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Networking on Science and Technology in the Black Sea Region

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Synthesis Report on Mechanisms for programme setting up and proposal evaluation procedures

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Document History

Revision	Date	Organisation	Description
Initial Draft	21/12/2009	ENEA, partners which supplied country reports	Initial draft version of D1.4 Containing the collection of completed country reports and first synthesis outcomes
First Draft	08/02/2009	ENEA	Synthesis part containing complete synthesis on programme setting-up mechanisms (part B of country reports)
Second Draft	15/02/2010	ENEA	Complete draft version of synthesis part.
Complete Draft Version	08/03/2010	ENEA	Complete version of D1.4 containing also a best practice identification section
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Final version, revised	17/05/2010	ENEA	Incorporating additional comments from CNMP and DLR.









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Executive Summary

The scope of this document is to make an inventory of funding instruments within the countries of the BS.ERA-NET project partners, which can be potentially opened within the BSRP pilot joint call or which can provide a base for sustaining the BSRP in time.

The analysis target of the present deliverable are public programme owners and programme managment agencies from BS.ERA-NET project countries which can be potential funders of the pilot BSRP call and their corresponding funding instruments.

26 programme owners and programme managment agencies (POs and PMs) and 35 funding instruments have been identified within a set of singe integrated information sources: the country reports, which can be found in the Appendix of this document, and which integrare and complete other information collected within the project. All funding instruments have been analysed for their setting-up procedures. Twenty three of them have been analysed for their proposal evaluation procedures.

The funding instruments can be classified into four main categories according to the setting-up mechanism on which they are based:

- o Bi-lateral programmes based on inter-governmental agreements.
- o Bi- programmes based on ad-hoc agreements between single funding parties.
- National programmes with mechanisms for opening in international cooperation schemes (such as ERA-NETs, Art. 169, JTI).
- Unilateral programmes of single national funding organisations, which fund internationallyoriented activities.

The identified funding instruments based on inter-governmental agreements and those for settingup of ad-hoc bilateral programmes could create the base of truly multi-lateral pilot call. Most of the intergovernmental programmes identified have been opened in other ERA-NETs schemes, while many of the programmes based on ad-hoc agreements have already best practice and precedence in S&T collaboration within and with the BS region.

The active bi-lateral programmes based on governmental agreements are insufficient in order to base a truly multi-lateral call on them. Many countries do not have stipulated such agreements with other countries, especially within the BS region. The political background seems still problematic. The stipulating and activation of such agreements require too much time and is done through diplomatic channels. Instead, bi-lateral programmes based on ad-hoc agreements between single programme owners and programme managment agenciesare more flexible and easy to establish. In many cases these programme owner and programme managment agencies are big research organisations, e.g. academy of sciences in the BS countries.

In practice all of the bi-lateral programmes analysed (both political and ad-hoc) fund mobility of researchers in the framework of research projects or scientific events. The corresponding budgets of such programmes are limited.

In addition to the bi-lateral programmes, few national programmes, which can be opened in international cooperation, have been identified as well. Such programmes are typically opened in







thematic ERA-NET projects and fund bigger research projects, contributing to the harmonisation of the national R&D practices across Europe. Within BS.ERA-NET the identified programmes of this type are still insufficient in order to apply them in the Pilot Joint Call. Moreover, many of the BS countries still do not have established such programmes on national level. Such programmes could be considered for sustaining the Black Sea Research Programme (BSRP) and for transferring R&D practices.

In the end, several unilateral programmes have been identified. These fund in particular research fellowship grants to EU- members (exception is Turkey, which has similar fellowship scheme). Such programmes could be considered in case the BSRP will include fellowship grants within its instruments.

2 Introduction

The scope of this document is to make an inventory of funding instruments within the countries of the BS.ERA-NET project partners, which can be potentially opened within the Black Sea Research Programme (BSRP) and its Pilot Joint Call (PJC). The inventory contains only funding instruments identified within the first year of the project. Such instruments include active intergovernmental agreements (mainly bi-lateral), programmes for international cooperation based on ad-hoc agreements between single programme owners and programme managment agencies, national programmes with mechanisms for opening in international schemes (such as ERA-NETs, Art. 169, JTI), mechanisms for designing of new programmes for international cooperation, unilateral programmes (of a single national funder), which fund international cooperation activities.

Note on methodology

In order to fulfil this activity, the work has been carried out in two main steps:

- 1) Information collection and integration into a single information set
- 2) Analysis of the integrated information and synthesis of main findings regarding programme setting-up and proposal evaluation procedures.

Information collection and integration into a single information set:

The inventory of funding instruments (programmes) is based on a set of Country Reports produced for each country within the BS.ERA-NET consortium. Such country reports are divided into three main parts. **Part A** specifies the general structure of the national R&D funding systems in terms of main programme owner and programme managment agencies and the relations between them. **Part B** is dedicated to the programme owner and programme managment agencies, which have funding instruments suitable for international cooperation activities or for opening in schemes such as ERA-NETs, Art.169, JTI. **Part C** contains more details on each funding instrument identified in section B.

The country reports are integrating and completing relevant information collected previously within the project. In this way all the synthesis work has been carried on the base of a single information source per country. The separate country reports are added as appendices to serve as evidence to the synthesis outcomes in this report. The information sources which were used for compiling the country reports include:

- Questionnaire regarding cooperation in science, research technological development and/or innovation addressing governmental and non-governmental programme owner and programme managment agencies (PO and PMs);
- Collection of short fact sheets about existing bi- and multi-lateral programmes with BS countries;









• Country visit reports.

Each project partner was asked to extract, integrate and complete the information already provided for the scope of other tasks within WP1, focusing on:

- National programme owner and programme managment agencies and regional programme having suitable funding instruments, which can be opened in ERA-NET-like schemes or which can fund cooperation in the region. Good-practice examples of opening in other ERA-NET-like schemes or for establishing cooperation with countries from the BS region were used as guidelines for identifying the programme owner and programme managment agencies and their funding instruments. Additional information on PO and PMs identified through the questionnaire was collected, related to their precise potential funding instruments (only PO and PMs from the countries of the BS-ERA.NET consortium were considered). Additional national PO and PMs have been identified in addition to those which filled the questionnaire.
- Funding instruments of national programme owner and programme managment agencies, which have mechanisms for funding international cooperation activities in research. It was up to project partners to determine which were the R&D national programmes which can potentially support the Pilot Joint Call and the BSRP. Some of these funding instruments were illustrated as an example of good practices applied in establishing bi-lateral cooperation. In particular this refers to PO and PMs which have dedicated budget for international cooperation, but not a general programme instead each cooperation is set-up as a new programme, but some good practice rules and procedures are followed.

The country reports were checked for integrity and quality and in were used as a single information source for the synthesis work.

Analysis of the integrated information and synthesis of main findings:

Identified instruments are analysed and synthesized on aspects related to the procedures for setting-up and on operational aspects related to proposal evaluation procedures. The setting-up procedures can differ significantly among funding instruments. For example, intergovernmental programmes for bi-lateral S&T cooperation require as a base overarching political agreements, and additional political negotiations on governmental levels in order to be activated. Many PO and PMs have established programmes for international cooperation or some budget dedicated for this purpose.

The synthesis in this report has been combined with the synthesis of Questionnaire B regarding bilateral programmes. In particular synthesis of evaluation procedures of the funding instruments identified with the country reports is based on similar synthesis of evaluation procedures made by GSRT after the analysis of the Questionnaire.

The synthesis work has been carried by first extracting information from the country reports into structured and interconnected Excel tables and by second using standard excel reporting tools and common sense in summarising the findings. The project partners were asked to check on the interpretation of the corresponding country reports and eventually to integrate them with additional or corrected information, after which the synthesis work has been redone in order to find additional errors and/or correct those identified by the project partners.

Relation of D1.4 (and T1.4) to other parts of the project

The main input documents to D1.4 are the country reports, containing integrated information, some of which were used also in other sub-tasks and deliverables within WP1. In particular,









- WP1, T1.1 Exchanging information on the existing national and regional RTDI Programme, with its main output being the Analysis of the above mentioned questionnaire. D1.4 builds on this, by focusing and enlarging the group of potential funding organisations, by identifying their concrete funding programmes (beyond programmes for bilateral cooperation as is the focus of the questionnaire) and analysing in more detail such programmes (with respect to programmes setting-up procedures and proposal evaluation procedures).
- WP1, T1.2 Analysis and interpretation of the identified RTDI national and regional Programmes
 including similar initiatives within EU and D1.2 Portfolio analysis of research initiatives targeting
 the Black Sea region. For the development of D1.2 a set of programme fact sheets on on-going
 cooperation activities with and within the BS region was collected. The scope of D1.4 is on one
 hand, narrowed, to only those cooperation activities which can be used as funding sources for
 the pilot call (or which can sustain the BSRP in the time), and is extended, on the other hand,
 to accommodate also national programmes with setting-up procedures allowing for funding a
 call under ERA-NET and similar schemes.
- WP1, T1.3 Short Term exchanges of programme managers for information and best practice identification. This task provided additional information, completing the country reports of some countries (e.g., France, Germany, Italy and Turkey) as well as identification of best practices, related to opening of national programmes in ERA-NET and similar schemes, or to the settingup of non-political bi-lateral cooperation in science and technology.



Deliverable D1.4 can be used as input for:

- WP3, T 3.5 Identifying of the financial sources at national and international level based on the identification of Starategies, objectives and instruments. D1.4 contains background information on concrete funding instruments of various programme owner and programme managment agencies/programme managers across the countries of the BS.ERA-NET consortium partners. Even if the identified funding instruments are not exclusive, such background information could be used in targeting better the PO and PMs for finding financial resources for the pilot joint call and for further sustaining the BSRP.
- WP3, T3.4 Elaboration of the rules of the call (goals, eligibility, type of projects, evaluation criteria, project implementation procedure, etc.). D1.4 contains a synthesis of the proposal evaluation procedures and the main evaluation criteria used in various funding instruments.









 WP2: mapping bottom-up (added value of the call, requirements for cooperation by research performers, research strengths and weaknesses in the BS region) and top-down information (what can be funded by regional and European programme owners, D1.4).

Organisation of the document

The document is organised in the following way: Section 3 contains description of the funding organisations identified within the Country Reports and the corresponding funding instruments (Part B of the country reports). The funding instruments are classified by the type of their setting-up procedures (i.e. the mechanisms which allow to apply such funding instruments in schemes as ERA-NET). Furthermore, the funding instruments are summaries on a country base. The last part of the section contains a synthesis on the main findings, trying to individuate a set of programmes which can form the base for funding a truly multi-lateral pilot call. Section 4 contains description of the evaluation procedures of a subset of the funding instruments identified. The funding instruments are classified according to their corresponding evaluation procedures, the kind of evaluators they employ and the evaluation criteria.

The synthesis contains indications on most commonly used evaluation criteria and target evaluation times. Section **5** contains a list of good-practice programmes, which can serve as examples of programme opening in ERA-NET schemes and establishing of cooperation with BS countries. Finally, section 6 summarises the main findings of the synthesis work.

3 Synthesis on mechanisms for programme setting-up and programme opening

The synthesis is performed on the base of the information provided in section B of the collected country reports. The scope of this synthesis work is to identify programme owner and programme managment agencies from the partner countries of the project BS.ERA-NET, which have funding instruments that can be applied in the pilot call. The idea is to create an inventory of potential funding instruments for the pilot call, covering the countries of the project partners.

The study here extends the initial analysis made within the Questionnaire B (Analysis of Quest. B, section 4) in trying to identify the also the potential funding instruments as well as identifying additional programme owner and programme managment agencies within the BS region and within the rest of the countries participating in the BS.ERA-NET consortium.







3.1 Programme Owners:

The figure below shows the numbers of potential funding programme owner and programme managment agenciesidentified from the Questionnaire B and the subsequent country reports. In total they are 30, 11 from them have filled questionnaire B and additional information is provided on their funding instruments in the corresponding country reports. Additional 15 programme owner and programme managment agencieswere considered within the country reports as having funding instruments, which can be applied in the BSRP pilot joint call. Four of the PO and PMs identified within Questionnaire B as potentially interested in funding are not appearing in the country reports with more concrete funding instruments. In the end, one of the PO and PMs interested in participation in the call is neither from the BS area or from the EU Member states participating in the BS.ERA-NET consortium and consequently has been not (yet) surveyed for concrete funding options.



Figure 1: Potential Funders from Questionnaire B and Country Reports

From the 11 PO and PMs which have expressed interest in the pilot call and have provided additional information through the country reports, 9 are partners of the project BS.ERA-NET. These are CNRS, MESR (France), GSRT (Greece), IB (Germany), MES (Bulgaria), ANCS (Romania), TUBITAK (Turkey), SCS-RA (Armenia), GNSF (Georgia). Among the newly identified PO and PMs through the country reports, there are other 2 project partners: the Academy of Science of Moldova (two of its units) and the Academy of Science of Azerbaijan.

The analysis below is on the PO and PMs described from the Country Reports only (26 in number). It should be noted that these PO and PMs have been surveyed in order to identify existing programmes with mechanisms for international cooperation, or mechanisms allowing for the setting-up of new internationally opened programmes. Figure 2 shows the different types of these programme owner and programme managment agenciess, 7 of them are ministries, 7 are governmental or ministerial agencies, 7 are research performers which have the autonomy to fund bi-lateral cooperation with specific research organisations abroad, and 5 are from other types (non-profit non governmental foundations or associations, intergovernmental organisations, etc.).











Figure 2: Types of Programme Owners

It is interesting to note that 4 of the Research Performers are among the Academy of Sciences from BS countries.



The figure below shows the distribution of these PO and PMs per country and per type.

Figure 3: Potential Funding Organisations per country

The table below shows the list of the PO and PMs individuated through the country reports. The complete list of their programmes is in Annex 2.







PO and PM	Country	Main Type	
SCA-RA	Armenia	Governmental agency	
		Research performer (Academy of	
ANAS	Azerbaijan	Science)	
MES	Bulgaria	Ministry	
CNRS	France	Research performer	
MESR	France	Ministry	
MAEE	France	Ministry	
GNSF	Georgia	Governmental agency	
GRDF	Georgia	Other	
BMBF/IB	Germany	Governmental agency	
DAAD	Germany	Governmental agency	
AvH	Germany	Other	
Thematicaly focused Project			
managment agencies	Germany	Other	
DFG	Germany	Other	
GSRT	Greece	Governmental agency	
CEI	Italy	Other	
MIUR	Italy	Ministry	
MSE	Italy	Ministry	
MAE	Italy	Ministry	
CNR	Italy	Research performer	
SCSTD	Moldova	Research performer	
		Research performer (Academy of	
CIP	Moldova	Science)	
ANCS	Romania	Governmental agency	
		Research performer (Academy of	
RAS	Romania	Science)	
TUBITAk	Turkey	Governmental agency	
MESU	Ukraine	Ministry	
		Research performer (Academy of	
NASU	Ukraine	Science)	

3.2 Funding Instruments

In section B of the country reports, identification of funding instruments for the above PO and PMs have been done according to the mechanisms that such instruments provide for funding international S&T cooperation. The funding instruments can be classified into three main classes according to the setting-up mechanism on which they are based:

- o Bi-I and multi-ateral programmes based on inter-governmental agreements.
- Bi- and multi-lateral programmes based on ad-hoc agreements between single PO and PMs
- National programmes with mechanisms for opening in international cooperation schemes (such as ERA-NETs).

The second class can be further sub-divided into bi- and multi- lateral programmes in the framework of more general programmes for international cooperation and into instruments allowing for the establishment of completely new programmes.









In addition a number of unilateral programmes of single national programme owner and programme managment agenciess, which fund internationally-oriented activities were identified within the Country Reports. These are mainly research fellowship programmes, which fund mobility of researchers to or from a certain country.

An overview of the funding instruments is given below with indication of the corresponding PO and PMs per country. Note that only funding instruments identified as potential funding sources for the PJC or for sustaining the BSRP within section B of the country reports are listed, according to the information provided by the BS.ERA-NET consortium partners.

- 1) Existing bi- and multi-lateral programmes, based on inter-governmental agreements, targeting the countries from the BS region. The corresponding programme owner and programme managment agenciesare mainly ministries or their agencies. Such instruments have been already opened in ERA-NET projects (e.g. SEE.ERA-NET), which is a source for good practices. The problem with them is that political agreements with countries from all the region do not always exist and even if they exist they are not operational (often for political reasons). The following PO and PMs have programmes of this type:
 - MES (Bulgaria), having intergovernmental S&T bi-lateral programmes with France, Germany, Greece, Romania, and Ukraine.
 - MAEE (France) having intergovernmental S&T bi-lateral programmes with Bulgaria, Greece, Romania, Turkey and Ukraine.
 - BMBF/IB (Germany), having intergovernmental S&T bi-lateral programmes with Turkey and Ukraine, and a multi-lateral programme with the countries of Central Asia, South Caucasus, Moldova and Belarus¹
 - GSRT (Greece), having intergovernmental S&T bi-lateral programmes with Bulgaria, France, Germany, Italy, Turkey and Ukraine.
 - MAE (Italy), having intergovernmental S&T bi-lateral programmes with Georgia, Germany, Greece, Romania, Turkey, Ukraine.
 - ANCS (Romania), having intergovernmental S&T bi-lateral programmes with Bulgaria, France, Germany, Greece, Italy, Turkey, Ukraine.
 - TUBITAK (Turkey), having intergovernmental S&T bi-lateral programmes with Bulgaria, France, Germany, Greece, Italy, Romania, Ukraine.
 - MESU (Ukraine), having intergovernmental S&T bi-lateral programmes with Bulgaria, France, Germany, Greece, Moldova, Romania, Turkey.
 - CEI (Inter-governmental), with its multilateral programmes on cooperation activities and S&T fellowships, which include the following countries from the BS-ERA.NET consortium: Bulgaria, Italy, Moldova, Romania and Ukraine.

All the above programmes are funded by two PO and PMs. The exception is CEI, which is a single multi-lateral PO and PM, and whose funding programmes are based on multi-lateral intergovernmental agreements².

² Since at the time of the writing of the current deliverable, CEI (Central European Inistiative) was the only non-national PO reported in the Country Reports, and since ist head-office is situated in Italy (two meetings



¹ However, these inter-governemntal programmes of BMBF/IB are reported as nont realistic for opening in the BSRP PJC, and consequently will not be considered further in the analysis/synthesis work.







- 2) Existing programmes for international cooperation, which can be activated through ad-hoc agreements between single PO and PMs. Such programmes are typical for big research organisations and do not depend on political agreements between the corresponding countries. The following PO and PMs have existing programmes of this type:
 - CNRS (France)
 - CNR (Italy)
 - DFG (Germany)
 - The academy of Science of Moldova
 - TUBITAK
- **3)** Funding instruments, which allow the creation of new programmes. In some cases the PO and PM has specific budget for international cooperation, with no concrete programme for it. The PO and PM which have funding instruments of this type are:
 - SCA-RA (Armenia)
 - ANAS-GI (Azerbaijan)
 - BMBF/IB (Germany)
 - NASU (Ukraine)

The PO and PMs from Armenia, Azerbaijan, and Ukraine have dedicated budgets for international cooperation, but no specific programmes associated with them. Both NASU and SCA-RA have already bi-lateral programmes with CNRS, which can be used as good practices for the PCJ. BMBF/IB has mechanisms for dedicating funds for international cooperation and has good-practice examples of how to do it (e.g. the programme for Intesnsified Cooperation between Germany and Turkey).

- 4) Existing national programmes with mechanisms for opening in international cooperation. Such reported programmes do not specifically target the BS region, but provide mechanisms for opening in schemes such as ERA-NET or in bi-lateral schemes.
 - ANAS (Azerbaijan)
 - Thematically oriented PO and PM agencies in Germany
 - MIUR (Italy)
 - MSE(Italy)
 - MESU(Ukraine)
- 5) Unilateral internationally-oriented programmes of single national PO and PMs: these provide mainly fellowships for researchers for training or carrier continuation is a different country. The PO and PMs with such programmes are:
 - DAAD (Germany)
 - AvH (Germany)

with CEI has taken place in 2009), ist programmes are reported "incorrectly" under the Italian funding instruments. The reason fort his ist he fact that the setting-up procedures of the programmes of CEI are based on inter-governmental agreements and negotiations









- TUBITAK (Turkey)
- MAEE (France)

The exception here is MAEE (The Ministry of European and Foreign Affairs of France) which is funding research and technological development projects and networking and coordinating research activities actions.

The different funding instruments per country are presented in the graphic below.



Figure 4: Funding instruments per country

3.3 **Programme Setting-Up Mechanisms per country:**

A synthesis on the identified funding instruments per country according to setting-up mechanisms reported in part B of the country reports is presented below.

o Armenia

Here the situation is quite simple. There is a central PO and PM SCS-RA, which has dedicated budget for international cooperation from which it can create new programmes according to flexible bi- and multi-lateral agreements.

o Azerbaijan

In Azerbaijan, there are two funding instruments identified, a three national programmes managed by the Academy of Science (ANAS) and which can be opened internationally or the creation of a new programme by ANAS. There is a limited condition, related to thematic fields all these instruments refer to the geology thematic field.

o Bulgaria

The funding instruments identified are the bi-lateral programmes on the base of inter-governmental agreements. There exist a good practice using such programmes in similar ERA-NET schemes (SEE.ERA-NET). The limiting factor relates to the fact that political agreements do not exist with all









the countries from BS.ERA-NET consortium (e.g. Azerbaijan, Georgia, Malta). In addition not all of these agreements are activated (e.g. Armenia, Moldova, Italy, Turkey). The setting-up procedures could require 6 up-to 8 months.

o France

There are three programme owner and programme managment agencies identified, CNRS, MAEE and MESR. CNRS has a general international programme according to which concrete bi-lateral programmes can be defined in a flexible way, without the need of political agreements. The settingup procedures are already experimented with research organisations from countries from the BS region and reported as best practices. MAEE funds the inter-governmental bi-lateral S&T programmes of France. In addition it also funds an international programme between organisations in France and in central, oriental and Baltic European countries. MESR has a programme supporting mobility of researchers to France.

o Georgia

The Georgia National Science Foundation (GNSF) has dedicated budget for international cooperation from which it can provide contribution to new bi- and multi-lateral programmes by concluding respective agreements.

o Germany

The country report of Germany specifies several funding instruments suitable for an ERA-NET scheme. First, the IB (DLR) has the possibility of creating a new programme in a flexible way, upon approval of the competent ministry. Second, an ad-hoc bi-lateral programme of DFG has been identified. Third, three unilateral international fellowships programmes are reported (respectively of DAAD, AvH and DGF). And third, national thematic programmes can be opened for international cooperation in accordance with the procedures of various thematically oriented PO and PMs (these programmes are not further analysed due to their numbers, and due to the fact that thematic fields are not yet defined for the BSRP).

o Italy

There are several options identified also in Italy. First, opening of national programmes in ERA-NET like schemes. National programmes managed by the Ministry of Education and Research (for basic and applied research) and by the Ministry of Economic Development (for technology transfer and industrial innovation) have been identified and have been already opened in other ERA-NET and similar initiatives. A fellowship programme (of CEI) funding organisations from Bulgaria, Moldova, Romania and Ukraine has been identified³. There are also politically-based bi- and multilateral agreements (from the Ministry of Foreign Affairs and CEI). They have limiting factor related to the fact that neither of them have been opened in ERA-NET schemes, and require negotiations on political levels. Bi-lateral political agreements exist with all BS countries, but only few are active (those are Georgia, Germany, Greece, Romania, Turkey, Ukraine). Activation of agreements involves not only additional political discussions and allocation of budget, but bottom up interest expressed by Italian research performers.

Many Italian research organisations have international programmes, which can be managed through bi- and multi-lateral agreements with research organisations in other countries in a flexible way. In particular we have identified CNR, for which has already bi-lateral agreements with







organisations in Bulgaria, France, Germany, Turkey, and for which similar agreements are under preparation with Armenia, Georgia and Moldova⁴.

The limiting factor, which regards all Italian PO and PMs identified so far, is that all of them are external to the project consortium. This would mean that if a PO and PM from Italy is to be involved, the rules of the call and the BSRP programme should be communicated at least six months in advance, in order to be able to take a decision.

o Moldova

Two programmes of the Academy of Science of Moldova have been identified as suitable for opening in the BSRP Pilot call. Both of them are based on flexible bi-lateral agreements with single organisations. One of the programme targets the Academy of Sciences of third countries, the other is targeting single organisations (PO and PMs both on governmental level and research performers). Currently, the Academy of Science of Moldova has bi-lateral agreements with the Academy of Science in Azerbaijan, Bulgaria, Romania, Turkey and Ukraine, and with single organisations in Germany, Ukraine and Italy (the last one is under preparation).

o Romania

In Romania two types of funding instruments have been identified. The major instrument is the "2nd National Plan for Research, Development & Innovation (2007-2013)" R&D Programme structured into six sub-programmes: "Human Recources", "Capacities", "Ideas", "Partnerships in Priority S&T Areas", "Innovation" and "Sustaining institutional performance". The "Partnerships in Priority S&T Areas" is managed by the National Centre for Programmes Management.

Under the "Capacities" sub-programme, bi-lateral agreements between ANCS and several countries have been developed. The second instrument is a research fellowship programme from the Romanaian Academy of Science. Within the PNII programme, several ERA-NETs Joint calls were financed especially within the "Partnerships in Priority S&T Area"(ERA.-IB, NEURON, EURONANOMED, MNT, MANUNET, etc). The active bilateral agreements are with Bulgaria, Greece, Turkey, Ukraine, France, Germany and Italy, while there are no political agreements with Georgia and Malta. The agreements with Armenia and Azerbaijan have not been activated.

The fellowship programme of the Academy of Science seems to have a more flexible setting-up procedure, but it is limited by the lack of budget for the current period.

o Turkey

There are three programmes identified in Turkey, all of them are from TUBITAK. One programme is based on political and non-political bi-lateral agreements, one is an international fellowship programme and the third is providing support to Turkish industry to participate in international R&D projects. At present agreements exist with Bulgaria, Greece, Romania, Ukraine, France, Germany and Italy. New agreements can be defined in a flexible way.

o Ukraine

In Ukraine two programme owner and programme managment agencies have been identified. The Ministry of Education and Research which is managing national R&D programmes as well as politically-based bi-lateral agreements, and the Academy of Science which has dedicated budget for international cooperation.

The Academy of Science has flexible ways of establishing bi- and multi-lateral programmes. Bilateral programmes have been established already with several research organisations, and can

⁴ These agreements has been as a result of the BS.ERA-NET project activities









serve as good practices examples for setting-up new bi-and multi-lateral programmes by the Academy.

The other two funding instruments of the Ministry of Science have as restrictive factor their political base as well as the fact that they have never been opened in schemes as ERA-NET. At present Ukraine has an active bi-lateral programme with Bulgaria, Greece, Romania, Moldova, Turkey, France, Germany and Italy. Agreements with Armenia, Azerbaijan, Georgia and Malta are not established or are not active.

3.4 Synthesis of Programme Setting-Up Mechanisms:

The analysis of the country reports shows that there are three main types of mechanisms, which can be applied in funding the pilot joint call.

- 1) Funding of a multi-lateral call through bi- lateral intergovernmental agreements
- 2) Ad-hoc bi- and multi-lateral agreements between single PO and PMs (including the creation of new programmes).
- 3) Opening of existing national programmes.

Bi- and Multi-lateral intergovernmental agreements:

Such agreements are concluded on inter-governmental level, and then additional negotiations are needed in order to activate them and fund mutually agreed activities. The political negotiations are not always easy and could take time.

There are organisations from 13 states participating in the BS.ERA-NET consortium. Three of them, Bulgaria, Greece and Romania have indicated as primary means for funding the joint call through bi-lateral programmes based on inter-governmental agreements.

The figure below presents the actual state of the intergovernmental agreements among the countries participating in the BS.ERA-NET consortium⁵.

⁵ The data are based on the integrated information provided by Questionnaire B and the country reports.













The figure shows that neither of the countries participating in the BS.ERA-NET consortium has operational programmes with all the rest under such bi-lateral intergovernmental agreements. As already noticed in the analysis of Questionnaire B, political reasons could become an impeding factor for the creation of a truly multilateral programme in this sense. The figure shows also that there are countries, which have not activated existing governmental agreements (and some did not even stipulate them) with neither of the countries participating in the consortium (e.g., Armenia, Azerbaijan, Malta). Romania, Turkey and Ukraine have the biggest number of active agreements with the rest of the countries in the consortium.

Figure 6 gives a closer look on the operational inter-governmental S&T agreements between countries within the BS region.



