</td>
<td>€ 9,5 million</td>
<td></td>
</tr>
</tbody>
</table>

Nevertheless, a range of different programmes/measures exists that can be regarded relevant for S&T cooperation. This mainly applies to issues linked to tertiary education, environment and energy. In particular, the main achievements under the 4CS, specifically in the Common Space on Research, Education, and Culture, relate to Russia’s active involvement in EU’s science funding programmes, the introduction of the two-cycle system of higher and postgraduate education in line with the Bologna process in the Russian Federation as well as the agreement on new priorities for TEMPUS and Erasmus Mundus education cooperation programmes\(^\text{161}\).


\(^\text{160}\) The figures for 2007 include the Institution building partnership program (IBPP) and the Public-Private Partnership for Technical Preparation of Transport Investment Projects, which have not been particularly regarded, since they are not relevant to S&T.

\(^\text{161}\) Ibid, p.11
As for the cooperation programmes in the context of higher education running mainly under the ENPI interregional programmes as well as under the Russian Country Programme, one can observe a positive tendency concerning Russian participation. TEMPUS (university cooperation), Erasmus Mundus (academic mobility) and the European Studies Institute (promotion of multidisciplinary EU studies) reflect the three broad strategic objectives in this field. In many aspects, such as the approximation of the Russian higher education system toward the standards set by the Bologna process or the exchange of academic staff, Russia has made progress and/or is among the top participants. However, stronger involvement and participation of Russian actors is desirable.

Other instruments such as TAIEX or the NIF are currently not used for S&T cooperation between Russia and the EU. These already existing instruments could be expanded toward issues of S&T relevance if in line with the strategic objectives of the European Commission and the Russian Federation. Until now TAIEX (as for Russia) has only been used as a channel for transferring know-how and experience in different spheres of good governance, democracy and legislative to Russian decision-makers and consequently to foster the approximation of norms and standards between Russia and the EU. Concerning the NIF, which among others explicitly aims at SME development, any Russian benefit has been hardly visible. This might be a field for further enhanced S&T related activities. In this context, an engagement of the NIF in (co-)financing innovative projects might be considered.

For the Russian Federation, Cross-Border Cooperation is the main financial instrument for cooperation with the EU- Participation of the Russian Federation was found in 7 out of 15. Russia has repeatedly declared its commitment and interest to this form of cooperation. On the practical level, the Financing Agreement of the Baltic Sea Programme was not signed, Russia withdrew from the Black Sea Programme, and calls for proposals in other 3 programmes were launched with a suspensive clause pending the ratification of the Financing Agreements from the Russian side. Therefore, Russian cooperation appears to be marked by delays, and may reflect the need to review and evaluate these technical assistance programs. The implementation of S&T in CBC still remains unclear. Although, scientific and technical cooperation can be implemented in 3 out 5 programmes and due to the fact that the programmes shall be developed through the bottom-up process, i.e. by local and regional partners from the eligible areas, it is desirable to continue the political dialogue. The effective implementation can be facilitated through an optimized institutional capacity and autonomy of the local and regional administrations and their subordination to political authorities. Further, a better understanding of EU institutions and policies as well as intergovernmental relations, a sufficient dialogue and cooperation with civil society organisations in the planning of the CBC programmes can be achieved.

In conclusion, the implementation and impact of S&T cooperation within the current financial instruments made available to support the 4CS is rather limited. The situation is further aggravated by the absence of new, ambitious and instrumental PCA and S&T agreement between Russia and the EU. The budget for common activities is not used effectively. The Russian side has made it clear that mechanisms, which are currently in force, are not built on equal footing and do not satisfy the Russian interests. Therefore, the planned contribution by Russian Federation often remains unallocated. Programmes and projects planned under ENPI often remain unrealised. At the same time the European Studies Institute in Moscow can be viewed as a good practice as well as an example of a co-funded activity, which is a step to the

changing attitude toward international co-operation that is increasingly based on equal sharing of funds and responsibilities. Another example of a successfully functioning 4CS instrument is the “Industry dialogues”.

As of today, one of the main instruments of S&T cooperation between the EU and Russia is the Framework Programmes, especially since the introduction of co-ordinated calls. Nevertheless, by recognising the existing opportunities and by continuing a productive and balanced political dialogue, a more effective framework for the implementation of S&T cooperation can be facilitated. Therefore, the extension of the European Research Area by deepening the integration and strengthening the participation in available programmes under ENPI of the Russian Federation must be a goal of the European Union.
### 6 ANNEX

#### Table 5 - Participation of EaP countries in ENPI Regional Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Armenia</th>
<th>Azerbaijan</th>
<th>Belarus</th>
<th>Georgia</th>
<th>Moldova</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEG</td>
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<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Water Supply + Sanitation</td>
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<td>-</td>
<td>-</td>
<td>x</td>
<td>-</td>
<td>x</td>
</tr>
<tr>
<td>Transboundary River Mgmt</td>
<td>X</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>INOGATE</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Kyoto Protocol</td>
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<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>SEMISE</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Energy Saving</td>
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</tr>
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<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Twinning</strong></td>
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<td>TAIX</td>
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<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td><strong>E. Mundus</strong></td>
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<td>Action 1 (2009-2011)</td>
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<td>6</td>
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<td>Tempus IV</td>
<td>4</td>
<td>2</td>
<td>2</td>
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