Figure 6: Active intergovernmental agreements within BS region

Also in this case, neither of the countries, which have established operational agreements, cooperates with all the rest. Ukraine, Romania and Turkey are most active in establishing political







relations in the region, followed by Bulgaria and Greece. From 8 possible agreements, the most active country Ukraine has established 5.

Figure 7 shows the bi-lateral cooperations between BS countries and rest of the countries in the BS.ERA-NET consortium. While no BS country is cooperating with Malta, four countries cooperate fully with France, Germany and Italy. Moldova, Armenia and Azerbaijan do not have active cooperations on governmental level, but there is attempts to establish them (for example signed agreements exists between Armenia and Italy and France, while Moldova has a bi-lateral agreement with EU). Even if there is no enough data on bi-lateral agreements with all EU countries, this figure shows that there is more interest from BS countries to cooperate in S&T with EU, than between themselves.



Figure 7: Intergovernmental agreements between BS countries and other EU countries in the consortium

What is the political interest of the rest of the EU countries participating in BS.ERA-NET project toward the BS countries? In this case, Malta has no established cooperation with neither of the BS countries, while for France, Germany and Italy, each one has 5 active inter-governmental agreements.

In conclusion, we can say that establishing a multi-lateral call based solely on inter-governmental agreements is not feasible within the project, but the BSRP can contribute to strengthen the political dialogue on S&T cooperation, especially within the countries of the BS region.

Ad-hoc bi- and multi-lateral agreements between single POs and PMs

Even if the political cooperation among BS countries are somehow behind, many of the PO and PMs have mechanisms which allow them to establish ad-hoc S&T programmes with single organisations, avoiding in such way political problems and negotiations. Here, in particular is to note the role of the National Academies of Sciences in the BS countries. As also stated in the BS-Res PO and PMT project (Deliverable 3.1: "Recommendations to Enhance the Cooperation of the National Academies of Sciences of the BSEC Countries"):

"The National Academies of Sciences in most of the Former Eastern block countries have been founded in order to consolidate and stimulate the efforts of scientists under the single supranational structure of that time. The purpose was to address specific needs not necessarily of every









country, but of the block as a whole, in all scientific fields. Due to their common past the NAS developed many links among themselves, a fact that is reflected in the collaboration activities they exhibit today."

In many of the BS countries, the academies of sciences or other single PO and PMs have more flexible means in establishing ad-hoc bi- and multi-lateral programmes with single PO and PMs from other countries. Such cooperation, apart existing cooperation between National Academies of Science, already exist with various research organisations also in EU countries and internationally (see D1.2 and D1.3 for analysis of existing cooperation within the BS region and with the BS region).

The table below summarises the PO and PMs, which have flexible means of establishing ad-hoc bi- and multi-lateral cooperation with other organisations (PO and PMs) and which have been identified as potential funding organisations for the BSRP pilot call.

Country	PO and PM	Programme	
Armenia	SCS	new programme	
Azerbaijan	ANAS	new programme	
France	CNRS	programme for int. cooperation	
Georgia	GNSF	new programme	
Germany	BMBF/IB	new programme	
Italy	CNR	programme for int. Cooperation	
Moldova	ASM	programme for int. Cooperation	
Romania	Academy of Science	programme for int. Cooperation	
Turkey	TUBITAC	programme for int. Cooperation	
Ukraine	Academy of Science	new programme	

Many of these PO and PMs have already established programmes for international cooperation, with specific rules and activities to be funded, while other can dedicate budget for the setting-up of new bi- and multi-lateral programmes.

Figure 8 shows how many bi-lateral S&T programmes can be funded per each country in the BS.ERA-NET consortium either through active inter-governmental agreements or through ad-hoc bi-lateral agreements which can be established in the framework of the project.











Figure 8: Potential bi-lateral cooperation

Note that most of the countries can cooperate with the rest, avoiding the inter-governmental agreements, through the funding provided by single PO and PMs (not necessarily those managing bi-lateral intergovernmental programmes). The only countries, which have identified so far only interg-governmental bi-lateral S&T programmes as potential funding sources for the pilot call, are Bulgaria, Greece and Romania. Note also that the corresponding PO and PMs from Bulgaria, Greece and Romania have already participated in an ERA-NET call (SEE.ERA-NET project), while all the rest of the PO and PMs with ad-hoc mechanisms for funding bi-lateral cooperation have previous experience and best practices in establishing such cooperation in flexible way.

The programmes based on agreements (both at state and organisational level) are in general based on limited funding and can fund relatively small projects⁶. Bigger initiatives could be funded by opening existing national programmes, which have bigger budgets, than those specifically dedicated to international cooperation.

Opening of existing national programmes:

Through the country reports some national programmes, which can be opened for international cooperation have been identified as well. Such programmes are typically opened in thematic ERA-NET projects and fund bigger research projects contributing to the harmonisation of national R&D practices across Europe. Within the BS.ERA-NET project only few programme owners and programme managment agencies with such funding instruments have been identified. They are:

- The Academy of Science in Azerbaijan which is managing three national programmes in geology;
- The thematically oriented network of programme owner and programme managment agencies in Germany;
- The Ministries in charge of Science and in charge of Education and of Economic development in Italy;
- The Ministry in charge of Science and Education in Ukraine.

⁶ Information on the budgets for bi-lateral cooperation, both inter-governmental and ad-hoc is too limited within the country reports, also indication of the funding of single projects is not available.









The PO and PMs from EU (Germany and Italy), have precise mechanisms for opening of national programmes for international cooperation (such were reported for the Italian PO and PMs in framework of ERA-NET and similar schemes). These mechanisms are less clear in the rest of the countries, which identified national programmes as potential funding for the BSRP call. Some of the BS countries do not have yet programmes, which fund national research on competitive basis.

3.5 Conclusions:

The analysis carried out on funding instruments according to their setting-up mechanisms shows that the most feasible way to implement a true multi-lateral call is through a combination between governmental bi-lateral agreements and ad-hoc agreements between single PO and PMs. The activities, which can be funded in this way, are of relatively small size. It could worth analysing the integration of such funding with additional funding from PO and PMs providing international fellowship grants (several such PO and PMs have been reported in the country reports).

The carried analysis also shows that most of the countries does not see yet opening of national programmes for international cooperation (in the sense of thematic ERA-NETs), which could provide for bigger funding resulting in more substantial R&D cooperation. One possible cause for this could be the political base, which shows to be slow.

4 **Proposal Evaluation Procedures**

4.1 Analysed programmes / funding instruments:

The table below contains the programmes, which were analysed with respect to their proposal evaluation procedures. These programmes represent a subset of the programmes identified as potential funding sources above. This subset does not contain the funding instruments for which such information was not provided, as well as those, which do not include pre-established evaluation procedures (e.g. evaluation procedures are defined ad hoc with each agreement or single call). The programmes are sorted in the following way: first bi-lateral S&T programmes based on inter-governmental agreements are listed; the second group of programmes comprises those based on ad-hoc bi- and multi-lateral agreements; they are followed by funding instruments allowing the establishment of new programmes; the next group of programmes comprises identified national programmes with specific opening mechanisms for international cooperation; then the identified unilateral programmes follow; in the are the multi-lateral programmes. The funding instruments, based on different types of bi-lateral agreements are marked in colour.

The information is based on Questionnaire B and part C of the Country Reports. This is indicated in the last column of the table.

PO and PM	Country	Funding instrument/programme	Programme type	Source
MES	Bulgaria	National Science Fund	inter-governmental agreement	Q,CR
GSRT	Greece	Bi-lateral governmental cooperation agreements	inter-governmental agreement	
MAE	Italy	Bi-lateral governmental cooperation agreements	inter-governmental agreement	CR







		Bi-lateral governmental	inter-governmental	
ANCS	Romania	cooperation agreements	agreement	Q, CR
		Implementation of commitments of Ukraine in sphere of the	inter-governmental	
MESU	Ukraine	international S&T cooperation	agreement	CR
			ad-hoc agreement	
			and inter-	
		Bi-lateral governmental	governmental	
TUBITAK	Turkey	cooperation agreements	agreement	CR, Q
		International Programme for		
CNRS	France	Scientific Cooperation	ad-hoc agreement	Q,CR
GNSF	Georgia	Not identified	ad-hoc agreement	Q
GRDF	Georgia	Not identified	ad-hoc agreement	Q
		Initiation and Enhancement of Bilateral and Multilateral		
DFG	Germany	Programmes	ad-hoc agreement	CR, Q
CND	Italy	Programme for International	ad bac agreement	0
CINK				
		Bi-lateral grant programmes between ASM and with third		
ASM	Moldova	countries	ad-hoc agreement	Q
		Dedicated budget for		
BWBF/IB	Germany	International cooperation	new programme	Q
		Dedicated budget for		
NASU	Ukraine	International cooperation	new programme	CR
MIUR	Italy	FAR (Applied Research Fund)	national	Q,CR
MIUR	Italy	FIRB (Basic Research Fund)	national	Q
Аун	Germany	International exchange of scientists and scholars	unilateral	0
		International Research Training		
DFG	Germany	Groups	unilateral	CR
		International Industry R&D		
TUBITAK	Turkey	projects support programme	unilateral	CR
TUBITAK	Turkey	TUBITAL Fellowship Programme	unilateral	CR
CEI	Italy	CEI Cooperation Fund	multi-lateral	Q,CR
		Research Fellowship Programme		
CEI	Italy	(CERES)	multi-lateral	Q,CR
MESR	France	Mobility of researchers to France	N/A	CR

There are in total 23 funding instruments of 19 PO and PMs, which have been analysed for their evaluation procedures. 14 of them are based on bi-lateral agreements: 5 are based on inter-governmental agreements, 1 – allows for both inter-governmental and ad-hoc agreements, 7 are existing programmes for international cooperation based on ad-hoc agreements, and 2 allow for the setting-up of new programmes.

There are two additional funding instruments reported, from Armenia (SCS) and from Azerbaijan (ANAS), based on ad-hoc agreements between single PO and PMs, which are not included in the









current analysis. They are not programmes, in a sense that they do not have pre-defined rules (in particular evaluation procedures). Other two funding instruments of BMBF/IB and NASU, which are not programmes in the same sense, are listed in the table, since the corresponding PO and PMs have used them in establishing ad-hoc bi-lateral cooperation and have indicated corresponding evaluation procedures.

4.2 Evaluation procedures:

There are three types of evaluation procedures applied within the above funding instruments:

- Two stage procedures, consisting of a national-level evaluation of proposals followed by a joint evaluation. This type of procedures is applied mainly within programmes based on bilateral agreements
- Joint evaluation only: this is the case within the multi-lateral programmes of CEI
- National evaluation only: this type of procedure is used within national programmes and also in some instruments based on bi-lateral agreements.

Figure 9 and Figure 10 show which type of evaluation procedures are used in all analysed programmes and in particular, in programmes based on bi-lateral agreements.



Figure 9: Distribution of different types of procedures (all analysed programmes)

Note that, in most of the cases two stage procedures are applied, in particular in bi-lateral agreements, where a single joint evaluation is not considered at all. The PO and PMs which apply only national evaluation within their bi-lateral programmes, are ASM and TUBITAK.











Figure 10: Procedures in bi-lateral programmes

4.3 Evaluators

In most of the cases the evaluation procedures are based on peer-review by independent researchers. The number of evaluators varies, from 1 up to 11. The duration of the procedure is from one month up to one year (Figure 13).

The evaluators are independent experts (in most of the cases they are independent researchers) or internal experts (in some cases they are internal researchers). Only one of the programme owners and programme managment agencies (MES- Bulgaria) has mentioned that also foreign experts take part in the evaluation.

The table below gives an overview about the evaluators within 22 of the analysed funding instruments (this information is not available for MAE-Italy).

Independent Researchers	Internal Researchers	Internal Experts	External Experts			
Inter-governmental	Inter-governmental					
MES			BMBF/IB			
GSRT						
ANCS						
MESU						
TUBITAK - Bi-lat. programmes						
Ad-hoc Bi-lateral						
TUBITAK - Bi-lat. programmes	CNRS	GNSF	BMBF/IB			
GNSF	CNR					
GRDF	NASU					
DFG						
ASM						
Unilateral						









A∨H	DFG	TUBITAK-Industry
DFG	TUBITAK- Industry	BMBF/IB
	TUBITAK -	
	Fellowship	
National		
	MIUR-FAR	MIUR-FAR
	MIUR-FIRB	
Multi-lateral		
CEI- CERES	CER-CERES	CEI- Cooperation
	CEI-Cooperation	
Other	·	·
MESR	MESR	

Figure 11 shows that independent researchers and internal experts are used in most of the cases (sometime in combination). External experts are usually experts from an external PO and PM, mainly thematically-oriented ministry or experts on financial matters within a proposal.



Figure 11: Types of evaluators

Figure 12 represents the types of evaluators participating in bi-lateral programmes (both intergovernmental and ad-hoc). Here the prevailing type is independent researchers. In three of the four cases in which internal experts are used, they are internal researchers (the PO and PMs in this case are research performers, i.e., CNRS, CNR and NASU). GNSF uses internal experts as well, while BMBF/IB relays on external experts from the PO and PM Network in Germany.





The bi-lateral programmes in most of the cases use one type of evaluators, i.e. internal or external researchers. Only GNSF relays on two types of evaluators. GNSF uses independent researchers and internal experts, while IB - independent researchers and external experts. The ministries and governmental agency relay mostly on independent researchers, while the research performers make use of internal employees as evaluators.

4.4 **Duration of Evaluation Procedures:**

The figure below shows the duration of the evaluation procedures for 15 of the analysed programmes (this data is missing for 8 of them).



Figure 13: Duration of evaluation procedures

For most of the programmes the evaluation procedures take from 1 till 3 months. For significant part they can take also up to 6 months. Very few programmes have evaluation procedures which









take less than a month (ASM) or more than six months (Training programme of DFG and TUBITAK fellowship programme).

Similar trend can be seen also in the case of the bi-lateral programmes only (see Figure 14).



Figure 14: Duration of evaluation procedures (bi-lateral programmes)

The evaluation procedures of the bi-lateral programmes of MES, ANCS, CNRS, GRDF, DFG and BMBF/IB take between 1 and 3 months, while those of GSRT, TUBITAK and GNSF take up –to 6 months.

4.5 Evaluation criteria:

During the analysis of Questionnaire B and the Country reports, the following evaluation criteria have been identified as used within the 23 programmes under analysis.

Quality of the research, of the proponents and of the proposal

- 1. Scientific and technical merits of the proposals
- 2. Novelty/ Expected advancement of knowledge /Innovation
- 3. Significance of the research with respect to int. Cooperation
- 4. Suitability of applicants / Scientific excellence of applicants
- 5. Adequacy of research infrastructures
- 6. Correspondence between proposed work and budget
- 7. Quality of documentation /project plan

Objectives and Impact

- 8. Impact (with respect to objectives)
- 9. Correspondence to thematic and/or horizontal priorities of the PO and PM
- 10. Correspondence to national priorities
- 11. Dissemination and exploitation of research results /industrial impact
- Bi- (and multi-) lateral cooperation
- 12. Added Value/Need of the bi-lateral/international cooperation
- 13. Sustainability in establishing long cooperation









The criteria most applied are:

- Scientific and technical merits of the proposals (21 programmes; all 14 bilateral programmes)
- Suitability of applicants / Scientific excellence of applicants (16 programmes in total; 9 bilateral)
- Added Value/Need of the bi-lateral/international cooperation. This criteria is particularly important for bilateral programmes (10 of them adopt it).
- Correspondence to national priorities (half of the bi-lateral programmes adopt it).

Figure 15 shows how the different criteria are applied in all 23 programmes under analysis and in particular in the 14 programmes based on bi-lateral cooperation.



Figure 15: Application of evaluation criteria

Note that criteria such as correspondence to the thematic priorities of the PO and PM, impact with respect to objectives, quality of documentation (project plan, adequacy of research infrastructures, novelty/ innovation, correspondence between work plan and budget, and sustainability in establishing long term cooperation are not considered very important both in bi-lateral cooperation as well as looking at all analysed programmes. Instead, when only inter-governmental cooperation is considered, many of the above aspects take significant relevance.

4.6 Optional evaluation criteria:

Thirteen of the analysed 23 financial instruments apply also optional evaluation criteria, which can influence the final decision on funding when two or more proposals have been evaluated in a similar way. Eleven of these 13 instruments are for bi-lateral cooperation (that is almost 80% of all bi-lateral instruments analysed).

The list of identified optional criteria is presented below.

- 1. Participation of young researchers
- 2. Participation of women
- 3. Participation of more than 2 organisations









- 4. Industrial participation (and in particular SMEs) / Links to industry and industrial impact
- 5. Impact with respect to significant regional problems
- 6. Involvement in international and EC programmes
- 7. Additional financial resources / Co-funding.

Figure 16 shows that the most important optional criteria is "participation of young researchers". Second optional criteria is "industrial impact and participation of industrial organisations", emerging mainly in funding instruments from ministries (but also research-oriented organisations such as ASM and GRDF, where the criteria is weakened to "links to industry and industrial impact"). Significant optional criteria are also links of the project to international projects (and the involvement of the participants in these) as well as the availability of additional funding to sustain the research. These two last criteria have relevance in particular in bi-lateral cooperation projects, where there are limited amount of resources for significant research effort.

Optional criteria, such as gender issues, and impact on regional level are not considered important. For example, the regional impact is considered only by MES-Bulgaria.



Figure 16: Programmes which apply optional evaluation criteria

5 Good Practices Identification

This document is an inventory of potential funding instruments for the BSRP pilot call, identified through the collection of Country Reports. Some of the national funding instruments have been discussed in more detail during the Short Terms Visits (planned in T1.3) and provided for the identification of additional good-practice programmes, which can serve as an example for the future call. In addition a detailed survey was carried out on existing bi- and multi-lateral programmes within the BS region within T1.6.

Here we can mention the following programmes which can serve as good-practice examples:

- Bi-lateral inter-governmental cooperation programmes of Bulgaria, Greece and Romania. These programmes have been already successfully opened within SEE.ERA-NET and SEE.ERA-NET+ projects.
- Programme for International Scientific Cooperation of CNRS. This programme allows for the creation of flexible bi-lateral agreements with single PO and PMs (or research organisations). There are already a number of existing cooperation established within the









BS.ERA-NET consortium (e.g. with SCA-RA/Armenia, Academy of Science of Ukraine, GNSF/Georgia) and they can be used as good-practice examples for the future joint call. Joint calls under these bi-lateral agreements have been already launched in 2009.

Similar programme exist also at CNR (Italy), which was used as a base for establishing of bi-lateral agreements with Armenia, Georgia and Moldova as a result of the short-term visit of delegations of those countries to Italy. Existing bi-lateral agreements of CNR include those with the Bulgarian Academy of Science, and with TUBITAK (Turkey).

- 3) The programme of BMBF/IB Intensified Cooperation (IntenC): Promotion of German-Turkish Higher Education Research is designed as a flexible bi-lateral agreement between to PO and PM/PM for the development of innovation cooperation scemes between Universities and initiation of joint research projects. The projects are evaluated separately in each country, followed by a joint agreement on projects to be funded.
- 4) Two programmes of DFG, Initiation and Enchancement of Bilateral and Multilateral Programmes and International Research Training Groups. The first one is interesting for its flexible mechanisms in establishing initial bi-lateral cooperations, while the second one is interesting from the point of view of providing access to research know-how and equipment in German universities.
- 5) The programme CERES of the Central European Initiative and FP7, showing how to exploit synergies between multi-lateral programmes (CEI S&T programme and FP7) in order to reduce fragmentation and increase funding.
- 6) National programmes of Italian PO and PMs, which were opened in thematic Era-Net schemes and the corresponding ERA-NET projects (e.g. EUROTRANS-BIO and CORNET).

Additional good-practices examples within the BS region have been identified within T1.6, in particular the bi-lateral cooperation between Georgia and Ukraine, as well as the bi-lateral cooperation between Bulgaria and Turkey, both of which are happening in regular basis and with certain intensity.

6 Conclusions

This document is an inventory of potential funding instruments for the BSRP pilot call, identified through the collection of Country Reports and Short Term Visits of Programme owners. Below the main outcomes of the analysis of those instruments are synthesized.

Setting-up procedures

The funding instruments are classified into four main classes according to the setting-up mechanism on which they are based:

- o Bi-lateral programmes based on inter-governmental agreements.
- Bi- and multi-lateral programmes based on ad-hoc agreements between single PO and PMs.
- National programmes with mechanisms for opening in international cooperation schemes (such as ERA-NETs).
- o Unilateral programmes, which fund mobility of researchers to or from a certain country









The second class can be further sub-divided into bi- and multi- lateral programmes in the framework of more general programmes for international cooperation and into instruments allowing for the establishment of completely new programmes.

Bi-lateral programmes

The active bi-lateral programmes based on governmental agreements are insufficient in order to base a truly multi-lateral call on them. Many countries do not have stipulated such agreements with other countries, especially within the BS region. The political background seems still problematic. The stipulating and activation of such agreements require too much time and is done through diplomatic channels. Instead, bi-lateral programmes based on ad-hoc agreements between single programme owner and programme managment agencies are more flexible and easy to establish. In many cases this PO and PMs are big research organisations, e.g. academy of sciences in the BS countries.

In practice all of the bi-lateral programmes analysed (both political and ad-hoc) fund mobility of researchers in the framework of research projects or scientific events. The corresponding budgets of such programmes are limited. The identified funding instruments based on inter-governmental agreements and those for setting-up of ad-hoc bilateral programmes could create the base for funding of the Pilot Joint Call. Most of the intergovernmental programmes identified have been opened in other ERA-NETs schemes, while many of the programmes based on ad-hoc agreements have already best practice and precedence in S&T collaboration within and with the BS region.

National and Unilateral programmes

Several national programmes have been identified, which allow for opening for international cooperation. Some of them are also within BS countries (e.g. Ukraine, Azerbaijan). Some of them have been already opened in ERA-NET schemes (Italy). Such programmes have more substantial budgets, and could be used within the BSRP as additional funding to those provided by bi-lateral programmes. Precedence exists in Italy, where inter-governmental agreements are strengthen through opening of national programmes of a different programme owner and programme managment agencies in order to fund strategically important projects within bi-lateral inter-governmental agreements. Considering also such programmes within BSRP could provide means to the solution of one of the problems reported by SEE.ERA-NET project, namely the low participation rate of EU researchers.

Identified unilateral programmes fund mainly mobility of researchers with longer duration. They can be also a means for increasing the budget base of the future BSRP call, stimulating in this way the participation of both EU and BS researchers.

Evaluation procedures:

Most of the identified funding instruments apply some kind of evaluation procedure. Such procedures are more flexible in ad-hoc bilateral agreements, where their definition is based on previous experience and best-practices. In most of the cases the evaluation procedure a peer-review carried by independent researchers. There are pre-defined evaluation criteria, most used of which are:

- Scientific and technical merits of the proposals;
- Quality and scientific excellence of the proponents;

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Comment [a1]: Could you explain why? : Because not each two countries have a political agreement. Look at the next sentence.

Comment [a2]: Please rephrase this sentence inter-governmental agreements and ad-hoc bilateral programmes have substantial difference, (involvement of Foreign ministries, type of contracts) therefore they should be separated. :







• Added-value of bi-lateral cooperation.







ANNEX 1 Collection of Country Reports

COUNTRY: Armenia

Part A: Main players in the R&D system: list of PO and PM and policy makers

In Armenia R&D was one of core sectors of economy in the past. The independent Armenia inherited quite ramified and developed network of research and education institutions distributed among Academic, university and branch/enterprise sectors.

The present R&D infrastructure in Armenia can be characterized as combination of features of centrally organized administrative system and new elements that have appeared on the way of transition to a market economy.

The main policy document regulating S&T and innovation activities in Armenia is **The Law on Scientific and Technological Activity (2000)** aiming at regulating interrelations between R&D organizations, state bodies, and R&D outcome consumers, as well as outlining general principles of formation and implementation of state policy in the field of S&T.

This Law prescribes the **Ministry of Education and Science (MES)** to act as state authorized body to develop and coordinate S&T policy-making. In spite of the fact that the MES is empowered to coordinate integrated S&T policy-making in Armenia, in practice it concentrates more on education policy.

The **Ministry of Economics** is actually carrying the responsibility for development and implementation of innovation policy, in co-operation and coordination with other concerned ministries and organizations.

To improve the policy-making and better coordination in the field of S&T, in October 2007 the government made a decision on creation of the **State Committee of Science (SCS)** empowered to carry out integrated S&T policy in the country. This structure is subordinated to the MES, but with wider power of independent activity. Actually, SCS is in charge with implementation of science policy and is the only Programme Owner in Armenia.

The National Academy of Sciences (NAS RA) with its around 35 subordinated research institutes, is still the main R&D performer in the country.

Armenian Academy of Sciences (since 1993 - the National Academy of Sciences of the Republic of Armenia) was founded on 25 November 1943 on the basis of the USSR Academy of Sciences Armenian Branch, organized in 1935.

In November 2006 the Armenian government adopted resolution on optimization of the Academy infrastructure and restructuring of some of its institutes through amalgamation and creation of scientific and technological centers. This decision was aimed at improving coordination of research activity in the institutes involved in overlapping or close research disciplines, more efficient use of scarce financial resources and promoting commercialization of research outcomes. For example, Scientific&Technological Center of Organic and Pharmaceutical Chemistry was created through amalgamation of the Institute of Fine Organic Chemistry, Institute of Organic Chemistry and Molecule Structure Research Center.









Table 1: Number of Research InstitutesDistributed by Institutional Subordination

Nº	Institutions	Number of organizations	Doctors	PhDs
1	National Academy of Sciences	35	265	1001
2	Ministry of Education & Science	18	298	853
3	Ministry of Agriculture	9	24	127
4	Ministry of Economics	9	42	158
5	Ministry of Health	13	35	84
6	Ministry of Nature Protection	2	2	3
7	Ministry of Urban Development	1	1	4
8	Ministry of Energy and Natural Resources	1	1	2
9	Ministry of Culture	6	5	20
10	Ministry of Territorial Administration	1	1	9
11	Ministry of Defense	2	2	2
12	Ministry of Emergency Situations	1	3	5
13	Yerevan Municipality	2	7	24
14	Other	17	28	69
15	Total	117	714	2361

Part B: Overview of most important PO and PMs

State Committee of Science

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The State Committee of Science of the Republic of Armenia (SCS RA) (<u>http://www.scs.am</u>) was established in 2007 under the Ministry of Education and Science, and according to its statute, is the main governmental body responsible for development and implementation of state scientific and technological policy in the country and ensuring the future process of scientific reforms. Actually, SCS is the only national PO and PM in Armenia (program owner and program manager) and acts to attain the following objectives:

- To implement the state scientific and technological policy
- To develop and implement long-term and tailor-made S&T programmes, as well as programmes in the framework of international cooperation for science development.









- To promote international cooperation and to participate in discussions and development of international agreements related to the issues falling under the Committee's authority.
- To develop recommendations on setting up R&D priorities.

SCS is funded by state budget within allocated funds for R&D. The SCS makes a proposal for redistribution of allocated state funding among programmes, including international cooperation, on a yearly basis and presents for the approval of the Government. In 2009, the total budget allocated to international cooperation has been approved to be around \$ 600 000 US.

Table 2: Indication on relevant budget of SCS RA (USD)

	2007	2008	2009
Total Budget of SCS	N/A	appr. \$19 mln.	appr.\$ 23 mln.
International Cooperation Budget	N/A	N/A	\$ 600.000

Information source: SCS website (http://www.scs.am);

SCS runs a number of programmes with R&D funding opportunities, which are financed via three main funding mechanisms:

- 1. thematic (project based) financing;
- 2. basic financing;
- 3. special purpose (targeted)research projects

SCS is also responsible for the bi-lateral S&T agreements of the republic of Armenia.

The thematic financing was introduced in 1992, which was then a progressive step that had several positive results, as, for instance, general democratization of entire science system, cutting down of overlapping research teams and projects, and possibility to have overall picture of research projects conducted in the country. However, the allocated funds were mainly directed towards paying salaries. Thus, science in Armenia was deprived of the ability to carry out an integrated policy in the field of fundamental research, to ensure re-orientation of its potential, to initiate new research trends, to provide effective organizational and financial support to research institutes, and to stimulate investigations. Existence of only thematic financing mechanism had also its negative aspects, as, for instance, weakening of integrated research activity and disintegration of basic financing mechanism in 1998, and, later in 2002, special purpose research projects' financing mechanism.

Thus, thematic financing is directed to individual researchers and small research groups. Basic financing is allocated to research institutes for carrying out research in the field of general priority of the institute and maintenance of research infrastructure. Special purpose (targeted) financing is intended for important innovative wide-scale research and technological projects, which can incorporate several institutions, including industry and SMEs. There are no data on R&D financing from private sector but it can be stated that funds for research from and within private sector are mainly directed toward specific applications or development of specific products, and are still insignificant.

International cooperation funding options and in particular within the BS region

International Cooperation: bi-lateral agreements of SCS

On the intergovernmental level during 1991-2005 S&T and/or cultural cooperation agreements were signed with around 20 EECA and EU-member states, including France, Greece, Romania, Slovakia, Bulgaria, Cyprus, UK, Russia, Ukraine, Belarus, Georgia, Kyrgyzstan, and Tajikistan. But most of these agreements are still not activated.

The SCS is responsible for policy making and implementation of international S&T cooperation, including initiation and implementation of joint R&D programmes with foreign organizations. Though, being newly








established body SCS doesn't have many cooperation agreements with foreign organizations, particularly in BS region.

The first bi-lateral cooperation agreement signed by SCS was S&T cooperation agreement signed between the SCS and CNRS (France) in January 2009. Within this agreement the first joint call for Armenian-French collaborative research projects was announced this year within the framework of which 9 small researchers exchange projects were selected for funding (10000 euro total funding for each project on the basis of co-funding).

In 2009 similar cooperation agreement was also signed with Belarus which presumes implementation of a joint program for R&D project proposals starting in 2010.

General mechanism for programme-setting up by SCS:

- On the level of SCS decision can be taken on allocation of certain funds for a new R&D
 programme, including international bi-lateral collaborative programme (for instance, in the
 context of BS ERA NET project).
- General rules for access to the programme/funding, including thematic priorities, eligibility criteria, level of project funding, evaluation procedure and duration can be defined by involved parties.

International Cooperation in R&D with countries from BS Region

Armenia doesn't have wide international cooperation in R&D with countries from BS region and EU.

It can be only mentioned that Armenia is one of the founding partners of the Joint Institute for Nuclear Research (JINR) established in Dubna, Russia, which involves also many other BS countries, particularly, Russia, Ukraine, Bulgaria, Romania, Georgia, Azerbaijan and Moldova. The main fields of JINR's activity are theoretical and experimental studies in elementary particle physics, nuclear physics, and condensed matter physics. The research programme of JINR is aimed at obtaining highly significant results of principal scientific value.

Armenia is also a partner in the Black Sea Basin Joint Operational programme (BS JOP), BS Cross Border Cooperation which is participated by other 10 BS region countries.









COUNTRY: Azerbaijan

Part A: Main players in the R&D system: list of PO and PM and policy makers

By the Presidential decree dated 04.01.2003 Azerbaijan National Academy of Sciences (ANAS) was appointed as an organization which carries out RTD policy in the Republic, coordinates and directs the scientific research in all state research and educational centres, and represents Azerbaijan in the area of science and technological development in foreign countries.

The institutes of the Azerbaijan National Academy of Sciences (ANAS) include most of the country's research organizations. The ANAS has 45 institutes and organizations which are organized into divisions.

Government-funded research is also performed under the auspices of government ministries, universities, and other institutions. Research performed by the ministries and non-ANAS institutes is often of an applied nature tailored to meet specific needs in Azerbaijan. As such, this research may have limited transferability beyond the borders of Azerbaijan, but it could be quite valuable where circumstances and technology needs are similar to those in Azerbaijan.

Azerbaijan has several important public institutions of higher education, including Baku State University, Azerbaijan State Oil Academy, Azerbaijan Technical University, State Management Academy, Azerbaijan University Architecture and Construction, Azerbaijan State University of Economy and Azerbaijan Medical University. These educational centers set the standard for the level of education in Azerbaijan and provide leadership in curriculum development and research.

Scientific research is also performed by a few private companies, primarily small innovative firms. Such ventures have the potential to be important engines of economic development, but face several significant hurdles, including: (1) a shortage of qualified specialists trained in technology transfer, marketing, and management; (2) a general lack of understanding of intellectual property issues and laws among technology entrepreneurs in Azerbaijan; and (3) a lack of available credit on reasonable terms. Together, these factors make it very difficult for successful commercialization of the products of research.

The main financial sources providing funds for development of science in Azerbaijan are the state budget and contracts with private enterprises and organizations. The state budget appropriations are of special importance in financing of science development. These appropriations pay off the main part of expenditures on basic research and provide funding to perform works of state important.

93 research institutes form part of the public sector, 16 more belong to the private sector and 36 belong to universities.

The international cooperation of Azerbaijan is mainly under the Ministry of Foreign Affairs (MFA), which together with the ANAS is implementing bi-lateral agreements in S&T of Azerbaijan.

The ANAS signed bilateral agreements with the Academies of Turkey, Austria, Romania, the Royal Society of UK, CNRS (France) and International Center for Theoretical Physics in Trieste (Italy).

The shortage of financing made international scientific cooperation and linkages rather difficult, resulting in isolation, unjustified complacency and a decline in the quality of scientific research in Azerbaijan.

Currently in Azerbaijan in almost all areas of science programme approach is missing, and funding is not made on a competitive basis, although in some areas of science there are attempts to develop and implement a comprehensive programmes. For example, in geology last three years the Cabinet of Ministers of the Republic has approved three State Programmes:







- "Program of Measures for 2007 2014 for Study of Hydrocarbon Potential and Geo-Dynamics of the Azerbaijan Sector of the South Caspian Depression" (approved by the Cabinet of Ministers June 18, 2007)
- "Program of Measures for Investigation, Exploration and Application of Environmentally Friendly Geotechnologies of Recovery of Metals for the Ore Fields of Azerbaijan" (approved by the Cabinet of Ministers January 22, 2008)
- "Plan of Activities on Preservation and Long Utilization of rare Geological Sites in Azerbaijan Republic for the period of 2009-2012" (approved by the Cabinet of Ministers August 22, 2008)

To date there are no other scientific programmes officially approved by the state authorities.

R&D priorities are not defined in Azerbaijan.

There are no international programme owner and programme managment agencies headquartered in Azerbaijan.

However, the situation in the science of Azerbaijan is gradually changing.

In accordance with Presidential Decree dated 10 April 2008 the State Commission on the reforms in science of Azerbaijan was established. The State Commission was entrusted with preparing a National Strategy for science in the Republic for 2009-2015 years and the State Programme for its implementation.

Prepared by the State Commission, National Strategy for science in the Republic for 2009-2015 and the appropriate State Programme were approved by the President of the country May 4, 2009. The State Programme was prepared in order to enhance information capacity of the state and accelerate the innovation processes, to improve management practices in scientific activities and financing systems for increasing the role of science and technology in solving important social and economic problems of the country.

According to this programme until 2015 the implementation of reforms in the sphere of science, improvement of its management and organization, the specification of research directions, improved training; a number of concrete measures to improve the efficiency of scientific and industrial organizations are foreseen.

The programme aims to:

- Creation of institutional and economic mechanisms for the development of important basic and applied research and meet the needs of national production in new technologies

- Improvement of the legal framework of scientific, technological and innovation activity;
- Improvement of training of highly qualified scientific and engineering personnel in the field of science and technology;

- Identify priority areas of research and practical work by taking into account the current world trends;

- Development of international scientific and technical cooperation;

- Integration of science and education;
- Formation of a national innovation system;

- Creation of the legal framework aimed at improving the status of scientists and researchers, their social security and increase their incomes.

- Defining priorities for basic and applied scientific research of the ANAS, as well as available country's scientific institutions and universities

- Development and implementation of short-and long-term targeted comprehensive scientific programmes

- Elaboration of proposals on improvement of management systems in science

- Implementation of the financing system that ensures the development of science

- Expansion of activities of the existing foundations, related to supporting the development of science, the creation of new foundations, preparation of substantiations and other regulatory documents on the activities of the Foundation of Science Development

- Creation of targeted programmes and special foundations to encourage scientific work of young scientists and to improve their creative abilities in basic research









-The expansion of international scientific cooperation, the introduction of the joint scientific projects and programmes, and attraction of international donors for research funding

-Creating a legal framework for the preparation of highly qualified scientific

personnel in foreign countries and their subsequent employment for the relevant work in scientific institutions of the country to build its research capacity in accordance with the National Strategy.

October 21, 2009 the President of the Republic of Azerbaijan issued an order to create Science Development Foundation under the President of the Republic of Azerbaijan to promote basic scientific research in the Republic of Azerbaijan, enhance study of natural resources, cultural and historical heritage of the country, improve the efficiency of research conducted in various fields of science, and for decent presentation of the Azerbaijani science in the global scientific area. This Foundation will be in future a source of funding for programme owner and programme managment agenciess.

Part B: Overview of most important PO and PMs

Geology Institute of ANAS

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

Geology Institute of Azerbaijan (GIA) (<u>www.gia.az</u>) is the largest scientific institution in the Azerbaijan National Academy of Sciences (ANAS) wholly occupied with fundamental research, as well as applied developments in various fields of geology, geophysics, geochemistry, eco-geology and other Earth sciences. There are 23 research departments & 2 laboratories, Natural-Historical Museum after H. Zardabi, Center of geodynamic research & seismic monitoring (formed in 2003 by Civil Research and Development Foundation (USA) grant support), National Data Center (formed in 2002 within Comprehensive Nuclear Test-Ban-Treaty Organization (the Treaty was ratified by Azerbaijan on the 2nd February, 1999), 13 functional subdivisions of scientific service in the Institute. The Institute's staff is 267 researchers, among them 157 Ph.D & Dr.Sc., 4-full members & 9-associate members of ANAS.

Institute's areas of core competencies include the following:

- 1. Study of hydrocarbon systems & basin modeling.
- 2. Study of mud volcanism phenomenon.
- 3. Complex study of the Caspian Sea geology.
- 4. Study of ore & non-ore economic minerals fields.
- 5. Theory & practice of oil & gas fields' development.
- 6. Environmental geology.
- 7. Analysis & management of natural & technogenic hazards.

Among other important areas of research are:

- 8. oil & gas geology & geochemistry;
- 9. genesis & formation of oil & gas fields;
- 10. petrology & metallogeny;
- 11. geotectonics & geodynamics;
- 12. paleontology & stratigraphy;
- 13. hydrogeology & engineering geology;
- 14. seismology;
- 15. tectonophysics & mining mechanics;
- 16. paleomagnetism;
- 17. petrophysics;
- 18. mining-geological research & geological basis for oil & gas fields development;
- 19. experimental research of rock mechanics;
- 20. physics, chemistry & hydrogasdynamics of beds;
- 21. methods of oil production increase and oil & gas recovery predictions;









At present GIA is a policy maker, a programme owner and programme managment agencies and also a programme manager. State funding is the main origin of the funds of GIA although there are also external grants from local and foreign state and private sources.

As a Policy Maker GIA defines the strategic lines of a research policy in the areas mentioned above and as a Programme Owner it has funds, which it decides how to distribute. In contrast with that what takes place in EU countries where Programme Manager issues the calls, collects proposals, evaluates proposals, monitors and evaluates projects, implements various administrative payment and other procedures GIA is not involved in such type of activity and the financing which is provided by the Government for the State Programmes are used for the research activity in GIA itself and in other institutions which are its partners mentioned in the programmes action plans.

International cooperation funding options and in particular within the BS region

GIA collaborates with international scientific centers and institutes: Massachusetts Institute of Technology, Cambridge (US); University of Utah, Salt Lake City (US), University of South Carolina, Columbia (US); University of Toronto (CA); University of Birmingham (UK); University of Aberdeen (UK); Universitè P.&M. Curie, Paris (FR); Friedrich-Schiller Universität, Jena (DE); GeoForschung Zentrum, Potsdam (DE); Delft University of Technology (NL); Pavia University (IT); Bologna University (IT); Sofia University (BU); Babes-Bolyai University, Cluj-Napoca (RO); Jozef Stefan Institute, Ljubljana (SI); Institute of Nuclear Physics, Krakow (PL);Ankara University (TU); Moscow State University (RU); Georgian State University, Tbilisi (GE), and others.

Development of scientific basis necessary for successful oil and gas field exploration appears to be the area where GIA is uniquely positioned in Azerbaijan to take advantage of the oil boom in the Caspian Sea. Institute has long term experience of work based on contracts with leading oil companies in the world, such as BP, Conoco Philips, Statoil, ChevronTexaco, ExxonMobil, Shell, Unocal, Total, Elf, Agip, LUKOIL and others.

At present GIA does not have programmes/funds targeting countries from the BS region. In principle three state programmes mentioned above are opened for international cooperation.

GIA can create new programmes/funds with a reasonable flexibility (e.g., which can be dedicated also to fund the BSRP call).







COUNTRY: BULGARIA

Part A: Main players in the R&D system: list of PO and PM and policy makers

The Ministry of Education, Youth and Science (MEYS) and the Ministry of Economy, Energy and Tourism (MEET) are the main policy-making and executive bodies in the area public S&T and innovation policy. Their functions are complemented by several executive agencies and advisory bodies. Depending on the policy field, other sectoral ministries are formally responsible for research activities within their respective areas of competence.

The MEYS defines the national priorities in the field of education and science policy; it is responsible for the design and implementation of the policy measures in this area. Since 2003, the MES is supported by the National Council for Scientific Research (NCSR). The NCSR is an advisory body in the formulation of the national research policy and research strategic issues. It gives recommendations on the issues concerning implementation of Bulgaria's S&T strategy and is a driving force in launching initiatives in areas that are essential to knowledge development and value creation. The NCSR is an arena for discussions both within the research system and with the users and the public regarding choices of direction and challenges in the world of research.

The second major institutional innovation within the realm of the MEYS that was introduced in 2003 was the founding of the. National Science Fund (NSF). The Fund implements the ministry's programmes promoting scientific research and supports international cooperation. This is the only specialized organization for funding national research and development programmes and projects.

Set up in 2001 with a primary aim to promote top-quality research in response to the social-economic needs of the country, today NSF is the only existing research funding agency in Bulgaria that base its activities on competitive spirit and excellence, is proud to be full member of the European Science foundation, as since 2003, having bilateral and multilateral collaborations and contacts all over the world. NSF activities correspond to the European trends for creating a new dynamic of research and defining new instruments for increased investment in R&D.

The NSF organizational objectives are designed to support our strategic goals which are the Fund to become more accessible and transparent; more integrated and efficient, more competent and important arena for cooperation. In its way to achieving these objectives, the short-term highest priority is given to:

- Carrying out long-term budget planning
- Simplification and standardization application procedures by introducing fully electronic application

submission and processing.

The MEET's responsibility within the S&T system is to develop policies to foster economic growth and competitiveness and to implement the national innovation policy concerning the business sector. On a strategic level, the economic policies of the Council of Ministers in general and the MEE in particular are strongly influenced by the Council for Economic Growth (CEG) - a high level advisory body, composed of representatives of government and the business sector. It provides a discussion forum for economic issues and important feedback and advice from the business community concerning proposed policy measures and the development of policy agendas.

MEET is also supported by an advisory body, the National Innovation Council (NIC). The main instrument in Bulgaria's innovation strategy is the National Innovation Fund (NIF). The NIF finances market-oriented applied research on a competitive basis and aims to establish links between research institutes, universities, industry and SMEs.

Main research actors









The main knowledge creating institutions in the Bulgarian innovation system are the universities and the nonuniversity research institutes, most notably those within the Bulgarian Academy of Sciences (BAS); the Agrarian Academy (AA) and specialized national public health centers.

Today in the country there are 51 higher educational establishments with 13000 researchers, of which 37 state supported and 14 private ones.

The research landscape comprises of 82 structural units of the Bulgarian Academy of Science with about 3600 researchers, which do research in a broad range of scientific disciplines, including social sciences and the humanities. This is the main horizontal research organization.

The second large horizontal research institution is the Agrarian Academy, operating under the authority of the Ministry of Agriculture and Food supply. The NCAS runs 40 institutes in the area of agriculture, fishery and forestry with 1800 researchers.

In addition, a number of state institutes are linked to different executive agencies and/or ministries in order to provide specific scientific services.

Also, actors in the research landscape are specialized non-governmental organizations and innovation small and medium-sized enterprises (SME's)

Organization Chart



Financial Policy in the field of Science of Bulgaria

The R&D funding is an important prerequisite for achieving qualitative and competitive results. During the last few years there is 20-25 mln.levs (equal to 10-12 mln. Euro) yearly increase of the absolute value of the budget expenditures for science. Unfortunately because of the financial crisis, this trend was blocked.

The public resources for science are mainly distributed on an institutional basis. For the last two years the share of programme and project based funding is constantly growing ensuring better concentration of resources for high-competitive and excellent research groups and networks and pooling implementation of large joint research programmes.









There is continuous intensification of the instruments that support research and innovation activity in the universities in the country as an input to the EU agenda for modernization of higher education intuitions as key actors in the "knowledge triangle" concept.

The research and innovation funding is operated by the National Science Fund and Innovation Fund through specialized programs. Some specific activities are performed by other sectoral ministries and agencies through targeted research programmes focused on emerging political or social issues of national importance.

What is overly obvious is that the overall capacity of and budget for science in Bulgaria is far too low. Both GERD and BERD are among the lowest in EU27 (0,5% and 0,11% of GDP respectively). In relative terms, the number is even more sobering: GERD per researcher is 11 700 EUR, which is more than 13 times less than average level of EU27

Part B: Overview of most important PO and PMs

Ministry of Education, Youth and Science of Bulgaria (MEYS)

The activities of MEYS, Bulgaria, include, but are not limited to:

- 1. Initiating, supporting and carrying out activities for the advancement of science, innovation and technologies;
- 2. Preparation and participation in scientific projects under regional, European and international programs;
- 3. Supporting for national, European and global research infrastructure, participation in international research organizations and programmes
- Expert activities in the preparation, administrative and financial management of projects under regional and international programs and initiatives;
- 5. Supporting databases, electronic libraries and dissemination of information for previous and current regional, European and international scientific programs and initiatives;
- 6.Organizing and holding international events (conferences, seminars) in the field of education, science, technologies.
- 7. Analyzing and monitoring the state-of-the-art of the scientific potential (infrastructure, human resources utilities; funding sources).

A main secondary-level institution of the MEYS is the National Science Fund, Bulgaria (NSFB) – researchfunding instrument and man programme manager. The NSFB is responsible for pursuing the policy directions developed by the MEYS and to implement various funding instruments and programmes that support basic, applied and experimental research.

NSFB methods of work correspond to general European practices of openness and transparency.

The NSFB is generally working with external evaluation committees including international peer-reviewers.

In 2009, the budget of the NSFB was 50 mln. Euro, decreased in 2010 to 27 mln. Euro due to strong restriction financial course.

Structure of the NSFB (EP = expert panel)











The activities of the Fund can be structured in following action lines:

- Targeted research programmes, which support integrated research schemes in priority thematic areas in line with the European research framework programmes priorities and are carried out by a consortium of minimum three different research-performing institutions implementing common strategic research agenda;
- Support for development of centers of research competence aiming at pooling the existing research
 potential and resources. Actually there are 33 Centers of competence supported both by targeted
 national research programmes and utilization of other funding instruments.
- Promotion of scientific research in Universities aiming high quality scientific research in the public higher education institutions and supporting:
 - Inter-institutional integration with other higher education institutions and universities, scientific organizations, small and medium-sized enterprises, university hospitals and national centers;
 - Effective international scientific cooperation and encouragement of participation of university scientists and units in building up of a European university space;
 - Intensification of the relation "science industry" by means of implementation of joint scientific research projects (SRP) with companies, small and medium-sized enterprises
- Support for creation of long-lasting and effective partnerships between the academia and research sectors and mounting the absorptive capacity of the industry for research and innovative products, technologies and services;
- Internationalization of research various competitions under bilateral, tri and multilateral programs with different partner countries from European Union and third countries such as Germany, France, Greece, Romania, Slovenia, Former Yugoslav Republic of Macedonia, China, India, etc. These programmes have special impetus on the research mobility and transfer of knowledge.
- Development of Integrated research and technological institutes supporting implementation of largescale research programmes; providing a new way of realizing public-private partnerships and focusing on key strategic projects for the country that have high downstream knowledge and industrial potential.







- Matching funds for participation of Bulgarian public and private research institutions; SME's and
 industry in the activities of the Seventh Framework programme and COST programme;
- Preparatory grants for development of research projects for Seventh Framework programme and COST programme.

International cooperation funding options and in particular within the BS region:

Bulgaria is implementing and participating in several bilateral and multilateral programmes and initiatives.

European programmes:

- experience in ERA - NETs finalized with a Joint Call for proposals. MEYS was partner in the pilot joint call and currently is contributing 200 000 EUR to the Joint research Programme under SEE-ERA.NET PLUS currently ongoing. A SEE-ERA.NET PLUS. MEYS was responsible for the development of call text and criteria for evaluation of proposals.

> Partner in WBC-INCO.NET

> Partner in SEAS-NET and responsible for the component "Black sea", more specifically for the research infrastructures inventory for the region;

- > Regional programmes
- > Member of BSEC
- > Involvement in SEE regional programme

International Cooperation in R&D with countries from BS Region

Target Country	Duration	Details	Main Obstacles
Armenia	S&T agreement Council of Ministers Decision№ 249 from 9 th of April 2009	No active research cooperation	Limited funding, lack of concrete negotiations between competent departments
Moldova	Protokol for cooperation Council of Ministers Decision № 738 from 2008	No research cooperation active	Limited funding, lack of concrete negotiations between competent departments
Romania	S&T agreement	Active, last protocol 2006- 2008	
Russia	S&T agreement	Under negotiation	
Turkey	S&T agreement Signed 2005	Never activated	Not ratified yet form the Turkish government
Ukraine	S&T agreement Signed governmental programme 1992	Active, last protocol 2008- 2010	Limited funding







Programme setting-up

Bilateral initiatives and programmes for research and mobility projects are normally preceded by an overarching governmental agreement in the area of education, culture and research, then, the Government gives a mandate to the competent Ministry to start negotiations for a joint programme or protocol in the area of research.

After the national procedures are completed, which normally takes between 6-8 months, depending on the specific conditions of the agreement, the first call for proposals can be launched.

Depending on the agreed conditions, protokol last for 1 or two years, more commonly the second option. After each cycle a joint committee is formed from representatives from the cooperating partners to agree the next programme.

In some cases bilateral programme include research priority area for cooperation, however usually they cover all scientific disciplines.

Aim and scope of the programmes

Strengthening the bilateral S&T cooperation

Encouraging exchange of knowledge and young researchers

In rare cases: joint research projects, because of the limited funding

Funded Activities

Support for mobility of researchers on the condition that such mobility is within the framework of a concrete research project.

In some cases, i.e. Bulgaria, we support some research activities within the project proposed and only for the national partner.

Beneficiaries

Public Research centers, Universities, Enterprises

Thematic priorities

Mathematics	Geosciences, Climate Research,
\square Informatics, Information Technology,	Environmental Research and Technologies
Communication Technology	🛛 Energy, Energy Technologies
🛛 Physics, Physical Technologies	⊠Engineering
Materials, Chemistry, Chemical	🛛 Aeronautics, Space
Technologies	🖂 Economics, Social Sciences, Humanities
🛛 Biology and Biotechnology	⊠ depending on each Work Programme, but
🖂 Medicine	most of the fields mentioned above are
	covered.









Thematically open - no particular priority

Additional Comments:

• The thematic priorities are determined within the single calls (in the execution protocols).

Funding

Country	Notes	Budget in the last protocol
Armenia	Never activated for research activities	N/A
Moldova	Never activated for research activities	N/A
Romania	2007-2009	100 000 euro for the Bulgarian partners
Russia	Under negotiation	N/A
Turkey	Never activated	N/A
Ukraine	2007-2009	30 000 euro for the Bulgarian partner

Evaluation procedures

The evaluation procedure is carried in two stages: a national separate evaluation followed by a joint bilateral final evaluation.

Selection criteria (max. 400 characters)

• Scientific relevance of the project (methodology, originality and innovation, scientific qualifications of the proposers);









- Need for the bi-lateral cooperation and the roles of the participating research units;
- Potential for creation of R&D collaborations between the two countries;
- Participation of young researchers in the project
- Impact from the project in terms of increase mobility between the counterparts
- The following are optional criteria, which influence positively the evaluation:
- Impact of the project toward solving significant regional research problems
- Involvement in other multilateral and European programmes, in particular in the 7th FP of the EC. And Sustainability of the proposed project in terms of establishing long-lasting cooperation between the partners

International cooperation options

The mobility of researchers or the projects funded under these bilateral programmes allow for participation of third-country organisations (which will not be funded under a specific bilateral agreement). Participation of third-country organisations (or of additional organisations from the two countries) is evaluated positively.









COUNTRY: France

In terms of R&D expenditure, France has the second largest research system in the EU. France's GERD amounted to \in 37.8b in 2006, which accounted for 17.7% of EU-27 expenditure in this field (European Commission, 2009).

Part A: Main players in the R&D system: list of PO and PM and policy makers

At government level, the Ministry of Higher Education and Research coordinates research policy. There is also a range of consultative bodies (see figure 1 below). Besides the Ministry in charge of research, the Ministry in charge of industry, which is responsible for industrial research and energy research, has a specific role to play in relation to research.

Main implementing agencies are as follows:

• The National Agency for Research (ANR), which was created in 2005 to fund basic research projects on a competitive basis. It is under the aegis of the Ministry of Higher Education and Research, but the Ministry in charge of health, the Ministry in charge of budget and the Ministry in charge of industry are represented on the Executive Board.

• OSEO innovation, which provides SMEs with support for R&D and innovation projects. OSEO innovation is aimed to strengthen cooperation between large firms and SMEs on pre-competitive research activities. It also has the responsibility for projects involving medium enterprises, in addition to the follow-up of existing large programmes. It was created to increase the emphasis put on the medium enterprises and to increase the number of "gazelles" in France.

Even if research policy remains a national prerogative, regional and local authorities have their own budgets and autonomously decide the amount they spend on R&D support. Although they increased noticeably their budgets dedicated to research and innovation since 2000, nevertheless their total amount still represents under 5% of total public expenses for R&D.

Regions are allowed to set up a regional research scheme or a regional research and higher education scheme.









Figure 1: Overview of the governance structure of the French research system

Main research performer groups:

The most important public research performers in terms of funds are higher education institutes, which comprise 82 universities (as counted by the Conference of Universities' Chairmen) and the "grandes écoles".

Alongside higher education institutes, research is also carried out by public research organisations (PROs). PROs are under the supervision of one or several Ministry(ies), in accordance with the research area, which is/are in charge of orienting their strategy. The main PRO is the National Center for Scientific Research (*Centre National de la Recherche Scientifique* – CNRS). The CNRS is a publicly-funded research performing organisation that has the objective to produce knowledge and make it available to society. Other large PROs include the National Institute for Agronomic Research (*Institut national de la recherche agronomique* – INRA), the National Institute for Computer Science and Automation (*Institut national de recherche en informatique et en automatique* – INRIA), the National Institute for Health and Medical Research (*Institut national de la senté et de la recherche médicale* – INSERM), and the Atomic Energy Commission (*Commissariat à l'énergie atomique* – CEA).

Part B: Overview of most important PO and PMs

National Center for Scientific Research (CNRS)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

Source: <u>ERAWATCH Research Inventory</u>, Technopolis France. For acronyms used in the figure which are not explained in the text see the list of abbreviations.







The National Center for Scientific Research (CNRS) is a government-funded research organization under the administrative authority of the French Ministry of Higher Education and Research in charge of research. The missions of CNRS, defined by governmental decree, are to evaluate and carry out research capable of advancing knowledge and bringing social, cultural, and economic benefits to society; to contribute to the application and promotion of research results; to develop scientific information; to support research training and to participate in the analysis of the national and international situation of science and its perspectives for evolution in view of contributing to the development of the national research policy.

CNRS is both a programme owner and programme managment agencies and programme manager. CNRS develops its international actions with the aim to help its researchers collaborate with the best teams in other countries and therefore to play an important role on the international scene. These international actions are coordinated and implemented by the Office of International Relations (Direction des Relations Internationales, or DRI).

International activities associated with CNRS's scientific priorities are not uniformly distributed around the globe but rather focused, according to each priority, on a few countries where the relevant scientific fields are particularly strong.

The budget comes from state funding: the Ministry of Higher Education and Research, as well as the Ministry of European and Foreign Affairs.

International cooperation funding options and in particular within the BS region

The international activity of the DRI is based on balanced partnerships and structured collaborations. To carry these out, the DRI offers a kit of CNRS tools for researchers who wish to initiate collaboration through exchange, to solidify it through an International Program for Scientific Cooperation, to coordinate it through a network and to structure it as an associated laboratory or an International Joint Unit. Black Sea countries can apply to any of these instruments:

- Bilateral scientific seminars
- Bilateral research projects
- International exchanges
- International Projects for Scientific Cooperation

International Cooperation in R&D with countries from BS Region

Country	Horizontal Priorities	Thematic Priorities	Obstacles for S&T cooperation
Armenia	Basic and applied research	Biotechnology, Nanotechnologies/Materials, Environment (incl. climate change), socio-economic sciences and humanities	Budget problems, lack of information on financial tools for cooperation
Azerbaijan	Basic research	Nanotechnologies/Materials, Environment (incl. climate change), socio-economic sciences and humanities	Budget problems, lack of information on financial tools for cooperation, agreements on IPR
Bulgaria	Basic and applied research	Nanotechnologies/Materials, socio-economic sciences and humanities	







Georgia	Basic and applied research	Biotechnology, Nanotechnologies/Materials, Environment (incl. climate change), socio-economic sciences and humanities	Legal problems, budget problems, agreements on IPR, language of cultural barriers
Romania	Basic and applied research	Biotechnology, Nanotechnologies/Materials, socio-economic sciences and humanities	
Turkey	Basic and applied research	Nanotechnologies/Materials, energy, transport and aeronautics, security, ICT	
Ukraine	Basic and applied research	Health, Biotechnology, nanotechnologies/materials, energy, environment, SHS, space, ICT	Legal problems, budget problems

Part C: Programmes

Programme title: Bilateral scientific seminars

Programme Owner:

Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1537

Programme type:

	🗌 national	unilateral	🛛 bilateral	🗌 multilateral	
_					

Involved Countries:

Programme Owner country: France

Target country/countries: Ukraine

Programme start, end: 2009

Aim and scope of the programme (max. 1000 characters)

Organisation of scientific seminars for duration of 3 days, with additional visits to institutes of the scientific domain concerned.

The budget comes from CNRS International budget

Types of activities/projects funded: Travel and subsistence costs are funded.

Beneficiaries (max. 500 characters)

All CNRS units, whether intramural, joint or associated, and all research institutes of the National Academy of Science of Ukraine (NASU) are eligible.









Thematic priorities

Mathematics Informatics, Information Technology, Communication Technology	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies
Physics, Physical Technologies	☐ Engineering
Materials, Chemistry, Chemical Technologies	Aeronautics, Space
Biology and Biotechnology	Economics, Social Sciences, Humanities
Medicine	Thematically open - no particular priority

What is funded? (max. 500 characters)

Travel costs	
Personnel costs	
Consumables	
Equipment	
Conferences, Exhibitions	
Dissemination	

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme: 25 000 € in 2009

Organization and execution of the seminar, including hotels, meals and inland transportation of participants from the guest country up to half the total number of participants. It may also cover the subsistence and national travel costs of up to twelve participants from the host country.

Application / Evaluation procedures (max. 1000 characters)

Applications may be submitted on the French side by any scientist eligible for support in the framework of CNRS's general funding scheme. Similarly, on the Ukrainian side, applications may be submitted by any scientist from institutes belonging to the National Academy of Sciences of Ukraine (NASU).

The proposal is to be addressed in two copies to:

CNRS Headquarters:- DRI

3, rue Michel-Ange

75794 Paris cedex 16 - France

Telephone: +33 1 44 96 53 36

Fax: +33 1 44 96 48 56

and one file e-mailed to:

caroline.danilovic@cnrs-dir.fr

A corresponding version of the proposal (in two copies) needs to be submitted by the Ukrainian

co-organiser to:

National Academy of Sciences of Ukraine:









Elena Myronchuk International Relations Department

54 Volodymyrska Street,

Kiev, 010333, Ukraine

The proposal needs to be submitted to the CNRS and to the NASU in English by the deadline as

fixed in the Call for Proposals.

Separate evaluation from experts of each side, ranking of projects in three levels (A = high priority, B = second priority, C = rejected).

Trans-national selection procedure: Comparison and final selection by a joint CNRS-NASU Committee.

Selection criteria (max. 500 characters)

Selection of applications is based on the excellence and novelty of the project. Projects involving young researchers are given priority.

International cooperation options (max. 1000 characters)

The programme is not open for involvement of third parties.

The programme is specifically designed for international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: 5 workshops funded in 2009 No rules for Intellectual Property Rights (IPR) foreseen in the programme.

Programme title: International exchanges

Programme Owner:

Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1150

Programme type:

🗌 national 🗌 unilateral 🛛 bilateral 🗌 multilateral

Involved Countries:

Programme Owner country: France

Target country/countries: Ukraine

Programme start 2005, end:

Aim and scope of the programme (max. 1000 characters)

Fostering exchanges of researchers for durations of one week to one month, within the framework of joint research projects.

The budget comes from the CNRS International budget.

Types of activities/projects can be funded: International exchanges fund mobility costs only.

Beneficiaries (max. 500 characters)

Research teams from CNRS and the National Academy of Sciences of Ukraine .









Thematic priorities		
Mathematics Informatics, Information Technology,	Geosciences, Climate Research, Environmental Research and Technologies	
Communication Technology	Energy, Energy Technologies	
Physics, Physical Technologies	Engineering	
Materials, Chemistry, Chemical Technologies	Aeronautics, Space	
Biology and Biotechnology	Economics, Social Sciences, Humanities	
Medicine	Thematically open - no particular priority	

What is funded? (max. 500 characters)

I Travel costs	
Personnel costs	
Consumables	
Equipment	
Conferences, Exhibitions	
Dissemination	

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme : 70 000 € at average for CNRS only.

Application / Evaluation procedures (max. 1000 characters)

Submission from June 1st to September 30^{th} . Joint calls for proposals with submission to both sides. Separate evaluation from experts of each side, ranking of projects in three levels (A = high priority, B = second priority, C = rejected).

Final selection by a joint committee.

Selection criteria (max. 500 characters)

Selection of applications is based on the excellence and novelty of the project. Projects involving young researchers are given priority.

International cooperation options (max. 1000 characters)

The programme is not open for involvement of third parties.

The programme is specifically designed for international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: 3 calls since 2005, 20 projects selected in the last call

IPR rules are foreseen under the frame of the CNRS-NASU scientific cooperation agreement.

Programme title: International Projects for Scientific Cooperation – PICS

Programme Owner:







Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1141

Programme type:

🗌 national 🗌 unilateral 🛛 bilateral	multilateral
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Involved Countries:

Programme Owner country: France Target country/countries: Ukraine

Programme start 2006, end:

Aim and scope of the programme (max. 1000 characters)

A PICS is a research project involving two teams, one in a CNRS-affiliated laboratory and the other abroad. It is awarded for a 3-year non-renewable period, and aims at consolidating an ongoing collaboration that has already produced joint publications with a partner abroad. Funding received in the framework of a PICS is intended to cover research travel as well as the organization of seminars and meetings.

The budget comes from CNRS International budget

Types of activities/projects funded: PICS fund mobility costs, organization of seminars and meetings, consumables, small equipment.

Beneficiaries (max. 500 characters)

Research teams from CNRS and the National Academy of Sciences of Ukraine.

Thematic priorities

Mathematics Information Technology	Geosciences, Climate Research, Environmental Research and Technologies
Communication Technology	Energy, Energy Technologies
Physics, Physical Technologies	Engineering
Materials, Chemistry, Chemical Technologies	Aeronautics, Space
Biology and Biotechnology	Economics, Social Sciences, Humanities
Medicine	
	Thematically open - no particular priority

What is funded? (max. 500 characters)

Travel costs	
Personnel costs	
Conterences, Exhibitions	
Dissemination	

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme: 73 000 € in 2009 for CNRS only.









Application / Evaluation procedures (max. 1000 characters)

Researchers and academics working in CNRS-affiliated laboratories wishing to submit a PICS proposal should send a summary of their project (as well as a list of articles co-authored with their partner(s)) by email to the representative for international affairs (CMI) of the relevant Research Institute of CNRS before March 31st.

Upon approval by the Institute, researchers may request application forms from the assistant of the appropriate geographical division of the Office of European Affairs (DAE) or the Office of International Relations (DRI) of CNRS and submit them before March 31st.

PICS can be submitted for collaboration with any country. If an agreement for joint funding exists between CNRS and the foreign partner's home organization, the project must be submitted at the same time to that organization.

Time line

- 1 March (of year N-1): Call for proposals opens.
- 31 March: Deadline for submission of a project summary (including a list of articles co-authored with the partner(s) abroad) to the relevant Research Institute.
- 30 April: Research Institute approval for submission of a full proposal.
- 1 to 30 May: Application form obtainable from DAE and DRI.
- 1 to 30 May: Application filled out by the two coordinators, one from France and one from abroad. Application submitted to DAE/DRI and to the partner institution abroad (in case of a bilateral agreement).
- 31 May: Deadline for submission of application to DAE and DRI. Application transferred to Research Institute for evaluation.
- 30 September: Overall ranking of proposals by Research Institute.
- December: Acceptance letter from DAE or DRI to the project leader specifying fund allocation.
- January of year N: Start of project, monitored by DAE, DRI and the Research Institute.
- January of year N: Notification of funds by DAE or DRI on proposal of the Research Institute.

December of years N, N+1, N+2: Annual scientific and financial report established by the program coordinators sent to DAE/DRI and the Scientific Institute.

Important dates

Before 31 March, submit pre-proposal to your Research Institute. After receiving approval, you may submit the full application to DAE or DRI, by 31 May.

Joint calls for proposals with submission to both sides. Separate evaluation from experts of each side, ranking of projects in three levels (A = high priority, B = second priority, C = rejected).

Final selection by a joint committee.

Selection criteria (max. 500 characters)

Scientific excellence of the applicants, novelty of the projects, involvement of young researchers.

International cooperation options (max. 1000 characters)

The programme is open for involvement of third parties.

The programme is specifically designed for international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: 4 calls since 2006, 10 projects currently funded.

Perspectives for the future :Extension to other Ukrainian teams through the support of the State Foundation for Fundamental Research.









IPR rules are foreseen under the frame of the CNRS-NASU scientific cooperation agreement.

Programme title: Bilateral research projects with Armenia

Programme Owner:

Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1538

Programme type:

🗌 national 🛛 unilateral	🛛 bilateral	multilateral	
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Involved Countries:

Programme Owner country: France

Target country/countries: Armenia

Programme start 2009, end:

Aim and scope of the programme (max. 1000 characters)

Fostering scientific cooperation within the framework of joint research projects in all fields of exact, natural, social and human sciences.

The budget come from the CNRS International budget.

Types of activities/projects can be funded: Mobility costs (minimum of 60% earmarked), research consumables and/or small equipment.

Beneficiaries (max. 500 characters)

All CNRS units, whether intramural, joint or associated, and all research and innovation institutions of the Republic of Armenia are eligible. Research teams from CNRS and Armenia supported by the State Committee for Science.

Thematic priorities

 Mathematics Informatics, Information Technology, Communication Technology Physics, Physical Technologies Materials, Chemistry, Chemical Technologies Biology and Biotechnology 	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies Engineering Aeronautics, Space Economics, Social Sciences, Humanities 		
Medicine	Thematically open - no particular priority		
What is funded? (max. 500 characters)			

Travel costs
Personnel costs
⊠ Consumables
🛛 Equipment







Conferences, Exhibitions

Dissemination

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme : 35 000 € (2010 previsions for CNRS only).

Application / Evaluation procedures (max. 1000 characters)

Joint call for proposals with submission to both sides. Deadline for applications: May 31, 2009. Separate evaluation from experts of each side, ranking of projects in three levels (A = high priority, B = second priority, C = rejected).

Final selection by a joint CNRS-SCS committee.

Selection criteria (max. 500 characters)

Scientific quality and novelty, perspective for developing the CNRS-SCS collaboration, young researcher's recruitment potential, and perspective for future joint applications to the EU Framework Programme.

International cooperation options (max. 1000 characters)

The programme is not open for involvement of third parties.

The programme is specifically designed for international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: First call in 2009, projects have just been selected

The Armenian institutions selected for funding shall be entitled to sign a Contract on the Intellectual Property Protection with CNRS.

Programme title: Bilateral Research Projects with Azerbaijan

Programme Owner:

Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1539

Programme type:

Involved Countries:

Programme Owner country: France

Target country/countries: Azerbaijan

Programme starts 2009, end:

Aim and scope of the programme (max. 1000 characters)

Fostering scientific cooperation within the framework of joint research projects in all fields of exact, natural, social and human sciences.

The budget comes from CNRS International budget

Mobility costs (minimum of 60% earmarked), research consumables and/or small equipment.









Beneficiaries (max. 500 characters)

All CNRS units, whether intramural, joint or associated, and all laboratories belonging to ANAS Institutes are eligible. Research teams from CNRS and ANAS

Thematic priorities			
 Mathematics Informatics, Information Technology, Communication Technology 	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies 		
Physics, Physical Technologies	Engineering		
Materials, Chemistry, Chemical Technologies	Aeronautics, Space Economics, Social Sciences, Humanities		
Biology and Biotechnology			
Medicine	Thematically open - no particular priority		

What is funded? (max. 500 characters)

Travel costs
Personnel costs
⊠ Consumables
⊠ Equipment
Conferences, Exhibitions
Dissemination

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme: 15 000 € (2010 previsions for CNRS only).

Application / Evaluation procedures (max. 1000 characters)

Joint call for proposals with submission to both sides. Separate evaluation from experts of each side, ranking of projects in three levels (A = high priority, B = second priority, C = rejected). Deadline for applications: May 31, 2009

Final selection by a joint CNRS- ANAS Committee.

Selection criteria (max. 500 characters)

Scientific quality and novelty, perspective for developing the CNRS- ANAS collaboration, young researcher's recruitment potential, and perspective for future joint applications to the EU Framework Programme.

International cooperation options (max. 1000 characters)

The programme is not open for involvement of third parties.

The programme is specifically designed for international cooperation or is international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: First call in 2009, projects have just been selected.

IPR rules are foreseen under the frame of the CNRS-ANAS scientific cooperation agreement.









Programme title: Bilateral Research Projects with Georgia

Programme Owner:

Funding Agency: CNRS

Administering Agency: CNRS

Web page: https://dri-dae.cnrs-dir.fr/spip.php?article1540

Programme type:

national unilateral X bilateral multilateral
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Involved Countries:

Programme Owner country: France

Target country/countries: Georgia

Programme starts 2009, end:

Aim and scope of the programme (max. 1000 characters)

Fostering scientific cooperation within the framework of joint research projects in the fields of

- mathematics
- Earth and environment sciences
- life sciences
- The budget come from the CNRS International budget.

Types of activities/projects can be funded: Mobility costs (minimum of 50% earmarked for junior scientists), research consumables and/or small equipment. GNSF eligible costs include salaries.

Beneficiaries (max. 500 characters)

Research teams from CNRS and Georgia supported by the Georgian National Science Foundation. Each team (French and Georgian) must include at least one junior scientist.

Thematic priorities			
 Mathematics Informatics, Information Technology, Communication Technology Physics, Physical Technologies Materials, Chemistry, Chemical Technologies Biology and Biotechnology Medicine 	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies Engineering Aeronautics, Space Economics, Social Sciences, Humanities Thematically open - no particular priority 		
What is funded? (max. 500 characters)			

Travel costs
Personnel costs (only for Georgia)
⊠ Consumables







Equipment

Conferences, Exhibitions

Dissemination

Funding mechanism: Direct allocation to the CNRS labs

Annual budget of the programme : 15 000 € (2010 previsions for CNRS only).

Application / Evaluation procedures (max. 1000 characters)

Joint call for proposals with submission to both sides. Eligibility check form GNSF on the basis of participation to "The State Science Grants Call -2008".

Final evaluation by CNRS experts, joint selection of one project in each field.

Selection criteria (max. 500 characters)

Scientific quality and novelty, perspective for developing the CNRS- GNSF collaboration, young researcher's recruitment potential, and perspective for future joint applications to the EU Framework Programme.

International cooperation options (max. 1000 characters)

The programme is not open for involvement of third parties.

The programme is specifically designed for international cooperation or is international cooperation.

Additional remarks (max. 1000 characters)

Results of the international component of the programme up to now: First call in 2009, projects have just been selected.

Perspectives for the future: Opening to other thematics.

No rules for Intellectual Property Rights (IPR) foreseen in the programme.

Part B: Overview of most important PO and PMs

Ministry of European and Foreign Affairs (MAEE)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The General Administration for International Co-operation and Development (DGCID) of the Ministry of European and Foreign Affairs has four main missions:

1. to support and facilitate the internationalisation of French research

2. to contribute to the construction of the European Research Area

3. to bring active assistance to research entities, universities, administrations and businesses in partner countries, particularly their scientific structures

4. to participate in the formation of policies concerning development research, with programmes aiming to increase knowledge and capacity building in developing countries and to support the emergence of scientific communities in the South.

International cooperation funding options and in particular within the BS region

The Ministry is both a programme owner and programme managment agency. The ministry's Directorate General for International Cooperation and Development (DGCID) funds programmes aim at encouraging the









mobility of scientists, training for research, and elaborate common research projects with foreign partners. It also endeavours to introduce the latest scientific issues into bilateral or multilateral cooperation programmes. The idea is to give greater influence to French expertise and scientific thinking by favouring those programmes for which French abilities are world-renowned, and to promote initiatives enabling researchers from Southern countries to become involved in the most important current research areas. All Black Sea countries are targeted by the DGCID programmes.

International Cooperation in R&D with countries from BS Region

Only basic research is funded by the programmes of DGCID (except innovation for Russia). Project proposals are evaluated by a separate procedure, by experts of the Ministry and independent researchers. At least 2 experts evaluate one project proposal, which takes 2 to 3 months.

The participation of young researchers is an optional evaluation criterion which can positively influence the funding decision. Other criteria are: scientific and technical merits of the proposal, suitability of applicants and feasibility of projects, significance of the research regarding international cooperation, requested budget and added value of the bi-(multi-)lateral collaboration.

Bilateral agreements have been established with Turkey (PHC Bosphore), Bulgaria (PHC RILA), Romania (PHC BRANCUSI) and Ukraine (PHC DNIPRO).

The instruments to support international cooperation are S&T agreements with foreign organisations and funding for the mobility of researchers. Both public research organisations, as well as private non-profit research organisations are beneficiaries. The eligible costs cover travel and personnel costs (scholarships for young researchers, PhD scholarships and grants for researchers at post doctoral level), as well as conferences and exhibitions.

On a bilateral level, France has established **Hubert Curien partnerships** aiming at supporting 2 years research projects involving teams from France and the partner country. These programmes allow researchers mobility and the development of excellent scientific exchanges, on the basis of co-funding⁷. Countries concerned are: Bulgaria, Romania, Turkey, Ukraine.

Within Hubert Curien partnerships, calls are being co-funded by both partner countries. Applications are submitted online.

On a regional level, the **ECO-NET Programme**⁸ is conceived to offer support for multilateral scientific collaborations between France and partners from central, oriental and Baltic European countries, as well as new independent countries. It aims at integrating these countries into the European research networks. Projects proposals must involve at least 2 organisations from the 2 lists of eligible countries and one French organisation. **Zone A** is Bulgaria, Croatia, Estonia, Hungary, Lettonia, Lituania, Macedonia (FYROM), Monténégro, Poland, Czech Republic, Romania, Russia, Serbia, Slovakia, Slovenia, Ukraine. **Zone B** : Albania, Bosnia-Herzégovina, Armenia, Azerbaïdjan, Belarus, Georgia, Kazakhstan, Kirghizstan, Moldavia, Uzbekistan, Tadjikistan, Turkmenistan. To be eligible, applications must involve at least one country from zone B (plus France).

Actions supported by this programme are twofold:

- Research and technological development projects
- Actions aiming at networking and coordinating research activities

⁸ http://www.egide.asso.fr/jahia/Jahia/accueil/appels/econet



⁷ Source: <u>http://www.diplomatie.gouv.fr/fr/actions-france_830/recherche-sciences_1029/programmes-cooperation_2609/partenariats-hubert-curien_13109/index.html/</u> or http://www.egide.asso.fr/jahia/Jahia/accueil/appels/phc.







Activities targeted should last for at least one year and not more than 2 years. There no specific scientific domains. Funding cannot exceed 20 000 euros per year/per project.

Within this programme, calls are being funded only by France. Applications are submitted online.

Ministry of Higher Education and Research (MESR)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The French Ministry of Higher Education and Research prepares and implements the policy of the Government in the field of higher education, research and technology. The ministry prepares the governmental decisions related to the allocation of the State resources in the framework of the civil budget for research and technological development. Consultative committees, general inspection committees and a range of departments, services and offices help ministers draw up and implement the policy. The Directorate for European and International Relations and Cooperation (DREIC) is implementing the policy of the ministry in international relations and cooperation in the fields of education, higher education and research.

The Ministry of Higher Education and Research comes as a support to the Ministry of European and Foreign Affairs to provide an expertise on projects and an evaluation.

International cooperation funding options and in particular within the BS region

The instruments for international cooperation are the mobility of researchers only on one side (target country to France). Public research organisations and individual researchers are the beneficiaries. Eligible costs are travel costs, as well as personnel costs (PhD scholarships). The tasks of the MESR are: drafting and publishing a call, organising the evaluation of proposals, taking the decision on which projects will be funded, evaluation of the periodical project reporting and payment. National calls are launched for the different programmes.

International cooperation with BS countries concern all thematic fields except space, for Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania and Turkey.

International Cooperation in R&D with countries from BS Region

Administrative conditions include that the proposal must be signed by an authorised person and by the project leaders of both countries, a final report must be submitted after the completion of the project and it must include a project duration.

Project proposals are evaluated in a separate procedure by experts of the Ministry and independent researchers. They evaluate the proposals remotely and in in situ/committee meetings. Optional criteria that can positively influence the funding decision are the participation of young researchers, links to the industry and participation of SMEs. Other criteria are the scientific and technical merits of the proposal, suitability of applicants and feasibility of the projects, significance of the research regarding international cooperation, national priorities and added value of the bi-(multi-)lateral cooperation.

The MESR has several programmes targeting the New Independent States:

ACCES programme⁹: participation of NIS researchers to international conferences in France. The
objective is to create links with French and foreign researchers in a specific research field. The
personal demand must be made by the organiser of the conference. Travel and subsistence costs
are covered.

⁹ <u>http://www.enseignementsup-recherche.gouv.fr/cid21214/appel-d-offres-du-programme-acces.html</u>









- PARCECO programme¹⁰: participation of French researchers in summer schools (only) in NIS. Travel and subsistence costs are covered.
 Research Training Network NIS¹¹: 3 years research training networks on a specific thematic field.
- Research Training Network NIS¹¹: 3 years research training networks on a specific thematic field. Creation of a network of laboratories (2 French and 2 NIS labs minimum). Travel and subsistence costs for senior members of the RFR are covered, as well as grants for PhD students in NIS (maximum 3 times 6 months) working in one of the labs of the network. 16 networks are funded right now, including 2 Ukrainians labs, 4 Romanian labs and one Bulgarian lab.
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¹¹ http://www.enseignementsup-recherche.gouv.fr/cid21215/appel-d-offres-du-programme-peco-nei.html



¹⁰ <u>http://www.enseignementsup-recherche.gouv.fr/cid21213/appel-d-offres-du-programme-parceco.html</u>







COUNTRY: Georgia

Part A: Main players in the R&D system: list of PO and PM and policy makers

Georgia's research system has gone through major restructuring in the last 4-5 years, yet the process is far from being completed. The continuing changes encompass: optimisation of the number and the profile of scientific-research institutes and their integration into the university system, elaboration of new funding models of S&T (including cooperative granting of international programmes and projects), support of young scientists, etc.

The main ministry responsible for S&T policy is the **Ministry of Education and Science**. The Ministry coordinates the general horizontal policies and infrastructure development for S&T, as well as for funding research in its area of expertise.

The S&T activities in Georgia are regulated by 2 legal acts: "Law on Science and Technologies and their Development", and the "Law of Georgia on Higher Education". The Intellectual Property protection system effective at present in Georgia comprises all the elements necessary for its functioning. Georgia is a party to all the main international agreements concerning IPR.

Amendments to "Law on Science and Technologies and their Development" made in December 2004 have initiated changes in structure and management of S&T. In particular **The Georgia National Science Foundation (GNSF)** was established by Presidential Decree # 653 (July 2005) as a Public Legal Entity to promote the progress of science by implementing competitive granting system.

GNSF is involved in S&T policy development as well as in preparation, funding and implementation of national S&T programmes. GNSF provides competitive grants (via open calls for proposals) for: public scientific institutes, non-governmental non-for-profit organisations and public universities.

Rustaveli Foundation for Georgian Studies, Humanities and Social Sciences (Rustaveli Foundation) is involved in science policy development in social and humanitarian fields. Foundation provides competitive grants in Georgian Studies, Humanities and Social Sciences.

The Georgian Research and Development Foundation (GRDF) is a non-profit non-governmental organization performing its activity on the basis of the Georgian Civil Code, other legal acts and the GRDF Charter. The mission of Foundation is to promote the development of the scientific and technological potential of Georgia through competitive grants, technical resources and training and thus to contribute to building knowledge-based economy. GRDF was established in 2001 with initiative and support of the U.S. Civilian Research and Development Foundation (CRDF).

Research performers

Around 100 S&T organisations/institutes (most of which before 2005 belonged to National Academy of Sciences) had become independent entities of public law and were given the choice: to proceed their activities in this new status and (having limited basic funding form state budget) compete for grants of GNSF; merge each other to joint capacity and efforts; integrate to universities; close down. As a result, the number of S&T organisations/institutes reduced to 66 and nowadays the Ministry of Education and Science fulfils general coordination of their activities and provides basic funds.

The main research performers are represented by these 66 research institutes and 7 public universities. Around 20 private institutes mainly of medical profile are focused on applied/project activities. Besides, some 20-25 non-governmental organisations are involved in political analyses, socio-economic studies, statistical observations, eco-monitoring.









Part B: Overview of most important PO and PMs

Georgia National Science Foundation (GNSF)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The Georgia National Science Foundation (GNSF) is a Public Legal Entity established by Presidential Decree 653 in July 17, 2005 to promote the progress of science by implementing new funding schemes in Georgian R&D sector. Governing Bodies of GNSF are represented by the Science Board and the Director.

To support sustainable development of the country R&D sector GNSF currently implements diverse funding schemes and approaches which encompass: (i) Competitive grants for long-term (up to 3 year) research projects provided through annual calls for proposals; (ii) Competitive grants for developing research infrastructure of R&D organisations and support of libraries of the State Universities; (iii) Travel grants to encourage participation of Georgian scientist in international R&D events; (iv) Personal grants (scholarships) for young scientists.

GNSF participates in bi- and multi-lateral policy dialogue with EU and neighbour countries for shaping national R&D policy and developing effective model of R&D administration. As a counterpart organisation of Estonian foundation Archimedes GNSF was directly engaged in implementation of EU funded project (2006-2007) with main focus on: introduction of best EU practices of R&D management and identification of strategy for further development of Georgian science and higher education.

Since its establishment GNSF has acted as the EU FPs coordinating NCP for Georgia and respectively takes active part in information dissemination, awareness rising, consultation and other activities supporting cooperation of local RTOs and scientists with research organizations and colleagues from EU and neighbour countries, encouraging participation of Georgian researchers in FPs, paving way for integration of national R&D in ERA. In 2006 and 2007 GNSF organised together with INTAS 2 Science Policy Workshops in Tbilisi with total participation of around 300 persons: EU and international researchers and experts, regional and Georgian scientists and policy makers and other stakeholders.

GNSF is involved in the country innovation policy development to bridge the gaps between research and industry and facilitate growth of national economy. In line with that cooperative activities (including joint calls) are arranging with international funds and organisations (CRDF, STCU, etc.).

	2007	2008	2009
Total Budget	8 Mo GEL	10 Mo GEL	19 Mo GEL
Co-funding of research activities	0.21 Mo GEL	0.90 Mo GEL	1.1 Mo GEL

International cooperation funding options and in particular within the BS region

Scope of international co-operation in research comprises actually all fields of hard sciences and humanities, predominantly biotechnology and life sciences, physics and material sciences. As to co-operation in technology development it is relatively less intensive and quite limited especially in terms of number of jointly fulfilled projects.

The overall objective of the co-operation is to contribute to steady development of economy and knowledge based society by making Georgia the integral part of international S&T system. Other main objectives are: (i) introduction of best international practices in national S&T policy and management system; (ii)









development of new generation of scientists of international standing; (iii) attraction of additional financial means from international programs and foundations (that is quite important in the present situation of insufficient funding of S&T from State budget and national businesses).

Co-operation with EECA-countries

Co-operation of Georgia with EECA-countries mainly encompass Armenia and Azerbaijan. For example 12 projects with participation of Georgian research teams and partner(s) from at least one neighbour country have been implemented in the frame of "INTAS South-Caucasus 2006" collaborative programme. The following 6 priority areas for cooperation were jointly identified by the 3 countries: i) Environmental problems; ii) Public health; iii) Improved use of natural resources; iv) Modern problems of mathematics and astrophysics; v) Economic development; vi) Science, technology and innovation policy. Besides, number of joint research projects is fulfilled on the basis of bilateral/direct cooperation of SC universities and institutes.

Co-operation with other EECA is more limited and has case-to-case character. Still, most of EECA countries currently participate in 2 big projects funded by FP7 (IncoNET EECA and BS-ERA.NET) and implement jointly most of projects tasks.

Georgia is one of the founding partners of the Joint Institute for Nuclear Research (JINR) established in Dubna, Russia, which involves also many other BS countries, particularly, Russia, Ukraine, Bulgaria, Romania, Armenia, Azerbaijan and Moldova. The main fields of JINR's activity are theoretical and experimental studies in elementary particle physics, nuclear physics, and condensed matter physics. The research programme of JINR is aimed at obtaining highly significant results of principal scientific value.

Co-operation with EU-member states and associated countries

In general, multilateral co-operation with EU-member states and associated countries is realised in the frame of EU FPs (before 2007 in INTAS programmes as well). One illustration of the co-operation with EU is a participation of representative group of Georgian scientists and engineers in ATLAS programme being implemented in CERN. Since 2007 Georgia (especially GNSF) provides annual contribution to CERN.

In 2008 GNSF signed the Protocol on Cooperation with CNRS (France) and as an output in 2009 the first Joint Call for proposals was launched in agreed priority areas. Currently Memorandums are in preparation to set cooperation between GNSF and DFG (Germany) as well as with CNR (Italy). Two times (in 1999-2001 and 2003-2005) joint calls were initiated by Greece General Secretariat for Research and Technology (Ministry of Development) and Department of Science and Technology of Georgia (Ministry of Economy) to support implementation of joint projects in 3 priority fields: i) Information Communication Technologies, ii) Environment and iii) Cultural Heritage.

As to bilateral cooperation with EU and associated countries, Georgian researchers have taken part in Swiss R&D programme SCOPES (Scientific co-operation between Eastern Europe and Switzerland) as well as in other programmes opened for the third countries participation (e.g. German programme IEBC and programmes of DAAD).

There are also examples of scientific cooperation with EU-member states and associated countries on the level of individual initiative of scientists and research organisations.

Funding Schemes used by GNSF for International Cooperation

Georgia National Science Foundation (GNSF) and the Science and Technology Center in Ukraine (STCU) since 2006 have announced annually the joint Call for Proposals within the framework of **the Targeted Research & Development Initiatives (TRDI) Program** in the following priority areas: 1. Biotechnologies and Life Sciences; 2. Energy Efficiency; 3. Information and Communication Technologies. Around 60% funded projects have collaborator from EU (since collaboration with EU member countries as well with the United States, Canada is a main eligibility criteria).

On the basis of their Protocol for Scientific Collaboration, signed on June 2008, French Center National de la Recherche Scientifique **(CNRS)**, and the Georgia National Science Foundation **(GNSF)** in April 2009 launched a joint call for proposals for collaborative bilateral research projects. The Call covered the following 3 fields of exact and natural sciences: mathematics, earth and environment sciences, life sciences. Projects have been selected on the basis of their quality and novelty, the perspective they offer for developing the CNRS-GNSF collaboration, young researcher's recruitment potential and the perspective









for the future joint application to the EU Framework Programme. The second call will be announced in the beginning of 2011.

International Cooperation in R&D with countries from BS Region

Georgia is a partner in the Black Sea Basin Joint Operational programme (BS JOP), BS Cross Border Cooperation in which around 10 BS region countries participate.

Cross-border cooperation (CBC) is an integral component of the ENP enabling both EU Member States and partner countries to work together on a regional basis. These ENPI CBC programmes cover the countries of Eastern Europe, the Southern Caucasus, and the Eastern and Southern Mediterranean. Objectives for the programmes, along with eligible areas and indicative financial allocations are outlined in the ENPI CBC Strategy paper.

Georgia (in particular GNSF) is in cooperation with all countries from BS region via participation in FP7 funded projects IncoNET EECA and BS-ERA.NET.

Georgian Research and Development Foundation (GRDF)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The Georgian Research and Development Foundation (GRDF; www.grdf.ge) is a non-profit (noncommercial), non-governmental organization supporting development of the scientific and technological potential of Georgia through competitive grants, technical resources and training, and contribute to building knowledge-based economy.

In general GRDF is engaged in 2 types of activity:

(i) Financial support of Georgian R&D by means of implementation of targeted programmes and providing competitive grants via calls for proposals. These programmes cover the following priority fields: a) Support of competitively capable scientific R & D, especially research that serves to solve significant social and economic national concern of Georgia. b) Support of young scientists and engineers, involvement of students in the scientific work in order to train the valuable generation of scientists, support to prepare PhD scientific degree; Development of infrastructure of scientific-technical sphere. c) Support of business oriented scientists. d) To engage former weapon scientists in civilian research and provide an alternative to emigration for Georgian scientists.

(ii) **Grant Assistance Program (GAP) Activity.** This activity offers a unique set of services (mainly in financial management and project administration) to Georgian organizations being in cooperation with US Civilian Research and Development Foundation (CRDF). In particular GRDF: a) Assists in the development and execution of research projects (e.g. assistance in developing project budgets, establishing project milestones, establishing administrative and financial control). b) Distributes project funds from Sponsor Organizations (mainly CNRS) directly to project participants. c) Provides support for the procurement and delivery of project equipment, supplies and professional services. d) Facilitates the arrangement of international travel for project participants. Provides support to Sponsor Organization personnel in events planning and coordination.

GRDF supports non-proliferation activities in Georgia, especially implementation of BioIndustry Initiative (BII) and Cooperative Biological Research (CBR) programs. BII was created in 2002 by U.S. Department of State to work with countries of the Former Soviet Union to combat the threat of BioTerrorism through sustainable redirection of biological production facilities. JSC "Sakagrobiomretsvi" or Tabakhmela Biokombinat (former Georgian Veterinarian Biological Industrial Kombinat) was identified as a facility which has a possible source of bio weapon production, because of presence of large-scale dual-use equipments. GRDF supports DoS/CRDF in reconfiguration and renovation the company's facility into alternative, civilian sector oriented project.

Four projects are administered by GRDF under Cooperative Biological Research Program (CBR):









- a) GG-1 project: "Ecology, Genetic Clustering and Virulence of Yersinia pestis Strains Isolated from Natural Foci of Plague in Georgia"
- b) GG-13 project: "Isolation, distribution, and biodiversity of selected vibrions and their bacteriophages from aquatic environments in Georgia"
- c) GG-17 project: "Clinical, Epidemiologic and Laboratory Based Assessment of Brucellosis in Georgia"
- d) GG-18: "Ecology, genetic clustering and virulence of major bacterial and viral pathogens in Georgia"

Part C: Programmes

GNSF & STCU Targeted Research & Development Initiatives (TRDI) Programme

Involved Countries: Georgia; At least one scientific collaborator from any of the three STCU's western funding parties: the United States, Canada, and the European Union.

Programme type (bilateral/multilateral): Multilateral, open for foreign participation

Programme start, end: Nov 2006, open.

Aim and scope of the programme

Targeted Research & Development Initiatives Programme (TRDI) creates an equal partnership between STCU and the governmental science bodies of STCU Beneficiary countries. The STCU and the Beneficiary country agency review and competitively select science research that targets specific national S&T development priorities of the Beneficiary country. Targeted Initiative projects are co-financed using funds from the **Beneficiary country agency** and from the **STCU Donor Parties** of Canada, the European Union, and the United States of America.

Beneficiaries

All Georgian State Universities, scientific-research institutes, and non-commercial organizations are eligible.

In accordance with STCU policy, no less than 50% of project participants should be scientists with prior experience in the development of weapons of mass destruction.

Funding

Targeted Research & Development Initiatives projects are co-financed from GNSF and the STCU (50% - 50%) with the aim of selecting projects up to a total US 700, 000, with the Georgian share of financing totalling up to US 350, 000 and the STCU share totalling up to US 350, 000. Project proposals should be limited to total budgets not to exceed US\$ 70,000. Targeted Initiatives Program must be implemented within a period of between 12 to 24 months. Overall, around 10 projects are funded annually. All project related expenses (equipment, salaries, consumables, etc) are eligible.

Application / Evaluation procedures

- a) Those Georgian organizations planning to take part in the competition must prepare and submit to the GNSF for review a preliminary application (so called "short form") in the Georgian language.
- b) Then around twenty-five or less Georgian project managers will be short listed and STCU will send them directly Full Forms. These project managers will prepare and submit a Full Form proposal in English to the GNSF and STCU
- c) Following a brief internal review, the STCU will forward these proposal packages for a review of their scientific and technical merits by Western scientific experts.









d) Definite confirmation of the list of projects chosen for grant financing for the current year will be determined by a Joint Working Group (comprising representatives from the STCU Western financing parties and the GNSF) that will meet immediately prior to the STCU Governing Board Meeting. The decision will be officially announced at this meeting.

Selection criteria

- □ Scientific justification (uniqueness and level of science presented, understandability and readability, references and citations, etc.);
- □ Scientific methodology (methodological justification: uniqueness and reasonableness);
- □ Scientific promise (ability to achieve stated goals, reasonableness of developing new or improving existing technologies from the stated results);
- □ Applicability and feasibility (ability to achieve stated results based on material and financing requests, as well as upon existing institute technical capacities and resources);
- □ Sustainability (Feasibility of further scientific development or commercial potential);
- □ External support and interest (letters of support and expressions of interest to collaborate)

Feasibility for international cooperation

Strict requirement for all project submissions is the involvement of at least one scientific collaborator from any of the three western funding parties: the United States, Canada, and the European Union.

GNSF-CNRS Collaborative Bilateral Research Projects

Involved Countries: Georgia, France

Programme type (bilateral/multilateral): bilateral, open for foreign participation

Programme start, end: October 2009, and will last up to 24 months.

Aim and scope of the programme

On the basis of the Agreement of the Scientific Collaboration signed in Tbilisi on June 27, 2008, the Georgia National Science Foundation (GNSF) and the French Center National de la Recherche Scientifique (CNRS) launched this call for proposals for Collaborative Bilateral Research Projects. The Call covers the following 3 fields of exact and natural sciences: mathematics, earth and environment sciences, life sciences.

Beneficiaries

From the French side - all CNRS units;

From the Georgian side - research institutes, universities and groups of researchers, participants of the projects submitted to "The State Science Grants Call -2008" having passed the threshold of 80 points in above noted 3 scientific fields. Each team (French and Georgian) must include at least one junior scientist.

Funding

The CNRS eligible costs are travel and accommodation costs, research consumables and/or small equipment. In addition the GNSF eligible costs include salaries. Each side (CNRS and GNSF) supports the costs of only its national team, including medical and travel insurances. The hosting team provides assistance to the visiting scientists. The duration of a visiting stay cannot exceed 3 months. Only one project will be funded (30 000 Euros per project) in each scientific field. The duration of the projects is 24 months with a total budget of up to 90 000 Euros for 3 selected projects.

Application / Evaluation procedures

The applicants must submit their English written proposal to both CNRS and GNSF. GNSF will provide general evaluation of submitted proposals to establish their compliance with:








(i) the **Eligibility criteria** and (ii) the scientific scope of appropriate projects having passed the threshold of 80 points in "The State Science Grants Call -2008" (in Mathematics, Earth and environment sciences and Life sciences). Selected proposals will be submitted to CNRS for full scale evaluation and the final selection.

Selection criteria

Projects will be selected on the basis of their quality and novelty, the perspective they offer for developing the CNRS-GNSF collaboration, young researcher's recruitment potential, and the perspective for the future joint application to the EU Framework Programme.

Feasibility for international cooperation

Programme is designed for Georgian–French projects. Partner from other countries can participate based on own funds.

Programmes of GRDF with potential for participation of BS countries

Apart from 2 programmes given above in the form of Fact Sheets, several programmes of GRDF also worth to be mentioned since they have potential to be opened for participation of BS countries. These programmes are presented in accordance with the main priorities of GRDF.

Under the priority **Support of competitively capable scientific R & D** (especially research activities that serves to solve significant social and economic national concern of Georgia):

- GRDF and CRDF three times announced Georgia U.S. Bilateral Grant Program (BGP) aimed at development of collaboration between Georgian and US scientists in all directions of fundamental and applied science. Project proposals envisaged a joint research of Georgian and the US scientific teams. The highest priority were given to proposals included former weapon scientists and young specialists. Based on Georgian and US peer-revivers evaluation 38 meritorious projects were awarded.
- In 2005 CRDF, GRDF and partner organizations from Armenia and Azerbaijan announced the South Caucasus Cooperative Research Program (SCCRP) with the primary goal to support high quality innovative R&D by establishing sustainable research collaboration between researchers of U.S. and all three SC countries. Two projects were awarded. First one aimed to evaluate gold potential/deposits of Lesser Caucasus. Focus of another project was creation of Biotechnological Network with Establishment of Regional Microbial Culture Collections of the Caucasus" submitted by Institute of Biochemistry and Biotechnology. Each award amounts \$250 000.

Support of young scientists and engineers, involvement of students in the scientific work ; Development of infrastructure of scientific-technical sphere.

Joint program of the Ministry of Education and Science of Georgia, CRDF and GRDF aiming establishment of a scientific-educational center (CoRE) in one of Georgian universities was announced in 2007. On the competitive bases newly established Chavchavadze State University was granted of \$300,000. Minimum \$200,000.00 of this award was spent for purchase of modern research equipment and for unique research on Exploring Biodiversity of the Caucasus is being conducted.

Support of business oriented scientists.

Since 2005 the S&T Entrepreneurship Program (STEP) has been started in Georgia.

Up to now, under STEP several events were organized (with participation around 150 business oriented scientists and their potential partners from industry). Four calls were announced (last two were held with significant co-funding (approx. 80%) of GNSF). Eligible are proposals that have partner from industry. R&D should be core activity, yet the proposal should include preliminary market assessment, customer needs analysis, and business development components. At least 10-15% of the project budget should be provided by partner from industry. As a result the 70 companies have participated in this program and 40 S&B contacts have been concluded between companies and research institutes.









COUNTRY: Germany

Part A: Main players in the R&D system: list of PO and PM and policy makers

A key element of German research policy is the far-reaching scientific autonomy of the various publiclyfunded research organizations, for example the Max Planck Society (MPG), the Helmholtz Association (HGF), the Fraunhofer Society (FhG), the Leibniz Science Association (WGL) and the German Research Association (DFG). These research institutions and funding agencies also receive joint funding from the Federal Government and the *Länder*.

Since 2008, coordination between the Federal Government and the *Länder* has been organised through the Gemeinsame Wissenschaftskonferenz (Joint Science Conference – GWK), which was established on the basis of an administrative agreement between the Federal Government and the *Länder*. In future, the GWK will deal with all issues relating to research funding, scientific and research strategies and the scientific system that affect both the Federal Government and the *Länder*.

The Federal Ministry of Education and Research (BMBF) coordinates the federal R&D policy. Nearly twothirds of all federal R&D expenditure is financed by the BMBF's budget. The Federal Ministries of Economics and Technology (BMWi), of Defence (BMVg) and of Education and Research (BMBF) together account for nearly 90 percent of the Federal Government's total expenditures in this area.











Administrative Structure of Government-funded R&D (Note: Since 2008, coordination between the Federal Government and the Länder has been organised through the Gemeinsame Wissenschaftskonferenz (Joint Science Conference – GWK). The GWK (not shown in this graphic) has taken over tasks of the former BLK (Bund-Länder Commission)







Federal Ministry of Education and Research (BMBF)

BMBFs task begins with early learning and includes continuing education and training, whilst school education and university teaching fall under the remit of the Länder. BMBF share responsibility with the Länder in the fields of non-school vocational training and continuing education as well as in promoting training. The Ministry is also responsible for research funding, supporting the specially gifted, promoting upand-coming scientists and funding international exchanges in the fields of initial and continuing training, higher education and research.

The BMBF has introduced important measures to strengthen education, research and innovation in Germany under the High-Tech Strategy for Germany and the National Qualification Initiative. We have significantly expanded our activities to promote talented and up-and-coming young scientists, have provided new momentum in the research landscape with our Initiative for Excellence and have created new jobs by introducing innovative technologies and services. We are continuing the Higher Education Pact, the Initiative for Excellence and the Joint Initiative for Research and Innovation in association with the Länder. We are offering every generation - whether old or young - the opportunity to develop their full potential. What we need are dynamic, spirited and well-qualified men and women who will introduce the innovations of the future in Germany. It is our aim to maintain Germany's competitiveness and to do so we need a new culture of innovation which embraces all areas of society.

The BMBF's funding of science and research must be judged according to the benefits which the use of public funding holds for society, particularly in the long term. Such an assessment must be oriented towards the future and must take various factors into account.

The first of these is providing for the future: The protection of the environment and climate change, safeguarding energy supplies, but also demographic development are all processes which take several decades. Although we cannot forecast these processes precisely today, scientifically founded predictions of developments make it necessary to fund research into countermeasures.

A second factor is securing the basis for our prosperity and social cohesion. Many research results have considerable economic significance. They form the basis for the international competitiveness of highly developed technological nations. Here it is, of course, important that the results of research enter products and services and that research also reaches the people whom it can help - particularly in fields such as health research.

In order to remain in the lead internationally, it is decisive to identify the future direction of research as early as possible and to support work in this area. The third factor is the rather abstract progress in science and research in general. Findings and discoveries in research can often not be determined in advance this is the reason for their scientific charm and societal importance. This research has its origins in scientific questions, answers to which also require support.

Strategy processes in education and research are thus based on two fundamental questions: Where do we stand and in what direction do future developments point? Working on the basis of the results of analyses and scenarios, we can develop a dialogue with science and societal groups on central areas and key measures needed to achieve the goals of education and research policy.

Federal Ministries of Economics and Technology (BMWi)

The central priority of economic policy - and therefore of the Federal Ministry of Economics and Technology - is to lay the foundations for economic prosperity in Germany and to ensure that this prosperity is spread broadly throughout the population. This overarching priority gives rise to specific objectives that serve as guideposts for the formulation of economic policy.

These objectives include:









- developing opportunities to ensure sustained economic growth and competitiveness with other economies
- · ensuring a high level of employment
- strengthening small and medium-sized enterprises (SMEs)
- promoting new technologies and innovation to maintain economic competitiveness
- linking economic and ecological goals
- · expanding the worldwide division of labour and a free system of world trade
- ensuring a secure energy supply at appropriate prices

Given these priorities and objectives, the essential task of the Federal Ministry of Economics and Technology is to shape the conditions that foster successful economic activity on the basis of personal and entrepreneurial freedom, competition and stability. The Ministry's legislative, administrative and coordinating functions in areas such as competition policy, regional policy, SME policy, energy policy, and external economic policy are geared to this task.

Germany's overall economic policy is grounded in the principles of the social market economy, and this approach has proven to be effective, particularly during difficult phases of economic cycles. It is especially important for a forward-looking economic policy to ensure sustained conditions for greater employment in Germany.

Structure

The Ministry's organisation reflects the broad spectrum of its activities. These are divided among nine Directorates-General (DG):

- Central Administration (DG Z)
- European Policy (DG E)
- Economic Policy (DG I)
- SME Policy (DG II)
- Energy Policy (DG III)
- Industrial Policy (DG IV)
- External Economic Policy (DG V)
- Communications and Postal Policy (DG VI)
- Technology Policy (DG VII).

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)

The Federal Environment Ministry's sphere of responsibility also embraces three federal agencies: the Federal Environmental Agency (Umweltbundesamt), the Federal Agency for Nature Conservation (Bundesamt für Naturschutz) and the Federal Office for Radiation Protection (Bundesamt für Strahlenschutz). The ministry also receives advice in the form of statements and expert opinions from several independent expert bodies. The principal advisory bodies are the Council of Environmental Advisors (Rat von Sachverständigen für Umweltfragen) and the Advisory Council on Global Change (Wissenschaftlicher Beirat Globale Umweltveränderungen).

The actors of research funding are the funding institutions and the project management agencies. These initiate, manage and fund programmes.

Funding Institutions

Reasearch funding supports the realisation of political goals. For this purpose framework programmes are frequently installed. The funding institutions are the ministries at the national and state level. Research is also funded by foundations, associations and companies.









Funding programmes

Funding programme define the eligibility to obtain funding for research Framework programs often initiate several funding programmes to consider different aspects and to achieve structural effects.

Project Management Agency

The Project Management Agencies coordinate the correct allocation of funds to the science on funding programs. They have a mediating role between the funding agencies and the science.

Research Areas of the BMU

Research on Plant Production

The research in crop production deals with the subjects plant cultivation, plant breeding, plant nutrition, plant protection, agricultural technology, plant production, grasslands, orchards, horticulture, gardening, viticulture and special crops.

Animal Production

In the animal production the research deals with the subjects of animal husbandry, agricultural engineering, animal production, animal health, animal nutrition, Special animal species and beekeeping.

Research on Aquaculture

The research of fish farming, aquaculture and fisheries technology are centered by the Department of aquaculture.

Research on Forestry

The subjects silviculture, forestry, wildlife biology, forestry technology and Forest Genetics are researched by the scientists of forestry sciences.

Research on Ecology

The ecology involves the agricultural hydrology, meteorology, agricultural, agro-ecology, landscape design, soil science and organic farming.

Research on Socioeconomics

In the context of the socioeconomics agricultural policy, market education, business economics, agricultural sociology and agricultural economics are researched.

Research on Nutrition Sciences

Nutritional physiology, household science and dietary habits are the focus of nutritional sciences.

Interdisciplinary Research

The areas of communication sciences, biotechnology, resource management and research in the field of genetic resources belong to the interdiszuiplinary areas.

Research Food Technology

The Food technology includes the study of food chemistry, process engineering, customers of food and food microbiology.

Part B: Overview of most important PO and PMs

International Bureau of BMBF (IB)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing









The International Bureau has been commissioned by the German Federal Ministry of Education and Research (BMBF) to strengthen the international ties of German universities, research institutes and enterprises with the ultimate goal of building competencies and fostering competitive advantages for industry and the research community in Germany in the areas of research and innovation. In doing so, the International Bureau is making an important contribution to cultivating an international dimension within the research programmes of the BMBF.

The International Bureau works on behalf of the BMBF and sees itself as a service provider for the BMBF, or rather a service provider for the German science community on behalf of the BMBF.

Its responsibilities are:

* Supporting the ministry in planning and implementing international agreements and cooperation programmes

* Observing relevant international developments in the areas of research and innovation policy

* Advising and supporting stakeholders in the German scientific landscape in opening up opportunities for international networking and advertising Germany as an excellent place for science, research and innovation

* Contributing to the strategic development of the strategic dimension of the European Research Area

In dialogue with the research divisions of the BMBF and their project management organisations, the International Bureau initiates cooperation on research topics with a high policy priority with competent partners in a variety of countries - primarily in Europe, Asia, the Americas and Africa.

The International Bureau possesses detailed knowledge of the capacities for cooperation in other countries as well as the legal and political framework for cooperation. Moreover, it maintains contact with relevant organisations abroad as well as with German organisations active in cooperation at the international level.

The IB contributes to the implementation of the Federal Government's High-Tech Strategy and the Strategy of the Federal Government for the Internationalization of Science and Research, which was initiated by the BMBF.

The International Bureau provides BMBF funding to German universities, research institutes and small and medium-sized enterprises (SME) for investigating the potential for cooperation with partners abroad and for the preparation of projects involving international cooperation.

International cooperation funding options and in particular within the BS region

YES, Details can be found in Programme fact sheets and Web based database.

Funding programme with Turkey,

Funding programme with Ukraine,

Funding programme with Centralasia, des Southcaukasus, Moldau and Belarus

Opening of existing programmes is not realistic/ applicable

New programmes can be created after approval of BMBF. BMBF needs to be contacted and convinced of creation of a new programme

German Academic Exchange Service (DAAD)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The German Academic Exchange Service (DAAD) is the largest funding organisation in the world supporting the international exchange of students and scholars. Since it was founded in 1925, almost 1.5 million scholars in Germany and abroad have received DAAD funding. It is a registered association and its members are German institutions of higher education and student bodies. Its activities go far beyond simply awarding grants and scholarships. The DAAD supports the internationalisation of German universities,









promotes German studies and the German language abroad, assists developing countries in establishing effective universities and advises decision makers on matters of cultural, education and development policy.

Its budget is derived mainly from the federal funding for various ministries, primarily the German Federal Foreign Office, but also from the European Union and a number of enterprises, organisations and foreign governments. Its head office is in Bonn, but the DAAD also has an office in the German capital, Berlin, to which the famous Berlin Artists-in-Residence Programme (Berliner Künstlerprogramm) is closely affiliated. It maintains contact with and provides advice to its main partner countries on every continent via a network of 14 regional offices and 49 information centres.

The DAAD runs over 250 programmes, through which it funds more than 55,000 German and foreign scholars worldwide per annum. These programmes range from semesters abroad for undergraduates to doctoral programmes, from internships to visiting lectureships, and from information-gathering visits to assisting with the establishment of new universities abroad. It supports the international activities of German institutions of higher education through marketing services, publications, the staging of events and training courses.

Alexander von Humboldt Foundation (AvH)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

AvH promotes academic cooperation between excellent scientists and scholars from abroad and from Germany.

* the research fellowships and research awards allow Scientists to come to Germany to work on a research project they have chosen for themselves together with a host and collaborative partner.

* scientist or scholar from Germany you can profit from support and carry out a research project abroad as a guest of one of about 23,000 Humboldt Foundation alumni worldwide - the Humboldtians.

* As an intermediary organisation for German foreign cultural and educational policy AvH promote international cultural dialogue and academic exchange.

If a scientist would like to become a member of the Humboldt Family, only one thing counts: their own excellent performance. There are no quotas, neither for individual countries, nor for particular academic disciplines. AvHr selection committees comprise academics from all fields of specialisation and they make independent decisions, based solely on the applicant's academic record. AvH supports people, not projects. After all, even in times of increasing teamwork, it is the individual's ability and dedication that are decisive for academic success.

Every Humboldtian needs an academic host. Become a host and encourage your young, collaborative partners from abroad to apply for a Humboldt Foundation research fellowship for a research stay at your institute, or nominate a cutting-edge researcher of your choice for a Humboldt Research Award. The fellowship includes an allowance for research costs towards financing equipment, research assistance, administrative costs and so on. It helps you and your guest researcher to create optimum conditions for fruitful cooperation.

International cooperation funding options and in particular within the BS region

As indicated above AvH has no regional focus. For existing programmes please refer to programme fact sheets and detailed programme fact sheets.

PO and PM Network

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing









PO and PM Network is a non-formal association of Germanys Programme owner. Each PO and PM is assigned by the BMBF and responsible for a specific thematic area. The PO and PM are managing the national funding programmes.

AiF Hauptgeschäftsstelle Köln Bayenthalgürtel 23, 50968 Köln Geschäftsstelle BerlinTschaikowskistr. 49, 13156 Berlin <u>www.aif.de</u>

Deutsches Zentrum für Luft- und Raumfahrt e.V. Königswinterer Str. 522-524, 53227 Bonn http://www.dlr.de/pt-lf

EuroNorm GmbH Stralauer Platz 34, 10243 Berlin http://www.euronorm.de/; http://www.inno-watt.de/

Projektträger im DLR Deutsches Zentrum für Luft- und Raumfahrt e.V.Heinrich-Konen-Str. 1, 53227 Bonn www.pt-dlr.de

Projektträger Jülich Forschungszentrum Jülich GmbH52425 Jülich www.fz-juelich.de/ptj

Projektträger Forschungszentrum Karlsruhe Forschungszentrum Karlsruhe GmbHHermann-von-Helmholtz-Platz 176344 Eggenstein-Leopoldshafen <u>www.fzk.de/ptka</u>

Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH Schwertnergasse 1, 50667 Köln www.grs.de/ptr

Gesellschaft für Schwerionenforschung mbH Planckstrasse 1, 64291 Darmstadt www.gsi.de/gsi-pt

Projektträger DESY Notkestraße 85, 22607 Hamburghttp://pt.desy.de/

TÜV Rheinland Consulting GmbH Zentralbereich ForschungsmanagementAm Grauen Stein, 51105 Köln www.tuvpt.de

VDI Technologiezentrum GmbHVDI-Platz 1, 40468 Düsseldorf www.vditz.de/pt

VDI/VDE Innovation + Technik GmbH Steinplatz 1, 1062Berlin <u>www.vdivde-it.de</u>

International cooperation funding options and in particular within the BS region

Primarily national Programmes. Programmes open for international cooperation exist but have to be considered individual.

Helmholtz Association

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The Helmholtz Association is a community of 16 scientific-technical and biological-medical research centres. These centres have been commissioned with pursuing long-term research goals on behalf of the state and society. The Association strives to gain insights and knowledge so that it can help to preserve and improve the foundations of human life. It does this by identifying and working on the grand challenges faced by society, science and industry. Helmholtz Centres perform top-class research in strategic programmes in six core fields: Energy, Earth and Environment, Health, Key Technologies, Structure of Matter, Aeronautics, Space and Transport.

Click through the pages to discover how the Helmholtz Association defines its "Mission" and how it fills these ambitious goals with concrete content. Where does the Association see those "grand challenges" and









what answers can it produce - to secure a sustainable energy supply or forward-looking transport planning solutions, to develop key technologies for the future or therapies for treating diseases which are still incurable today?

The scientists and researchers working in the 16 Helmholtz Centres have developed a total of 30 research programmes whose scientific excellence and strategic relevance are evaluated by internationally-renowned peers once every five years. This in turn serves to ensure that the results of Helmholtz research can compete with the work of leading institutes worldwide.

Strategic programmes form the basis for positioning the Helmholtz Association in the research landscape. Clearly-defined goals additionally ensure that Helmholtz can focus on its strengths and so perform top-flight research. By concentrating its assets in multidisciplinary teams and by packaging the wide range of resources available in its Research Centres, the Helmholtz Association is uniquely able to not only provide solutions for individual questions but is also able to answer the complex questions raised by science, society and industry, and to develop the appropriate systems solutions.

Funding programmes

Programme-oriented funding represents the core of the reform. This means two things: Focusing the scientific work on research programmes and consequently restructuring the financing. Scientific research work at the Helmholtz Centres is largely paid for from tax revenue. This money used to go direct to the centres. The reform will distribute these financial resources on the basis of a new principle: Funding now goes to scientific programmes rather than to the centres.

This support policy is based on two guiding principles:

- * Cooperation across institutional and disciplinary borders
- * Competition for research funds.

The research programmes with which, generally, several Helmholtz Centres will apply for funding have been assigned to the six major research fields of the Helmholtz Association.

International cooperation funding options and in particular within the BS region

Helmholtz Association has no regional focus Funding. The programmes are focusing the scientific work on research programmes and consequently restructuring the financing. Scientific research work at the Helmholtz Centres is largely paid for from tax revenue. This money used to go direct to the centres. The reform will distribute these financial resources on the basis of a new principle: Funding now goes to scientific programmes rather than to the centres.

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COUNTRY: GREECE

Part A: Main players in the R&D system: list of PO and PM and policy makers

The main entity engaged in drawing up and implementing R&D policies in Greece is the General Secretariat for Research and Technology (GSRT), which until October 2009 functioned under the Ministry of Development. After the national elections on the 4th October 2009, in the light of reforming the governmental policies, the Hellenic Ministry of Development has been restructured and its agencies and competences have been incorporated in other Ministries. Under the new circumstances GSRT is currently under the auspices of the Ministry of Education, Life Long Learning and Religious Affairs. The Ministry of Education, Life Long Learning and Religious Affairs is also responsible for research organisations in the universities. The GSRT coordinates research projects funded by structural funds from the European Union. As regards developing policies, it is backed by the National Council for Research and Technology and other joint bodies (chambers of commerce, Federation of Greek Industries, etc.).

The Hellenic Ministry of Development, now restructured, was responsible for issues relating to industry, energy, commerce and tourism. In this context, GSRT coordinated all research initiatives and particularly R&D projects funded by the 3rd Community Support Framework (3rd CSF 2000-2006), and supervised the research centres performing approximately 20% of the national R&D effort. The principal authority for the entire 3rd CSF negotiation was the Ministry of Economy and Finance. Other ministries involved in R&D projects are the Ministries of Agriculture and National Defence monitoring R&D issues in the agricultural sector and the defence sector, respectively.

The public research centres, the higher education institutions and businesses are the bodies which implement R&D projects in Greece. The majority of public research centres are monitored by the General Secretariat for Research and Technology, while there are some monitored by other ministries. The GSRT supervises 16 research bodies and 15 technological bodies, including 6 industrial R&D institutions operating as business firms. Other government R&D bodies are the National Foundation for Agricultural Research (NAGREF), which comes under the Ministry of Agriculture and the Research and Technology Centre for National Defence, which comes under the Ministry of National Defence.

Higher Education Institutions (universities, technological educational institutes and university research institutes) come under the Ministry of Education, Life long Learning and Religious Affairs and account for the greater part of research activity, given that most Greek researchers work within them.

Research activity is being developed in various businesses, industries, etc., especially in the information technology and communications sectors. It should be noted, however, that private funding of R&D is extremely scarce.

Part B: Overview of most important PO and PMs: The General Secretariat for Research and Technology (GSRT)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The General Secretariat for Research and Technology (www.gsrt.gr) :

• Supports through its programmes, the research activities of both the country's scientific research institutes and those of its productive industry, focussing on areas that are important for the national economy and for the improvement of the quality of life.









- Promotes the transfer and dissemination of advanced technologies throughout the country's
 productive sector, thus ensuring early utilisation of the results of research activity.
- Contributes to the reinforcement of the country's research manpower.
- Represents Greece in relevant institutions of the European Union, thus bringing the country's research and technology activities into line with the requirements of the international community.
- Promotes cooperation with other countries and international organisations on research and technology issues.
- Establishes new institutes and technological centres in support of sectors of high priority for the development of the Greek economy.
- Supervises underwrites the fixed costs of, and otherwise provides support for 21 of the country's best-known research and technological centres.
- Supports the dissemination of research and technology information throughout the country and internationally by means of advanced IT systems and networks.
- Encourages activities aimed at raising awareness of the general public about research and technology issues.

Thus, the GSRT supports the following strategic priorities of R&T:

- Increasing the demand for new knowledge and research results in Greece
- · Reorganization of the research system and provision of knowledge in Greece
- "Freeing-up" the Greek research system and opening it further to the international field
- Development and Technological infrastructure in the context of a policy for Science and Technology
- Thematic / Sector priorities for a policy on Science and Technology
- Qualification of goals

International cooperation funding options and in particular within the BS region

- The GSRT has programmes/funds targeting countries from the BS region. They are transposed in bilateral cooperation agreements. Concerning the BS region GSRT has just activated the bilateral S&T agreement with Turkey (see relevant fact sheet).
- As internationalisation of S&T is considered a major factor for a knowledge based society, . Greece through GSRT is enhancing the international S&T cooperation and, in particular, the cooperation in Europe. To this end, all Greece's state funded programmes are scheduled to be open to international cooperation, while specific programmes for international S&T cooperation are also foreseen. In this context, a regional programme with third country groups like those of Southeast European, the Mediterranean and the Black Sea countries, similar to the INCO programme, under the FP6 is in the process of preparation.
- The GSRT has a significant experience in ERA NETs finalized with a Joint Call for proposals. It is
 worth mentioning SEE-ERA.NET which generated SEE-ERA.NET PLUS currently ongoing. A SEEERA.NET PLUS call has recently been opened and the budget allocated by GSRT to this call is
 300.000 EUR.
- The GSRT is strongly involved in the development of international cooperation and actions on









integration into ERA, in particular through the FP7 projects I-SEE-MOB "Inter-sectoral mobility of researchers in the Southern Eastern Europe" (GSRT is the coordinator), SEERA-EI "Southern Eastern European Research Area for e-infrastructures" and WBC-INCO.NET "Co-ordination of Research Policies with the Western Balkan Countries".

International Cooperation in R&D with countries from BS Region

Target Country	Duration	Details	Main Obstacles
Armenia	S&T agreement 31.03.1993	Never activated ¹²	Limited funding, Lack of information on financial tools
Bulgaria	S&T agreement 25.06.1976	Active, last protocol 2004-2006	
Georgia	S&T agreement 28.05.1997	Never activated	Limited funding, Lack of information on financial tools
Moldova	S&T agreement 15.3.1999	Never activated	Limited funding, Lack of information on financial tools
Romania	S&T agreement 31.08.1994	Active, last protocol 2006-2008	
Turkey	S&T agreement 06.04.2001	Active, last protocol 2009-2011	
Ukraine	S&T agreement 28.05.1993	Active, last protocol 2005-2007	

Programme setting-up

The bilateral programmes can only exist within a larger and previous frame, the bilateral agreement between the Governments of the two countries, through their Ministries of Foreign Affairs. The bilateral S&T agreements of Greece are defined by the GSRT- International S&T Cooperation Directorate. Once a protocol is signed, it must also be approved by the Ministry of Foreign Affairs and the House of Parliament and then the call can be launched. Usually, the protocol is active for two consecutive years and it provides the scientific fields of cooperation, the number of projects/mobilities, the procedures for submitting, the deadlines, the persons in charge, etc. Within an S&T agreement an infinite number of protocols can be issued, depending on the success rate of the previous ones and the available funds of the two countries.

Aim and scope of the programmes

Strengthening the bilateral S&T cooperation.

Funded Activities

¹² The activation means that a call is issued and a number of projects are funded within a 2-3 years period.







All bilateral agreements support mobility of researchers on the condition that such mobility is within the framework of a concrete research project.

Beneficiaries

Public Research centres, Universities, Enterprises.

Thematic priorities		
 Mathematics X Informatics, Information Technology, Communication Technology Physics, Physical Technologies X Materials, Chemistry, Chemical Technologies X Biology and Biotechnology X Medicine 	 X Geosciences, Climate Research, Environmental Research and Technologies X Energy, Energy Technologies X Engineering Aeronautics, Space X Economics, Social Sciences, Humanities M depending on each Work Programme, but most of the fields mentioned above are covered. Thematically open - no particular priority 	

Additional Comments:

✓ The thematic priorities are determined within the single calls (in the execution protocols).

Funding

Country	Notes	Budget in the last protocol
Armenia	Never activated	
Bulgaria	Active 2004-2006	235.000 euros
Georgia	Never activated	
Moldova	Never activated,	
Romania	Active 2006-2008	370.000 euros
Turkey	Active 2009-2011	300.000 euros
Ukraine	Active 2005-2007	170.000 euros

Evaluation procedures

The evaluation procedure is carried in two stages: a national separate evaluation followed by a joint bilateral final evaluation.









Selection criteria (max. 400 characters)

Scientific relevance of the project (methodology, originality and innovation, scientific qualifications of the proposers);

- Quality of the documentation and presentation of the project;
- Research infrastructures adequacy;
- Need for the bi-lateral cooperation and the roles of the participating research units;
- Potential for creation of R&D collaborations between the two countries;
- Exploitation and dissemination of research results

The following are optional criteria, which influence positively the evaluation:

- Participation of more than 2 research centres or universities in the project, as well as the participation of enterprises and industries (also from third countries);
- Involvement in other multilateral and European programmes, in particular in the 7th FP of the EC.

International cooperation options

The mobility of researchers or the projects funded under these bilateral programmes allow for participation of third-country organisations (which will not be funded under a specific bilateral agreement). Participation of third-country organisations (or of additional organisations from the two countries) is evaluated positively.









COUNTRY: Italy

Part A: Main players in the R&D system: list of PO and PM and policy makers

The main target setting instrument for RTD investments in Italy is the National Research Plan, which is being renewed every 3 years. Research policies are discussed and planned at a very high level in an interministerial committee called CIPE (Inter-ministerial Committee for Economic Planning), which approves the National Research Plan. The resources to implement the research policies set in the National Research Plan are distributed to various ministries annually through the annual State financial law, approved by the Parliament each December. The basic rules of programmes and funds introduced by the annual State financial Law or by the National Research Plan are defined by subsequent high-level laws (usually on a governmental or inter-ministerial level), while the concrete rules for fund distribution (e.g., calls and detailed programme rules) are defined by the corresponding programme owner and programme managment agencies (ministries or regions).

The **R&D policies** and their implementations are centralized into two ministers (Programme Owners):

- **MIUR Ministry of Education, University and Research**, in charge of universities and public research organizations, which is concerned with basic and applied/industrial research.
- Ministry of Economic Development (MSE), which is mainly concerned with Industrial precompetitive R&D policy.

Other actors playing a significant role in policy definition and implementation, concerning specific **thematic fields** are:

- Health ministry and its ISS High Institute of Health
- Ministry for Agriculture
- Ministry for Cultural Heritage
- Ministry for Environment
- Ministry for Public Administration and Innovation.

The regions in Italy are also policy makers and programme owners on **regional basis**. For example, they define the Regional Operational Programme in which they can decide how to distribute European structural funds.

The **international cooperation** of Italy is mainly under the Ministry of Foreign affairs (MAE), which together with MIUR is implementing bi-lateral agreements in S&T (development projects in different countries, according to its geographical priorities).

As far as **international R&D** is concern, MAE participates in initiatives concerning the Trieste area, where there is a well-established network of international research centres, and which is the main location of the **Central European Initiative (CEI)**.

In addition, many Italian universities (in collaboration with MAE) have defined international agreements with other countries, and major research players (examples: ENEA international grants, CNR bilateral agreements, etc.).









Part B: Overview of most important PO and PMs

The following public Programme Owners will be described in more detail in this report:

1. MIUR: Ministry of Education, University and Research (national programmes and funds for basic and applied research)

- 2. MAE: Ministry of Foreign Affairs (bilateral S&T agreements)
- 3. MSE: Ministry of Economic Development (industrial innovation and technology transfer)
- 4. CEI: Central European Initiative (S&T networks).

MIUR: Ministry of Education, University and Research

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The Ministry of Education, University and Research (MIUR) has the major role in fulfilling activities to the Italian National Research system. One of its main roles is the determining R&D and education policy and the co-funding of the scientific and technological research in Italy. It plays a triple role: R&D Policy Maker, R&D Programme Owner, R&D Programme Manager.

- **R&D Policy Maker:** MIUR is the major R&D policy maker in Italy, playing the coordination role in R&D policies on national level, within CIPE and within the National Research Plan.
- **R&D Programme Owner:** MIUR is assigned annually funds from the Italian government in order to implement the research policies set up in the National Research Plan.
- **Programme Manager:** at present MIUR is managing directly the programmes/funds owned by it¹³. It often makes use of external experts, especially regarding scientific or financial matters within its programme management functions.

International cooperation funding options: programme setting-up and mechanisms for opening of programmes

MIUR manages the following national funds and corresponding programmes:

- 1. FAR: Applied Research Fund
- 2. FIRB: Basic research fund
- 3. PRIN: research projects of national interest of the Italian Universities.

The first two programmes could be of interest for the project BS.ERA-NET: FAR has specific mechanisms for funding the Italian participation in international projects, while FIRB co-funds strategic scientific projects under the bi-lateral programmes of Italy (see description of the Ministry of Foreign Affairs for details).

General mechanisms for programme-setting up by MIUR

The general mechanisms for programme setting-up by MIUR follow the following scheme:

1) Funds are defined by the annual state financial law; the same law determines the budget allocation for new and existing funds.

¹³ In the past, programme management has been implemented by agencies or major research organizations.









- 2) The macro-rules for the fund allocation are defined (these correspond to programme definition in the context of the BS.ERA-NET project). This is done on at least inter-ministerial level (usually MIUR pays significant part in the programme definition).
- 3) The detailed rules for access to funding (such as rules of competitive calls, or rules for automatic allocation of funds) as well as the fund (programme) management procedures are defined by subsequent regulation by MIUR (in general such regulation requires approval by the state council and formal control check, which require additional time).
- 4) Each call or specific destination of funds under the above macro- and micro-regulation is defined by MIUR using quicker procedures.

Mechanisms for opening of national R&D programmes for international cooperation

The fourth step in the general programme setting-up procedure by MIUR can be used in order to open a programme managed by MIUR for international cooperation. In particular, the programmes FAR and FIRB can fund the Italian participation in international projects, according to the macro-rules defining the allocation of funds.

In particular, the FAR programme has been opened according to the mechanism described above for funding the art. 169 programmes AAL (Ambient Assistant Living; 4MIn for the call in 2009) and Eurostarts (8MIn for the call in 2009).

The FIRB programme has been analyzed for opening in the FP6 AirTN-ERA Net and has been opened in MATERA + project. It is also co-funding projects under the bi-lateral agreements of Italy.

MSE: Ministry of Economic Development

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The **Ministry of Economic Development (MSE)** is responsible for the promotion of production activities and manages programmes to foster enterprises' growth and competitiveness. MSE is a policy maker and manages funds dedicated to industrial innovation, pre-competitive research and technology transfer.

In particular, it manages:

- the Fund for Technological Innovation (FIT), which supports pre-competitive development projects
- "Industry 2015", a comprehensive industrial policy programme conceived to drive technology innovation in 5 strategic areas strongly impacting on national industrial development (energy efficiency, sustainable mobility, life technologies, "made in Italy" and cultural heritage).
- the National Operative Programme for Research and Competitiveness in Convergence Objective Regions 2007-2013. MSE is delegated by MIUR to manage innovation-related actions in the Italian Regions falling under the convergence objective (Calabria, Campania, Apulia and Sicily).

The Ministry is supported in the implementation of some of its measures by the **Institute for Industrial Promotion (IPI)**. IPI is the national technical agency assisting the Ministry of Economic Development in the planning, definition and implementation of policies and programmes in support of development, innovation, and competitiveness of the Italian industrial system. To this regards, in addition to technical support provided by IPI for the above mentioned MSE R&D programmes, IPI:

- manages the Italian Network for Innovation and Technology Transfer to Enterprises (RIDITT), an initiative promoted by the Italian Ministry of Economic Development since 2003, aimed at improving the competitiveness of the productive system by strengthening and integrating the available supply of services for innovation.
- participates with the Ministry of Economic Development, in the EUROTRANS-BIO and CORNET projects (FP7, ERANET scheme), aimed at strengthening transnational R&D collaboration in the field among programmes addressed to biotechnology and collective research.









hosts the secretariat of the International Network for SMEs (INSME), a non profit Association open to international membership, linking policy makers and intermediaries worldwide promoting innovation and technology transfer.

International cooperation funding options and in particular within the BS region: programme setting-up and mechanisms for opening of programmes

The Ministry of Economic Development participates jointly with the Institute for Industrial Promotion as in EUROTRANS-BIO and CORNET, two ERA-NET projects funded under FP7. The MSE participation in the above initiative happens through the following national funding programmes:

- 1. FIT: the Fund for Technological Innovation, which supports pre-competitive development projects (opened in EUROTRANS-BIO); RIDITT: the Italian Network for Innovation and Technology Transfer to Enterprises (opened in
- 2 CORNET).

General mechanisms for programme-setting up by MSE

The procedure through which the national programme RIDITT is funded by the MSE (and thus allowing the launch of national, and transnational, calls) is the following:

- 1) the Inter-ministerial Committee for Economic Programming (CIPE), a governmental policy making committee, decides on the allocation of financial resources to the Ministry of Economic Development, for funding the RIDITT programme as well as for funding technology transfer initiatives for SMEs;
- 2) the MSE sets by a decree the RIDITT measures and the share of funding for these measures;
- 3) the MSE allocates the funds approved by CIPE for the implementation of RIDITT programme;
- IPI, as RIDITT programme manager, supports the MSE in the implementation of the RIDITT 4) programme.

Mechanisms for opening of national R&D programmes for international cooperation in ERA-NET Schemes

The participation of MSE and IPI in EUROTRANS-BIO and CORNET has been possible thanks to the opening of FIT (for EUROTRANS-BIO) and RIDITT (for CORNET) programmes to transnational rules set by the consortia of the above ERA-NET projects.

1) EUROTRANS-BIO ERA-NET (ETB)

EUROTRANS-BIO brings together 12 European member states and regions in order to support transnational R&D private/private and private/public co-operations between biotech companies, especially SMEs, and academic labs by coordinating their national or regional public funding programs. ETB Initiative is lead by the Austrian BMWFJ and includes, among its partners, also the German Federal Ministry of Education and Research.

In the frame of EUROTRANS-BIO countries/regions involved in the initiative launch common calls for industry-driven trans-national R&D projects in the entire biotech sector (green, white, red and blue biotechnology). In order to coordinate national and regional programs, which are responsible for call operations and project funding, ETB is supported by the European Commission.

From 2004 to 2009 ETB has launched four joint calls, thereby successfully coordinating the programs of up to nine ETB partners, and recommended 81 cooperative R&D&I projects for funding. Annual joint calls will keep to be launched until 2012.

ETB consortium is working to deepen the level of integration among the participating programmes and in order to define and establish a sustainable joint programme for biotechnology R&D&I project cooperation of SMEs that should be able to run after 2012 only based on the partner countries/regions agencies without the EC support.









To the aim of increasing its reach and ensure sustainability, ETB pursuits the enlargement of its consortium towards countries with a strong as well as emerging biotech industry and funding programmes addressed to R&D in the biotech sector. Special interest is put on CEE and SEE Countries.

The Italian Ministry of Economic Development, and IPI, involvement of in ETB started in 2005, after the launch of the first project phase (2004-2008). At that time, after having assessed the relevance of ETB towards Italian R&D objectives as for the biotechnology sector, as well as the availability of a suitable national funding programme, the MSE decided to participate in the project with **the Fund for Technological Innovation (FIT)**, while IPI acted as "programme manager", by providing a comprehensive support to the MSE in the participation to the overall ETB strategic and operative activities, among which the joint calls.

FIT is a national R&D programme supporting small, medium and large enterprises as well as research centres to undertake experimental development activities, including not predominant industrial research activities. It covers several sectors (industry, handicraft, commerce, tourism and other services) and is applicable to beneficiaries in the whole national territory.

In that phase, the MSE was involved in ETB project as an associate partner, not as a contractor with the EC. While excluding the possibility to claim costs to EC, associate partners have the advantage to participate in ETB joint calls and to test the consistency of their national programme procedures with the ETB transnational calls rules. The MSE funded its participation in 2 calls, making available 9 M Euro of national funding from FIT.

Since 2009, when the second phase of the ETB project was funded by the EC, MSE and IPI play the role of full partners within the initiative as contractors with the EC.

The MSE, with the operative IPI support, has participated in the 4° ETB joint call with a budget of 5 M Euro. As from 1^{st} October 2009, it is taking part as well in the 5° joint call with other 5 M Euro.

Legal basis of the Fund for Technological Innovation (FIT): Law 46/82, Decree of the Ministry of Industry, Commerce and Handicraft 16th January, 2001, Community discipline on State Aid to research, development and innovation (GU C 323, 30.12.2006), Decree of the Ministry of Economic Development 10th July, 2008.

Further information: www.ipi.it ; www.eurotransbio.net

2) CORNET ERA-NET

The MSE participates also in **CORNET** (Collective Research Networking), an ERA-NET project aimed at implementing information exchange and collaboration among national and regional programmes for **collective research**. Collective research is defined as pre-competitive R&D performed to the benefit of a broad target group of enterprises, and is typically initiated by groupings of enterprise with common interests, like clusters, trade associations, federations, with the involvement of universities and specialised research centres.

The CORNET consortium is composed of 21 ministries and agencies in 17 EU countries and regions. It is led by AIF, German Federation of Industrial Research Associations and include among its partners also TUBITAK.

The aim of CORNET is the definition of an institutional framework ensuring its sustainability in the long term, with or without the EC financial support. As a part of the process towards sustainability, CORNET is strongly committed to expand the existing consortium to additional regions and countries, providing that they are eligible for FP7 participation and hold, or intend to set, an R&D programme addressed to SMEs associations.

Since 2005 CORNET has launched 8 joint calls for the selection of trans-national collective R&D projects. The European Commission is not involved in the definition or in the preparation of the joint calls, nor in the evaluation and financing of the approved projects. Approximately 40 project have been selected for funding up to now.









Italy is represented in CORNET by the Ministry of Economic Development and the Institute for Industrial Promotion, opening the funds of the Italian Network for Innovation and Technology Transfer to Enterprises (RIDITT).

The RIDITT programme finances, among other, non-profit SMEs associations undertaking pre-competitive R&D projects in collaboration with universities and other public or private research organizations. The RIDITT financing covers research activities in all sectors, but is aimed specifically to support economically depressed areas of the Italian territory. Such areas correspond to those eligible for community structural funds – Ob.1, ob.2 and transitional support – in the programming phase 2000-2006.

The MSE has been participating in CORNET as a partner since 2005, when RIDITT had funded one national call. Since 2005 MSE, with the support of IPI, has participated in 2 CORNET joint calls, the 3° call (2007) and the 8° call (2009). The budget made available by MSE for the participation in the above calls has been respectively of 2 M Euro and 875.000 Euro.

Legal basis for RIDITT: CIPE resolution n. 1 del 22/03/06; Decree of the Ministry of Economic Development 14/09/06; Decree of the Ministry of Economic Development 26/07/2007; Decree of the Ministry of Economic Development 29/07/2009.

For further information: www.riditt.it; www.cornet-era.net

Lessons learned: opening of national programmes in ERA-NET schemes

According to the ERA-NET scheme, the cooperation among R&D programmes of different countries/regions entails an increasing alignment level of the corresponding rules at national and regional level. Such integration covers the scientific, management and financial aspects of the programmes.

Regarding the EUROTRANS-BIO and CORNET ERA-NETs, the main efforts that have been needed by MSE concern mainly the alignment of the national call management rules with those implemented at transnational level (i.e. scheduling the launch of the call, evaluation process, time-to-contract, etc.). In both cases, the operational support of the "programme manager" (IPI) to the MSE has been very helpful in order to implement the cooperation with the other participating R&D programmes.

It has to be pointed out that the exchange of knowledge and experience with the ministries and agencies of the EU countries/regions participating in EUROTRANS-BIO and CORNET consortia, turned out to be a precious learning tool for the MSE. They have been a source of hints for improvements in and a test bed for experimenting new programme procedures.

MAE: Ministry of Foreign Affairs

The ministry of Foreign Affairs is defining the bi-lateral S&T agreements of Italy (in cooperation with MIUR and in accordance with the National Research Plan). It plays the roles of Programme Owner (definition of bi-lateral agreements) and Programme Manager (implementation of bi-lateral agreements through executive protocols).

The ministry is organized into General Directions with specific competencies, which are further articulated into specific offices. The Bi-lateral agreements are defined by the geographic General Directions (for the BS Region, this is DG Europe), while their implementation and corresponding call management is done by the DG Cultural Promotion.

International cooperation funding options and in particular within the BS region

MAE has stipulated bi-lateral agreements with all BS countries (including Russia). Such agreements correspond to a programme (in the context of BS.ERA-NET) and include among others the macro-rules of the bilateral S&T cooperation. The agreements are made operational through so-called executive protocols, each of which has a validity of 2 or 3 years. The executive protocol specifies the procedural rules for funding in addition to the general principles outlined in the bi-lateral agreements, as well as the projects selected for funding with the corresponding funding amounts for each of them. The programme setting up process can be summarized as follows:

1) Stipulation of bi-lateral agreement;









- 2) Ratification and assignment of initial budget (as well as mechanisms for budget allocation for consecutive periods)
- 3) Activation of the agreement by definition of procedural rules for funding and allocation of finances among selected projects (on a two-year basis).

MAE has bi-lateral agreements with all BS countries, but not all of them are being active in the moment (see section C for more details). The activation of agreements and budget allocation to them depends on concrete interest in collaboration expressed by Italian research organizations.

International Cooperation in R&D with countries from BS Region

Country	Horizontal Priorities	Thematic Priorities	Obstacles for S&T cooperation
Armenia	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Archaeology; Thematically open	Agreement has not been activated
Azerbaijan	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Archaeology; Thematically open	Agreement has not been activated
Bulgaria	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Thematically open	Agreement has not been activated
Georgia	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Archaeology	Political problems in re- activation of the agreement
Greece	Not available	Not available	
Moldova	Technology Transfer and Industrial Innovation	(See programme template below)	Agreement has not been activated
Romania	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Exact Sciences, Applied Sciences	
Turkey	Basic Research, Industrial Research, Technology Transfer and Industrial Innovation	Thematically open	







Ukraine	Technology Transfer and Industrial Innovation	(See fact sheet)	
Russia	Not available	Not available	

CEI: Central European Initiative

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The Central European Initiative (CEI) is an intergovernmental forum for political, economic and cultural cooperation among and between its Member States: Albania, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Italy, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Ukraine.

Since its inception, the CEI has represented a platform for intensified multilateral cooperation among its Member States, which is aimed at achieving cohesion in areas of mutual interest and at assisting its non- EU member countries to consolidate their economic and social development. Once predominantly oriented towards policy dialogue, the CEI has progressively placed economic growth and human development as additional pillars of cooperation with a focus on capacity building, sharing of experience and know-how transfer.

The CEI operates through a number of structures at governmental level:

- the annual <u>Meeting of the Heads of Government (CEI Summit);</u>
- the annual <u>Meeting of the Ministers of Foreign Affairs;</u>
- the Committee of National Coordinators (CNC);
- the Chairmanship of the CEI, i.e. the <u>CEI Presidency</u> which rotates annually and is currently held by Romania;
- the CEI Executive Secretariat and its Secretary General;
- the <u>Secretariat for CEI Projects</u> (CEI/EBRD Secretariat).

The CEI Summit, gathering the Prime Ministers from the 18 CEI Member States, decides on the political and economic orientation for CEI co-operation and gives visibility to the organization. Decisions on organizational matters are taken at the MFA Meetings whereas the CNC, convened on a bi-monthly basis and composed of representatives from Foreign Ministries of all Member States, is the key body responsible for the management and the implementation of CEI programmes and projects.

The above-mentioned structures are supported by the CEI Executive Secretariat and the Secretariat for CEI Projects. The former, established in 1996, is based in Trieste, Italy and operates with the legal status of an international organization; the latter has been operative at the European Bank for Reconstruction and Development (EBRD) in London since 1991 and holds offices either in Trieste and London. Both Secretariats function as organizational centers of the Initiative. They prepare the documentation needed for decisions taken by Prime and Foreign Ministers and by the CNC. Furthermore, they collect, evaluate and follow-up projects co-financed through the CEI funds.

In line with the priorities envisaged by its Plan of Action, the CEI operates in the following areas:

- Climate, Environment and Sustainable Energy;
- Enterprise Development including Tourism;









- Human Resource Development;
- Information Society and Media;
- Intercultural Cooperation including Minorities;
- Multimodal Transport;
- Science and Technology;
- Sustainable Agriculture;
- Interregional and Cross-Border Cooperation.

CEI Science & Technology Network

The CEI Science & Technology Network (S&TN), launched at the beginning of 2004, is composed of six Trieste - based research centers, the so-called Lead Institutions, and their partners in the CEI region. With the aim of strengthening scientific and technological cooperation, the CEI S&TN provides financial support for the organization of seminars, conferences, workshops and training courses. Young scientists from CEI countries, particularly non-EU ones, are offered the opportunity to attend such activities and carry out scientific research on various topics in one of the six Lead Institutions.

The CEI S&TN operates through the following Trieste-based research centers:

- International Centre for Genetic Engineering and Biotechnology (ICGEB <u>www.icgeb.org</u>)
- International Centre for Science and High Technology of UNIDO (ICS-UNIDO www.ics.trieste.it)
- International Centre for Theoretical Physics ABDUS SALAM (ICTP <u>www.ictp.it</u>)
- International School for Advanced Studies (SISSA www.sissa.it)
- Synchrotron ELETTRA (www.elettra.trieste.it)
- Consortium Area Science Park (www.area.trieste.it).

CEI University Network

The CEI University Network aims at facilitating cooperation among universities and other institutions of higher learning by supporting teachers' and students' mobility through the implementation of Joint Programmes, such as PhDs and Master's courses, summer schools, seminars and workshops. All CEI Member States are represented within the Network by at least one university. Priority areas of cooperation are: economics, infrastructure and transport, regional development and urban planning, public administration and governance models, ICT and environment.

The coordinating universities from countries belonging to the BS.ERA-NET consortium are:

- Bulgaria: University of National and World Economy (Sofia);
- Italy: University of Trieste;
- Moldova: Academy of Economic Studies of Moldova (Chisinau);
- Romania: University of Bucharest;
- Ukraine: Odessa National Maritime University.

CEI Funding









The first and most conspicuous CEI fund is the <u>CEI Trust Fund at the EBRD</u>, contributed entirely by Italy and managed by the Secretariat for CEI Projects. Since its inception in 1991, the CEI Trust Fund has offered funding mainly for Technical Cooperation (TC) projects, i.e. grant-type assistance in support of specific components of a project (management training, feasibility study or pre-loan audits). It is considered an invaluable channel to mobilise investment capital and expertise in the countries of operation. The Fund has been co-financing also a few other CEI instruments and activities, such as Know-How Exchange Programme (KEP) projects and CEI Summit Economic Forum.

In the period from 1993 to end-2008, 83 Technical Cooperation assignments were financed for a total of 17.362.751 EUR. This amount has generated a cumulative investment link of 2.393.799.322 EUR.

Italian resources also finance the activities of the Science and Technology Network and those of the University Network.

Moreover, all CEI member states contribute to the <u>CEI Co-operation Fund</u>, a funding instrument meant to support small–scale multilateral projects taking the form of seminars, workshops, training courses and similar events.

As to external funding, since 2004 the CEI Executive Secretariat has been promoting CEI participation in EU programmes. The Secretariat takes part in EU projects as both partner and lead partner in order to attract financial resources necessary to attain its goals and priorities.

International cooperation funding options and in particular within the BS region

Multi-lateral programmes of the CEI in the field of Science and Technology

The CEI has at disposal a number of funds and instruments, out of which some focused on funding activities in the field of Science and Technology.

These are basically:

- the CEI Science and Technology Network;
- the CEI Research Fellowship Programme (see below for further details).

Other CEI programmes which occasionally fund projects in the field of R&D are:

- the CEI Cooperation Fund (for multilateral projects);
- the Know-How Exchange Programme KEP (for bilateral projects focused on know-how transfer from EU CEI Member States to non-EU CEI Member States);
- the CEI Special Fund on Climate and Environment Protection CEI Climate Fund.

All these programmes are managed by the CEI Executive Secretariat and by the Secretariat for CEI Projects in Trieste.

International Cooperation in R&D with countries from BS Region

Country	Horizontal Priorities	Thematic Priorities
Bulgaria,	Basic Research,	Biotechnology,
Moldova,	Applied Research,	Environment and
Romania,	Technology Transfer,	Climate Change,
Ukraine	Innovation	Health, Physics,
		Mathematics







Cooperation between the CEI and BSEC

The Central European Initiative (CEI) and the Black Sea Economic Cooperation (BSEC) have 6 common members (Albania, Bulgaria, Moldova, Romania, Serbia and Ukraine) and share a significant number of priority areas of work such as agriculture, environmental protection, energy, transport, SMEs, tourism, science and technology culture, education.

On the occasion of several bilateral meetings, the two organisations have identified various possible areas of interaction: environment, energy, transport, agriculture and science and technology.

CEI and BSEC are also discussing the possibility of signing a Memorandum of Understanding to better define their co-operation.

Part C: Programmes

MIUR: FAR – Applied Research Fund

Policy Maker:

CIPE, MIUR: National Research Plan 2010 – 2013 (definition of the main actions for industrial research on short-mid period)

Italian Government: Italian low regarding the state aid to the industry and support for S&T research of competence of MIUR (Legislative decree n. 297 from 1999).

Programme Owner:

MIUR (the rules of the Industrial research programme are defined by MIUR in the Ministerial decree n. 593 from 2000).

Programme Manager:

MIUR; The financial management is delegated to a number of banks on the territory of Italy.

Web page:

http://www.miur.it

Programme type: 🛛 national	unilateral	bilateral	🗌 multilateral

Involved Countries:

Italy

Programme start, end:

2001-2010

Programme setting-up

The strategic priorities and amount of funding for applied research projects are decided on state level, by the National Research Plan, by the annual financial low and by the establishment of funds (programmes) which implement the National Research Plan.

MIUR, defines the rules for the programmes/funds managed by it. In particular, MIUR has defined the rules regarding applied research projects in the Ministerial Decree n. 593 from 2000). This decree specifies also a procedure for programme opening in an international context (art. 7, DM 593/2000).

The general procedure for programme opening concerns thematically opened international projects, which have been already approved on international level. MIUR can define with ministerial acts the exact procedures and budgets (from FAR) to allocate in order to finance the Italian participation in such projects.









The funding for such projects is distributed not in conformance to open national calls, but according to procedures for continuous proposal submission.

The FAR fund has been already opened for funding the Italian participation of JTI ARTEMIS and ENIAC, from art. 169 AAL and EUROSTARS.

Aim and scope of the programme

The programme for Industrial Research (FAR) puts together a number of fragmented and dispersed measures, which existed before for the support of industrial research. The funding within this programme is performed by three main means:

- Open calls issued by MIUR (Top-down approach), in accordance with the strategic thematic priorities in the National Research Plan.
- 2) Continuous submission of project proposals on initiative of the proposers (bottom-up approach)
- Automatic procedures (in case of employment of researchers by SMEs, stipulating of research contracts by MIUR, etc.).

The objectives of this programme are related to strengthening the industrial research, by financing applied and experimental research. Experimental research activities are only considered in the case of validation of applied research results.

Funded Activities

- Applied/Industrial Research (projects)
- Experimental development (projects)
- Education and training
- · Employment of researchers, research contracts.

Beneficiaries

Legal entities on the territory of Italy of the following types:

- · Industrial enterprises producing goods and services;
- Transport enterprises
- Artisan enterprises
- Research centers and universities
- Consortia and associations
- Science and Technology Parks

Thematic priorities

 Mathematics Informatics, Information Technology, Communication Technology Physics, Physical Technologies Materials, Chemistry, Chemical Technologies Biology and Biotechnology 	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies Engineering Aeronautics, Space Economics, Social Sciences, Humanities
Medicine	Other (please specify)
	Thematically open - no particular







priority

Funding

Budget

Data not available

Funding Mechanism

Cost covering, concessional credits

Funds distribution mechanism

- Through open calls (top-down)
- Continuous submission of project proposals (bottom-up approach)

Evaluation procedures

The evaluation procedure is two-stage. In the case of internationally-oriented projects, it is 3 and more stages, the national evaluation procedure applies only after the project has passed the corresponding international procedure.

The first stage of the national procedure consists of separate technical and financial evaluation carried out by external evaluators. The second stage is carried out by ministerial experts (from MIUR and other ministries). The table below summarises the national evaluation procedure.

Stages	Evaluators	Selection of Evaluators
2 stage procedure		
Technical Evaluation	One External Expert	Ministerial list of independent researchers
Financial Evaluation	Bank	List of associated banks
Proposal for funding (technical and financial evaluation)	Technical committee: 11 members	6 experts from MIUR 5 experts from 5 other ministries

Selection criteria

- Scientific and technical merits of proposal
- · Suitability of applicants and feasibility of the projects
- Requested budget
- National priorities
- Added value of international cooperation









• Market provision and investment return.

International cooperation options

• The open call projects and national projects with continuous submission encourage the participation of organisations from the EU by increasing the funding to the Italian participants.

• There is a generic procedure for continuous collection of internationally-oriented projects (art.7, DM n.593/2000) in the framework of international agreements of MIUR.

MAE: Bi-Lateral agreements of the Republic of Italy

Policy Maker:

CIPE, MIUR within the National Research Plan, Italian government, Ministry of Foreign Affairs

Programme Owner:

Ministry of Foreign Affairs (MAE), General Direction Europe (DG Europa) covering the Black-Sea countries. Other geographic areas are covered by the corresponding general directions.

Contact Person: Amb. Bova (General Director of DG Europa)

Programme Manager:

Ministry of Foreign Affairs (MAE), General Direction for Cultural promotion (DG Promozione Generale).

Contact Person: Barbara Bregato (head of Office 5 Bi-lateral scientific and cultural cooperation).

Web page:

www.esteri.it

	Programme type: national	unilateral	🛛 bilateral	multilateral
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Involved Countries:

A separate bi-lateral agreement with all BS-countries (including Russia).

Programme start, end:

Country	Duration
Armenia	2005 - unlimited
Azerbaijan	2006 – 2011 (renewed each 6 years)
Bulgaria	unlimited
Georgia	1999-unlimited
Greece	Data not available







Moldova	2000- unlimited (renewed each 6 years)
Rumania	unlimited
Turkey	2005-2009 (renewed annually)
Ukraine	unlimited
Russia	Data not available

Programme setting-up

The bi-lateral S&T agreements of Italy are defined by the corresponding General Direction from the MAE. For the Black-Sea countries, including Russia, this is the General Direction Europe. Such agreements define the basic principles and macro-rules of the bi-lateral S&T cooperation, such as aim and scope of the cooperation, the activities which will be funded, the programme management structure, the duration of the programme, sometimes thematic fields are determined etc.

In a consecutive step the agreements are confirmed by assigning annual budget to them (this can take a couple of years after the signing of the agreement). During ratification phase, the rules for subsequent budget allocation are specified as well, so that inactive agreements could be activated following more flexible procedures for budget allocation.

After the agreements are signed and ratified, they are activated through, the definition of an executive protocol, which defines the thematic priorities, the rules of a joint call, additional forms of collaboration, and the projects to be funded (selected according to the rules of the agreement and the joint call). The specific rules of each joint call are negotiated between MAE (General Direction for Cultural Promotion) and the corresponding party in the other country. The executive protocols have duration typically of 2 or 3 years, during which the projects approved for funding should be carried. The executive protocols are managed by the DG Cultural promotion (call management and programme management aspects).

Country	Current status of the agreement	Year of ratification of the agreement	Year of agreement
Armenia	Never activated	Not ratified	2003
Azerbaijan	Never activated	2006	2002
Bulgaria	Never activated	2007	2005
Georgia	Inactive since 2004 (update process idle)	1998	1997
Greece	Active	Data not available	Data not available
Moldova	Data not available	1999	1997







Rumania	Active	2003	2006
Turkey	Active	2005	2001
Ukraine	Active (in updating)	1999	1997
Russia	Active	?	?

Aim and scope of the programmes

Improving the mutual knowledge between the two countries, strengthening the bi-lateral S&T cooperation by the development of joint activities and joint participation in international initiatives.

Funded Activities

All bi-lateral agreements of Italy support **mobility of researchers** on the condition that such mobility is within the framework of a concrete **research project**. In addition **research projects (both basic and applied research)** are funded, on the condition that they are of particular importance (these projects are co-funded also by MIUR according to the rules of the FIRB programme).

Beneficiaries

On the Italian side: researchers from Italian public or private universities or research centres.

Thematic priorities

 Mathematics Informatics, Information Technology,	 Geosciences, Climate Research,
Communication Technology Physics, Physical Technologies Materials, Chemistry, Chemical	Environmental Research and
Technologies Biology and Biotechnology	Technologies Energy, Energy Technologies Engineering Aeronautics, Space Economics, Social Sciences, Humanities
Medicine	 ☐ Other (please specify) ☑ Thematically open - no particular priority

Additional Comments:

The thematic priorities are determined within the single calls (in the execution protocols).

Funding

Budget

Country	Annual budget
	(in Euro)







Armenia	no
Azerbaijan	257.030
Bulgaria	402.945
Georgia	310.000
Greece	?
Moldova	235.000
Rumania	561.550
Turkey	258.720
Ukraine	282.000
Russia	?

Funding Mechanism

S&T grants to researchers

Funds distribution mechanism

Ad-hoc calls (issued within the validity period of executive protocols, see programme setting-up mechanisms).

Evaluation procedures

The evaluation procedure is carried in two stages: a national evaluation followed by a joint evaluation.

Selection criteria (max. 400 characters)

- Scientific relevance of the project (methodology, originality and innovation, scientific qualifications of the proposers);
- Quality of the documentation and presentation of the project;
- Research infrastructures adequacy;
- Need for the bi-lateral cooperation and the roles of the participating research units;
- Potential for creation of R&D collaborations between the two countries;
- Exploitation and dissemination of research results

The following are optional criteria, which influence positively the evaluation:

- Participation of more than 2 research centres or universities in the project, as well as the
 participation of enterprises and industries (also from third countries);
- Additional financial resources from the proponents or from other organisations (e.g., research institutes, public and private organisations);
- Industrial impact of the results;
- Involvement in other multilateral and European programmes, in particular in the 7th FP of the EC.

International cooperation options







The mobility of researchers or the projects funded under these bi-lateral programmes allow for participation of third-country organisations (which will not be funded under a specific bi-lateral agreement). Participation of third-country organisations (or of additional organisations from the two countries) is evaluated positively.

CEI: Research Fellowship Programme (CERES)

Policy Maker

Central European Initiative

Programme Owner

CEI Executive Secretariat / EC (CERES is co-funded by the Seventh Framework Programme for Research and Technological Development)

Contact Person

Alessandro Lombardo (lombardo@cei-es.org)

Programme Manager

CEI Executive Secretariat

Web page

http://www.ceinet.org/CERES

Programme type: _____ national _____ unilateral _____ bilateral _____ X multilateral

Involved Countries

Albania, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Ukraine

Programme start, end

April 2009 – November 2012

Programme setting-up

The CEI Research Fellowship Programme was established in 2005 to allow CEI scientists to participate in events and carry out research at one of the 6 Lead Institutions of the CEI S&T Network (see above).

CERES is the natural evolution of the previous CEI Research Fellowship Programme: by merging EU resources with those of the CEI and of 5 programme partners, the CEI Research Fellowship Programme will be duly reinforced. CERES will envisage 30 incoming fellowships (12 months each) to be awarded to experienced researchers, i.e. post-docs, from CEI countries.

Aim and scope of the programmes

To strengthen mobility of researchers across the CEI area and contribute to the development of the CEI Member States in the field of R&D.

Funded Activities

Individual research projects.

Beneficiaries

Nationals from CEI countries with exception of Italy, holding a Ph.D. or at least 4 years of full-time research equivalent; priority given to female or younger candidates; priority to candidates from countries with low R&D intensity (R&D expenditure/GDP).









Thematic priorities

- X Mathematics
- X Informatics, Information Technology, Communication Technology
- X Physics, Physical Technologies
- X Materials, Chemistry, Chemical Technologies
- **X** Biology and Biotechnology
- X Medicine

Funding

Budget

Year	Annual budget (in Euro)
2009 – 2010	336.000
2010 – 2011	336.000
2011 - 2012 -	336.000

Funding Mechanism

Individual fellowships to researchers (duration 12 months).

Funds distribution mechanism

An yearly call for proposals issued in March - April.

Evaluation procedures

Proposals are assessed by a Selection Committee established ad hoc.

The composition, role and functioning of the CERES Selection Committee follows the "European Charter for Researchers and the Code of Conduct for their Recruitment". It is chaired by the CEI-ES in its capacity of Programme Coordinator and gather at least two representatives from the CEI-ES, one of whom being the CEI-ES Scientific Advisor, plus 2 delegates from each Programme Partner.

The CERES Selection Committee generally meets once per year further to the closure of each annual deadline.

Based on agreed eligibility criteria, decisions about the selection / rejection of a research project proposal are taken by consensus. Should consensus not be achievable, a simple majority vote will be used.



- X Geosciences, Climate Research, Environmental Research and Technologies
- X Engineering
- **X** Thematically open no particular priority







Through its Scientific Advisor, the CEI-ES, as Programme Coordinator and only institution not hosting fellows, has the last word on the selection process, should this be necessary to resolve potential conflicts of interest.

Eligibility criteria

- a) CERES fellowships are awarded to nationals from CEI Member States. Considering that the hosting research institutes are located in Italy, and taking into account that CERES supports incoming mobility, Italian nationals are not eligible.
- b) In line with the CEI role of bringing non-EU CEI Member States closer to the fulfilment of their EU aspirations, CERES pays special attention to candidates from countries with low R&D intensity (R&D expenditure / GDP).
- c) CERES Fellowships are awarded to "experienced researchers": "experienced researchers means: professional researchers: 1) already in possession of a doctoral degree, independently of the time taken to acquire it or 2) having at least 4 years of research experience (full-time equivalent) including the period of research training, after obtaining the degree which formally allow them to embark on a doctorate in the country in which the degree/diploma was obtained or in the country in which the research training is provided irrespective whether or not a doctorate was envisaged".
- d) Fluency in the English language.
- e) If two applications receive the same positive assessment, priority shall be given to the younger researcher.
- f) If two applications receive the same positive assessment, priority shall be given to proposals coming from women researchers.

CEI: Cooperation Fund

Policy Maker

Central European Initiative

Programme Owner

Central European Initiative

Programme Manager

CEI Executive Secretariat

Web page

http://www.ceinet.org

Programme type: D national	🗌 unilateral	🗌 bilateral	X multilateral
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Involved Countries

Albania, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Italy, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Ukraine.

Priority given to applications coming from non-EU CEI Member States.

Programme start, end

2002- on going

Programme setting-up

In order to facilitate the implementation of programmes and projects either organised or sponsored by the CEI, the Ministers of Foreign Affairs at their meeting held in Milan in June, 2001 decided upon the establishment of a CEI Co-operation Fund.









The CEI Co-operation Fund is to co-finance activities in various areas provided that at least 50% of the resources are available from another donor. Since its inception in 2002, the CEI Co-operation Fund has supported more than 600 Cooperation Activities in various CEI Member States.

Aim and scope of the programmes

Strengthening multilateral cooperation among CEI member states.

Funded Activities

Small-scale projects such as seminars, workshops, training courses.

Beneficiaries

All public and private bodies in CEI Member States, International organisations, regional bodies.

Thematic priorities

 Mathematics Informatics, Information Technology, Communication Technology Physics, Physical Technologies Materials, Chemistry, Chemical Technologies Biology and Biotechnology Medicine 	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies Engineering Aeronautics, Space Economics, Social Sciences, Humanities X Other (please specify):
	Energy;
	Enterprise Development including Tourism;
	Human Resource Development;
	Information Society and Media;
	Intercultural Cooperation including Minorities;
	Multimodal Transport;
	Science and Technology;
	Sustainable Agriculture;
	X Thematically open - no particular priority

Funding

Budget

	2007	2008	2009
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Total budget for Cooperation activities	668.543,00	631.543,00	680.383,00
S&T cooperation	65.565,0	72.030,0	N/A

Funding Mechanism

Financial contribution up to 50% of the project total cost.

Funds distribution mechanism

2 calls for proposals per year: by 1 February for implementation from July to December and by 1 September for implementation from January to June.

Evaluation procedures

Upon receipt of application the respective CEI Network of Focal Points will be invited to evaluate the proposed cooperation activity. The CEI network of Focal Points comprise a number of national experts, one per nation for each CEI area of cooperation (e.g. environment, energy, S&T, etc.). Focal Points provide the necessary expertise to evaluate CEI cooperation activities.

The applications with the result of the evaluation by the competent Network of Focal Point and a recommendation by the CEI Secretariat are then submitted to the Committee of CEI National Coordinators for approval. The CEI contribution authorised by the CNC is then disbursed,

normally in two instalments, as Advance and Final Payment. Both disbursements are subject to conditions set out in the CEI Rules for Allocation of Resources.

Stages 1 joint evalutation	Evaluators	Selection of Evaluators
Joint Evaluation	CEI Networks of Focal Points and CEI Executive Secretariat.	Focal points are designated by the respective governmental bodies of the CEI Member States in each of the areas of CEI activities

Selection criteria

- Compatibility with the CEI Plan of Action;
- Number of countries involved in the project;
- Preference given to participants from non EU CEI member states.

International cooperation options

International bodies can be beneficiaries.









Country: Republic of Moldova

Country name: Republic of Moldova

Population: approx. 3.6 mln

Area: 33843,5 km²

Capital: Chisinau

System of Government: Parliamentary Republic

Head of the Government: Vlad FILAT, appointed Prime Minister, by Presidential Decree No. 4-V of 25 September 2009, after a vote of confidence of the Parliament.

Science Minister: <u>Academician Gheorghe DUCA - President of the Academy of Sciences of</u> <u>Moldova</u> - The Academy of Sciences of Moldova is delegated with Government competences with the view to realization of state policy in the sphere of science and innovation and the president of ASM is a member of the Cabinet of Ministers of the Republic of Moldova.

Parliament: The Parliament of the Republic of Moldova (Parlamentul Republicii Moldova) is a unicameral assembly with 101 seats. Its members are elected by popular vote every 4 years. The parliament then elects a president, who functions as the head of state. The president appoints a prime minister as head of government who in turn assembles a cabinet, both subject to parliamentary approval. Speaker of the Parliament – Mihai GHIMPU, interim President of Moldova.

Administrative structure: Moldova is divided into thirty-two districts (raioane, singular raion); three municipalities (Balti, Chisinau, Tighina); and two autonomous regions (Gagauzia and Transnistria). The cities of Comrat and Tiraspol also have municipality status, however not as first-tier subdivisions of Moldova, but as parts of the regions of Gagauzia and Transnistria, respectively. The status of Transnistria is however under dispute. Although it is de jure part of Moldova and is recognized as such by the international community, Transnistria is not de facto under the control of the central government of Moldova. It is administered by an unrecognized breakaway authority under the name Pridnestrovian Moldovan Republic.

Geography: The Republic of Moldova lies in the Eastern part of Europe and occupies an area of 33,843.5 km². The capital of Moldova is Chisinau. On the North, East and South Moldova is surrounded by Ukraine, and on the West it is separated from Romania by the Prut River. The total length of the national boundaries is 1,389 km, including 939 km with Ukraine and 450 km with Romania. The most northerly point is the village of Naslavcea (48°21' N 27°35' E), while the most southerly point, Giurgiulesti (45° 28' N 28° 12' E), which is the only settlement on the bank of the Danube. The most westerly point is the village of Criva (48°16' N 26°30' E) and the most easterly point is the village of Palanca (46° 25' N 30° 05' E). The Republic of Moldova belongs to the group of countries located in the Black Sea Basin. It maintains close mutually advantageous commercial ties with these countries as well as the countries located in the Danube Basin. The southern border of the country extends almost as far as the Black Sea, which can be accessed through the Nistru Liman and the Danube River.







Part A: Main Players in the R&D System: List of PO and PM and Policy Makers

The main legal act which regulates the activities in the S&T domain of the Republic of Moldova is the <u>Code</u> on <u>Science and Innovation</u>. This code regulates legal relations related to the elaboration and implementation of the state policy in the field of science and innovations, activity in the field of scientific researches, innovations and transfer of technologies, scientific-technological information, accreditation of organizations in the field of science and innovations, attestation of scientific and scientific-pedagogical personnel of highest qualification, protection of intellectual property, legal status of entities in the field of science and innovations.

The Code was adopted on July 15, 2004 and it marked a turning year in the development of science and innovation in the country. Thus, the Code introduced two most essential changes in the role of the Academy of Sciences in science and innovation and these are:

- The Academy of Sciences becomes the sole public institution of national importance in the field of science and innovation, the plenipotentiary coordinator of the scientific and innovational activities, the supreme scientific forum and scientific adviser to the public authorities.
- 2) The Academy of Sciences is authorized with the Government's competence in the field of scientific research, reinforced by the <u>Partnership Agreement with the Government of the Republic of Moldova</u> (presently for the period of 2009-2012). The Agreement authorizes the Academy to distribute all State funds designed for scientific research, allocated on a competition basis.

Besides, the Agreement stipulates the <u>strategic priorities</u> in the development of science and innovation, which are coordinated with the strategic directions stipulated by the European Union:

- 1) Consolidation of the State of Law and utilization of cultural heritage with the perspective of integration into multicultural and multinational Europe;
- 2) Economical basis of sustainable development and efficient utilization of human and natural resources;
- 3) Biomedicine and human health;
- 4) Agriculture and industrial biotechnology;
- 5) Nanotechnology, new materials and information technology;
- 6) Energetic security and efficiency growth of the energetic complex.

Main players in the <u>R&D policy making</u>:

- 1) The Parliament:
 - adopts legal acts, which regulate the organization and functioning of the field of science and innovations;
 - approves strategic directions of the activity in the field of science and innovations;
 - approves the amount of financial resources, which area allocated to support the activity in the field of science and innovations;
 - ratify international agreements regarding cooperation in the field of science and innovations.
- 2) The Government concludes with the Academy of Sciences a Partnership agreement, which on the basis of delegation to the Academy of Sciences of powers to carry out the state policy in the field of science and innovations, determines:









- the strategy of development of science and innovation activity;
- strategic directions of the activity in the field of science and innovations;
- amount of financing in the field of science and innovations in accordance with Law on state budget taking into consideration the permanent increase of the necessities for its financing.

The Academy of Sciences of Moldova as the sole public agency of the national significance in the field of science and innovations is the plenipotentiary coordinator of scientific and innovation activity, supreme scientific forum of the country and scientific consultant of the public authorities of the Republic of Moldova.

More details on the R&D structure and R&D Policy in Moldova, can be found on the incrEAST web portal: <u>http://www.increast.eu/en/135.php</u>.

R&D National Programme Owner:

• Academy of Sciences of Moldova

R&D Programme Managers in the country are:

- 1) Supreme Council for Science and Technological Development
- 2) Center for International Projects of the Academy of Sciences of Moldova
- 3) Agency for Innovation and Technology Transfer.

Part B: Overview of most important Programme Owners and Programme Managers

Academy of Sciences of Moldova (ASM)

Academy of Sciences on the base of the Partnership Agreement with the Government:

- elaborates and promotes the strategy for development of science and innovation activity, realizes the state policy and performs the conceptual activity in the field of science and innovations;
- identifies strategic directions in the field of science and innovations;
- distributes budget allocations in accordance with the strategic directions in the field of science and innovations;
- organizes the elaboration of state programs, international scientific and scientific-technical programs, as well as mechanisms of their implementation;
- elaborates the mechanisms of monitoring and stimulation of implementation of the results of state
 programs in the field of science and innovations and creation of the market of produces of this field;
- organizes competitions of projects in the field of science and innovations, financed from state budget.

The Supreme leading body of the Academy of Sciences of Moldova is the Assembly. It consists of full and corresponding members; doctors-habilitat elected for a term of four years, representing scientific community of the Republic of Moldova. The Assembly approves the by-laws of the Academy of Sciences, elects the President of the Academy of Science and, once in 4 years, the Partnership agreement with the Government, confirms the policy of the Academy of Science in the science and innovation field and implements the strategy of this policy.









The Assembly examines and decides on the annual report regarding the results of activity in the science and innovation field and examines and <u>approves strategies</u>, <u>state programs related to the science and innovation field</u>. It determines strategic directions in the science and innovation field.

National research programmes: State programs in the field of science and innovation

State program in the field of science and innovations represents a complex of projects in this field and a form of realization of state policy in the field of science and innovation. However, this programs are restricted to the participation of accredited Moldovan organizations in the sphere of science and innovation.

State programs in the field of science and innovations are developed by the Government and scientific community in the person of the Academy of Sciences in accordance with the strategic directions of activity in this field. The list of state programs is included in the Partnership Agreement.

State programs in the field of science and innovations are financed partially or integrally from the state budget in accordance with the results of the contest organized by the Academy of Sciences.

Project in the field of science and innovations is a complex of activities, interconnected trough performers, terms and resources, which are realized by organization in the field of science and innovations regarding the solution of a problem (achieving of a common goal) and is aimed to:

- development of fundamental and applied knowledge and of their application methods;
- development of infrastructure of the field of science and innovation, improvement of laboratory, electronic and diagnostic equipment, polygraphic and publishing equipment;
- improvement of technical-economic parameters of applied technologies and/or manufactures produces (executed works, performed services) with the purpose to ensure their competitiveness on the world market;
- creation and/or assimilation of technologies and/or new types of produces (works, services),which
 are results of the implementation of an object of intellectual property (patent, industrial design,
 topography of integrated circuits, know-hoe etc.), for which the manufacturer has necessary
 documents (certificate, patent etc.) or license issued by the owner of the object of intellectual
 property, or which must be elaborated for the first time in the Republic of Moldova and/or are more
 competitive, possessing technical-economical significantly better parameters and increase the
 national scientific-technical and technological level.

Projects, as a rule, are a component part of a program in the field of science and innovation executed by organizations, performing respective activity.

Projects shall meet the following requirements:

- to be oriented to solve the most important problems of social-economic development of the state and correspond to strategic directions of development of science and innovations, stated in the Partnership Agreement;
- to contain scientific or technological novelty and correspond to professional level;
- to be scientifically and financially founded, to define the expected results and methods of their transparent monitoring.

Supreme Council for Science and Technological Development (SCSTD)

The Supreme Council for Science and Technological Development (SCSTD) is the executive body of the Assembly. It consists of the President of ASM, 3 Vice Presidents and Scientific Secretary General and









representatives of the scientific community, including higher education institutions and State Agency for Intellectual Property, elected by the Assembly for a four year term.

<u>SCSTD coordinates the elaboration of both the state programs, international scientific and scientific-technical programs in the science and innovation field and mechanisms for their implementation and monitoring. It coordinates and stimulates the activity in the field of innovation and technology transfer. Its competence is distributing, on the basis of Partnership Agreement, of the budget allocations according to the strategic directions in the science and innovation field. <u>SCSTD as well organizes the competition of the projects</u>, financed from the state budget and elaborates mechanisms of monitoring, stimulation and implementation of state programs in the science and innovation field, development of markets for produces in this field, etc.</u>

The Supreme Council for Science and Technological Development manages the schemes for <u>inter-academic</u> <u>mobility</u> provided in the framework of the following Agreements on scientific and technological cooperation between the Academy of Sciences of Moldova and foreign Academia (BS countries):

Data of signature	
1996 (additional protocols)	
29.05.2002 (additional protocols)	
additional protocol signed on 18.05.2004	
additional protocol signed on 17.01.2005	
18.06.2007	
05.10.2007	

Center for International Projects (CIP)

The Center for International Projects opened its doors in January 2009. It is an auxiliary public institution of the Academy of Sciences of Moldova, established in compliance with Article 79 of the Code on Science and Innovation of the Republic of Moldova.

The mission of the Center is:

- to promote and administer <u>bilateral grant programs (currently the ones between the ASM and the Belarusian Republican Foundation for Fundamental Research, Federal Ministry of Education and Research of Germany, Romanian National Authority for Scientific Research, Russian Foundation for Basic Research, Russian Foundation for the Humanities, Ministry of Education and Science of Ukraine) and international projects in the sphere of science and innovation (including FP7 projects with the participation of the ASM);
 </u>
- to offer managerial, technical, financial and legal assistance to the members of Moldovan scientific community, including consulting activities, seminars, trainings and other activities in the framework of international and bilateral projects.







ASM Bilateral Grant Programs with:	Legal framework	Projects ongoing in 2009	Projects envisaged for 2010
German Federal Ministry of Education and Research (BMBF)	Memorandum of Intentions on scientific and technological cooperation between ASM and BMBF, signed on 14.03.2008	10 projects (24 submitted); ASM – 100.000€; BMBF – 250.000€	28 project proposals under evaluation; ASM – 10.000€ per project; BMBF – 25.000€ per project
Belarusian Republican Foundation for the Fundamental Research (BRFFR)	Cooperation Agreement between ASM and the BRFFR, signed on 03.05.2007, and additional protocols between ASM and BRFFR	16 projects (32 submitted)	37 project proposals under evaluation
Russian Foundation for Basic Research (RFBR)	Agreement on scientific and technological cooperation between ASM and the RFBR, signed on 18.03.2005, and additional protocols between ASM and RFBR	45 projects for the period 2008- 2009 (88 submitted);	A new call under negotiations
Russian Foundation for Humanity (RFH)	Agreement on organization of the joint call between ASM and RFH, signed on 23.01.2009		9 projects accepted (24 submitted)
Romanian National Authority for Scientific Research (ANCS)	Programme on bilateral cooperation in the field of scientific research, technological development and innovation between ASM and ANCS, signed on 23.10.2008		Joint call launched on November 7, 2009
Science and Technology Center in Ukraine (STCU)	Statement of Intent to cooperate between STCU and ASM		24 Expressions of Interest
Ministry of Education and Science of Ukraine (MESU)	Agreement on cooperation in the field of education, science and culture between the Parliaments of Ukraine and the Republic of Moldova, signed on 20.03.1999 and additional protocols between ASM and MESU		18 projects accepted (72 submitted)







Agency on Innovation and Technology Transfer (AITT)

The <u>Agency on Innovation and Technology Transfer (AITT) of the Academy of Sciences of Moldova</u> is created according to the Code on Science and Innovation. AITT is the first organization created with the purpose of stimulation and implementation of Innovation and Technology Transfer (I&TT) mechanisms in the Republic of Moldova, under the supervision of the ASM.

The main direction of the AITT's activity is oriented towards supporting the society's modernization process and improvement of social and economic environment by implementing the scientific research results in schemes, documents, new competitive products and services in order to face high market demand by performing a well defined state policy and monitoring innovation and technology transfer activity.

During 4 years of activity (up to 2008), AITT selected 80 projects for funding from a total number of 233 submitted. The selected projects obtained both, state budget financing and private sector co-financing. These 80 projects cover the following fields: nanotechnologies, industrial engineering, new products and materials, biomedicine, pharmaceutics, agricultural biotechnologies, soil fertility, food security, health maintenance.

AITT also coordinates the activities of the Scientific Park "Academica" and Innovation Incubator "Inovatorul", created within ASM. The Park operates in the field of renewable energy. A new Park, "Inagro", oriented in the field of ecology and intensive agriculture it is in the process of creation. It is also, planned the creation of a new technological park in the field of nanotechnologies and microelectronics "NanoTechnoPolis". The residents of these entities benefit of big preferences, allowing them to commercialize their results, thus creating new opportunities for them. Also, these scientific parks and innovation incubator are an important part of the scientific-educational cluster "UnivER Science" created recently within AS.

Part C: Programmes

S&T Cooperation Programme between The National Authority for Scientific Research of Romania (ANCS) and the Academy of Sciences of Moldova (ASM) for the years 2010-2012

Web page: www.asm.md

Contact Person: Dr. Lidia Romanciuc Director of the Center of International Projects of ASM Tel.: (+373 22) 270774/577707; e-mail: <u>intprojects@asm.md</u>, <u>mrda@mrda.md</u>,

Involved Countries: Republic of Moldova, Romania

Programme type (bilateral/multilateral):

🗌 national	🗌 unilateral	🛛 bilateral	🗌 multilateral

PROGRAMME START, END:

The call was announced on November 7, 2009. The projects will start on June 1, 2010 for a period of 32 months.

PROGRAMME SETTING-UP

The Calls are implemented in the framework of the S&T Cooperation Programme between the National Authority for Scientific Research of Romania (ANCS) and the Academy of Sciences of Moldova (ASM) for the years 2010-2012, signed on 23.10.2008.

AIM AND SCOPE OF THE PROGRAMME









The aim of the Programme is to strengthen the cooperation, links between the researchers of the two countries in all scientific fields and the implementation of scientific results in common interest fields. The programme also envisages the facilitation of the integration of the Moldovan scientific community into the research and development system of the European Union, preparation of Moldovan teams to participate in community programmes, especially the Seventh Framework Programme, as well as develop towards the collaboration within regional programmes as those of the BSEC.

FUNDED ACTIVITIES

- 1) Basic and applied research projects (including mobility);
- Scientific seminars;
- 3) Summer schools.

BENEFICIARIES

In Romania: universities, research centers and institutes, as well as private and public enterprises.

In Moldova research institutes and universities accredited by the National Council for Attestation and Accreditation.

The project consortium must comprise at least one team from a Romanian team and one team from a Moldovan accredited organization in the sphere of science and innovations.

The Moldovan team must involve not less than 50 % of young researchers (up to 35 years).

THEMATIC PRIORITIES

- 4) Environment;
- 5) Agriculture;
- 6) Health;
- 7) Technologies;
- 8) Products and services;
- 9) Science and information resources management

FUNDING

Budget: for the period 2010 – 2012 annually are planned: ASM – 200.000€; ANCS – 1.000.000€

Funding Mechanism: S&T non-repayable grants

Funds distribution mechanism: Open Call

EVALUATION PROCEDURES

Proposals, which are submitted to the both Parties, are peer-reviewed independently by the Romanian and the Moldovan side. Only proposals approved by both partners can be funded.

In Moldova, the evaluation procedure has two steps:

- 1. Screening: registered proposals are screened for eligibility and completeness in compliance with the conditions and requirements stipulated in the Guide for Applicants. Missing or incorrect information is requested for resubmission within 3 days.
- Review: Eligible proposals are submitted to the Review Advisory Council of the Academy of Sciences of Moldova, who selects 2 reviewers per proposal from the project's scientific field. The Council is compiling a list with the review results (rates) and funding recommendations, which are after discussed by a mixed commission of representatives from the both funding Parties.

SELECTION CRITERIA

Applications will be considered on the basis of the following criteria:







- The relevance of the research subject to the research policy objectives and priorities of the ANCS and the ASM
- Quality and originality of the envisaged research approach
- Qualifications of the project partners
- Quality of the planned collaboration and recognizable added value added for both partners
- Prospects of sustainability and continuation of researches within EU programmes, esp. FP7
- Chances of commercializing the envisaged project results
- Participation of young scientists
- · Profitability / efficiency of the measure

INTERNATIONAL COOPERATION OPTIONS (MAX. 400 CHARACTERS)

Third parties can participate in the project, provided they finance themselves their activities.

Collaborative Call between the German Federal Ministry of Education and Research (BMBF) and the Academy of Sciences of Moldova (ASM)

Web page: www.asm.md

Contact Person: Dr. Lidia Romanciuc Director of the Center of International Projects of ASM Tel.: (+373 22) 270774/577707; e-mail: <u>intprojects@asm.md</u>, <u>mrda@mrda.md</u>,

Involved Countries: Republic of Moldova, Germany

Programme type (bilateral/multilateral):

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PROGRAMME START, END:

Since 2009, 10 common research projects are financed. A new Call was announced earlier this year and 28 project proposals under evaluation.

PROGRAMME SETTING-UP

The Calls are implemented in the framework of the Memorandum of Intentions on scientific and technological cooperation between ASM and BMBF, signed on 14.03.2008.

AIM AND SCOPE OF THE PROGRAMME

In a Memorandum of Intentions signed 14 March 2008 the German Federal Ministry of Education and Research (BMBF) and the Academy of Sciences of Moldova (ASM) have agreed to

- to promote cooperation between research centers, universities and research groups and to broaden relations between the scientific communities in the both countries;
- to strengthen the cooperation in the field of exchange of scholars, scientists and specialists for study and research visits, and visits in connection with agreed joint activities;
- to encourage cooperative projects of common interest between institutions and organizations of both parties and to foster in particular the optimum use of the opportunities offered by the European R&D Programmes.

FUNDED ACTIVITIES

Funded are collaborative research projects for duration of 12 months.

- The project proposal must encompass 2 components:
 - basic & applied research component; and









a pre-feasibility study component for further collaborative research project proposals under future bilateral calls or other programmes such as the EU Research Framework Programmes (FP7).

On the German side, the funding is awarded in the form of non-repayable grants, for example for

- Travel expenses for German experts travelling to the partner countries (primarily the provision of plane tickets);
- Cost of visits by foreign experts to Germany.

Funding can also be provided for

- Staff for the German side, for example for the organization of events and the preparation of applications
- Cost of events (e.g. rental of venue, logistics)
- Material costs that are not part of a laboratory's basic equipment (no PC equipment or basic consumables)

On the Moldovan side

- Additional salaries for Moldovan researchers;
- Purchase of equipment and materials;
- Travel costs of researchers from Moldova visiting Germany (economy class flight tickets, train tickets);
- Local transport expenses and per diem for German researchers visiting Moldova.

BENEFICIARIES

In Germany, German universities, non-university research institutions, clinics which are active in the field of research and companies that are headquartered in Germany are eligible for funding.

In Moldova research institutes and universities accredited by the National Council for Attestation and Accreditation.

The project consortium must comprise at least one team from a German research institute and one team from a Moldovan accredited organization in the sphere of science and innovations.

The Moldovan team must involve not less than 50 % of young researchers (up to 35 years). Members of the team from Moldova should conduct their research work at least 50 % of the time at their home institution.

THEMATIC PRIORITIES

Announced by the Call, in line with the respective research priorities of the BMBF and the ASM:

- 1. Citizens and governance in a knowledge-based society;
- 2. Information and communications technologies;
- 3. Biomedicine, pharmaceutics and human health
- 4. Agricultural biotechnologies and food security
- 5. Nanotechnologies, industrial engineering and new materials
- 6. Environment and renewable energy sources.

FUNDING

Budget: For the year 2009: ASM – 100.000€; BMBF – 250.000€

Funding Mechanism: S&T non-repayable grants

Funds distribution mechanism: Open Calls

EVALUATION PROCEDURES

Proposals, which are submitted to the both Parties, are peer-reviewed independently by the German and the Moldovan side. Only proposals approved by both partners can be funded.









In Moldova, the evaluation procedure has two steps:

- 1. Screening: registered proposals are screened for eligibility and completeness in compliance with the conditions and requirements stipulated in the Guide for Applicants. Missing or incorrect information is requested for resubmission within 3 days.
- 2. Review: Eligible proposals are submitted to the Review Advisory Council of the Academy of Sciences of Moldova, who selects 2 reviewers per proposal from the project's scientific field. The Council is compiling a list with the review results (rates) and funding recommendations, which are after discussed by a mixed commission of representatives from the both funding Parties.

SELECTION CRITERIA

Applications will be considered on the basis of the following criteria:

- The relevance of the research subject to the research policy objectives and priorities of the BMBF and the ASM
- Quality and originality of the envisaged research approach
- Qualifications of the project partners
- Quality of the planned collaboration and recognizable added value added for both partners
- · Prospects of success and sustainability of the project initiation / pilot measures
- · Chances of commercializing the envisaged project results
- Participation of young scientists
- Profitability / efficiency of the measure

INTERNATIONAL COOPERATION OPTIONS

Third parties can participate in the project, provided they finance themselves their activities.

Collaborative Call between the Academy of Sciences of Moldova (ASM) and the Russian Foundation for Basic Research (RFBR)

Web page: www.asm.md

Contact Person: Dr. Lidia Romanciuc Director of the Center of International Projects of ASM Tel.: (+373 22) 270774/577707; e-mail: intprojects@asm.md, mrda@mrda.md,

Involved Countries: Republic of Moldova, Russian Federation

Programme type (bilateral/multilateral):

national	🗌 unilateral	🛛 bilateral	multilateral	

PROGRAMME START, END:

Since 2006, were financed 44 projects for the 2006/2007 period and in 2008/2009 are under implementation another 45 projects. A new Call is being under negotiation to be launched in 2010.

PROGRAMME SETTING-UP

The Calls are implemented in the framework of the bilateral Agreement on scientific and technological cooperation between ASM and the RFBR, signed on 18.03.2005, and the specific details of each Call are negotiated in an additional protocol to the above-mentioned agreement. Each Party is financing only the participation of its research groups.

AIM AND SCOPE OF THE PROGRAMME

120







The scope of the programe is to strengthen the cooperative links and projects of common interest between institutions and organizations of both parties in the fields of scientific priorities of the both countries.

FUNDED ACTIVITIES

Basic Research Projects

BENEFICIARIES

In Moldova research institutes and universities accredited by the National Council for Attestation and Accreditation.

The project consortium must comprise at least one team from a Russian research institute and one team from a Moldovan accredited organization in the sphere of science and innovations.

The Moldovan team must involve not less than 50 % of young researchers (up to 35 years). Members of the team from Moldova should conduct their research work at least 50 % of the time at their home institution.

THEMATIC PRIORITIES

- Mathematics, mechanics and informatics;
- Physics and astronomy;
- Chemistry;
- Biology and medicine;
- Earth sciences;
- Social sciences and humanities;
- Information technologies and computing systems;
- Basics of engineering science.

FUNDING

Budget: ASM in 2009 has foreseen 6.000.000 MDL for basic research projects.

Funding Mechanism: S&T grants

Funds distribution mechanism: Open calls

EVALUATION PROCEDURES

In Moldova, applications should be submitted in Russian and Romanian languages to the Academy of Sciences of Moldova, while in the Russian Federation – to the Russian Foundation for Basic Research.

In Moldova, the evaluation procedure has two steps:

- 1. Screening: registered proposals are screened for eligibility and completeness in compliance with the conditions and requirements stipulated in the Guide for Applicants. Missing or incorrect information is requested for resubmission within 3 days.
 - Review: Eligible proposals are submitted to the Review Advisory Council of the Academy of Sciences of Moldova, who selects 2 reviewers per proposal from the project's scientific field. The Council is compiling a list with the review results (rates) and funding recommendations, which are after discussed by a mixed commission of representatives from the both funding Parties.

The selection criteria are basically the same for all bilateral grant programmes.

Collaborative Call between the Academy of Sciences of Moldova (ASM) and the Russian Foundation for the Humanities (RFH)







Web page: www.asm.md

Contact Person: Dr. Lidia Romanciuc Director of the Center of International Projects of ASM Tel.: (+373 22) 270774/577707; e-mail: <u>intprojects@asm.md</u>, <u>mrda@mrda.md</u>,

Involved Countries: Republic of Moldova, Russian Federation

Programme type (bilateral/multilateral):

	🗌 national	🗌 unilateral	🛛 bilateral	multilateral
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PROGRAMME START, END:

The Call 2009 was organized in compliance with the Agreement on organization of the joint call between ASM and RFH, signed on 23.01.2009. As a result 9 projects were accepted for financing out of 24 submitted. The projects were activated on July 1, 2009 with a total duration of up to 18 months.

PROGRAMME SETTING-UP

The conditions of the Call were negotiated and endorsed by the Agreement on organization of the joint call between ASM and RFH, signed on 23.01.2009.

AIM AND SCOPE OF THE PROGRAMME

The aim of the Programme was to contribute to the initiation and/or development of scientific collaboration between the scientists of the Republic of Moldova and their Russian colleagues, towards solving contemporary problems in the field of social sciences and humanities.

FUNDED ACTIVITIES

Research Projects

BENEFICIARIES

In Moldova research institutes and universities accredited by the National Council for Attestation and Accreditation.

The project consortium must comprise at least one team from a Russian research institute and one team from a Moldovan accredited organization in the sphere of science and innovations.

The Moldovan team must involve not less than 50 % of young researchers (up to 35 years). Members of the team from Moldova should conduct their research work at least 50 % of the time at their home institution.

THEMATIC PRIORITIES

- History, archeology and etnography;
- Economics;

ecology.

- Philosophy, sociology, political sciences, law, scientology;
- Philology, architecture and arts;
- Complex study of the man; psychology, pedagogy, social problems of the medicine and human

FUNDING

Budget: ASM in 2009 has foreseen 600.000 MDL for joint research projects.

Funding Mechanism: S&T grants

Funds distribution mechanism: Open calls

EVALUATION PROCEDURES









In Moldova, applications should be submitted in Russian and Romanian languages to the Academy of Sciences of Moldova, while in the Russian Federation – to the Russian Foundation for Basic Research.

In Moldova, the evaluation procedure has two steps:

- 3. Screening: registered proposals are screened for eligibility and completeness in compliance with the conditions and requirements stipulated in the Guide for Applicants. Missing or incorrect information is requested for resubmission within 3 days.
- 4. Review: Eligible proposals are submitted to the Review Advisory Council of the Academy of Sciences of Moldova, who selects 2 reviewers per proposal from the project's scientific field. The Council is compiling a list with the review results (rates) and funding recommendations, which are after discussed by a mixed commission of representatives from the both funding Parties.

The selection criteria are basically the same for all bilateral grant programmes.

Collaborative Call between the Academy of Sciences of Moldova (ASM) and the Ministry of Education and Science of Ukraine (MESU)

Web page: www.asm.md

Contact Person: Dr. Lidia Romanciuc Director of the Center of International Projects of ASM Tel.: (+373 22) 270774/577707; e-mail: <u>intprojects@asm.md</u>, <u>mrda@mrda.md</u>,

Involved Countries: Republic of Moldova, Ukraine

Programme type (bilateral/multilateral):

🗌 national	🗌 unilateral	🛛 bilateral	multilateral

PROGRAMME START, END:

The Call 2009 was organized based on the Agreement on cooperation in the field of education, science and culture between the Parliaments of Ukraine and the Republic of Moldova, signed on 20.03.1999 and additional protocols between ASM and MESU. Were submitted 72 projects, out of which 18 selected for financing.

PROGRAMME SETTING-UP

The conditions of the Call were negotiated and endorsed by the Protocol on planning of thematic and terms for the organization of the bilateral competition for basic scientific researches between the MESU and ASM for the period 2009-2010, signed on 02.12.2008.

AIM AND SCOPE OF THE PROGRAMME

The aim of the Call was to contribute to the initiation and/or development of scientific collaboration between the scientists of the Republic of Moldova and their Ukrainian colleagues, in the field of basic scientific researches.

FUNDED ACTIVITIES

Basic Research Projects

BENEFICIARIES

In Moldova research institutes and universities accredited by the National Council for Attestation and Accreditation.

The project consortium must comprise at least one team from a Russian research institute and one team from a Moldovan accredited organization in the sphere of science and innovations.







The Moldovan team must involve not less than 50 % of young researchers (up to 35 years). Members of the team from Moldova should conduct their research work at least 50 % of the time at their home institution.

THEMATIC PRIORITIES

- Biomedicine, pharmaceutics, health protection and fortification;
- Agricultural biotechnologies, soil fertility and food security;
- Nanotechnologies, industrial engineering, new chemical materials and substances;
- Rising the efficiency and assuring the security of the energy complex;
- Economic sciences and humanities.

FUNDING

Budget: ASM in 2009 has foreseen 1.400.000 MDL for joint research projects.

Funding Mechanism: S&T grants

Funds distribution mechanism: Open calls

EVALUATION PROCEDURES

In Moldova, applications should be submitted in Russian and Romanian languages to the Academy of Sciences of Moldova, while in the Russian Federation – to the Russian Foundation for Basic Research.

In Moldova, the evaluation procedure has two steps:

- 5. Screening: registered proposals are screened for eligibility and completeness in compliance with the conditions and requirements stipulated in the Guide for Applicants. Missing or incorrect information is requested for resubmission within 3 days.
- 6. Review: Eligible proposals are submitted to the Review Advisory Council of the Academy of Sciences of Moldova, who selects 2 reviewers per proposal from the project's scientific field. The Council is compiling a list with the review results (rates) and funding recommendations, which are after discussed by a mixed commission of representatives from the both funding Parties.

The selection criteria are basically the same for all bilateral grant programmes.









COUNTRY: ROMANIA

Part A: Main players in the R&D system: list of PO and PM and policy makers

In compliance with the present legislation, the entities carrying out research-development activities are included in the national Research-Development System, which is made up of the assembly of public and private entities and institutions that have the R&D activity in their statutes.

Within this system, a distinct entity is the research-development system of national interest, which includes the following categories of public entities, accredited according to the Governmental Ordinance 57/2002:

- a) national research-development institutes;
- b) research institutes and centers of the Romanian Academy and of the thematic academies;
- c) accredited universities or their departments;
- d) research-development institutes or centers organized within national firms, national companies or regie autonomes of national interest.

Within the national research-development system, the following categories of entities and institutions are included:

A. Public entities:

a) research-development institutes, centers or stations organized as public institutions;

b) research-development institutes or centers organized within national firms, national companies and regies autonomes or the ones belonging to public central and local administration;

c) international research-development centers created on the basis of international agreements;

d) other public institutions or their components that have the research-development activity in their statutes.

B. Private entities:

- a) research-development entities organized as firms;
- b) firms and their components that have the research-development activity in their statutes;
- c) private accredited universities or their departments

The strategic objectives concerning the R&D and innovation domains were mainly promoted through the sector specific policies, coordinated by the National Authority for Scientific Research (NASR), the Government body which overtook in 2005 the responsibilities of the Ministry of Education, Research and Youth concerning the RDI domain.

In this context, NASR assumed the responsibility to harmonize national RDI policies with the ones developed at European level, aiming to ensure the preparation of the scientific and technical community and of the economic environment for aligning to the priorities specific for science and technology in the European Union and to their alert evolution dynamics. NASR promoted the strategic documents that define the development perspective of the RDI domain

In the post-accession period 2007-2013, and which were adopted by Romania's Government in 2007:

- 1. The National RDI Strategy for 2007-2013, approved by Government Decision no. 217/ 2007;
- The National RDI Plan for 2007-2013, also called National Plan II NP II, approved by the Government Decision no. 475/ 2007, and which represents the main instrument for implementing the National Strategy.









The National RDI Strategy and Plan for 2007-2013 establish long term strategic objectives and priorities, and thus, they represent the reference according to which NASR develops the whole process of planning and implementing the policies that the Government promotes for the RDI field in the post-accession period.

The implementation of the National Strategy is achieved through the synergic correlation of the National Plan with the following RDI financing instruments:

i) coordinated by NASR:

- The Programme Research of Excellence CEEX (ended)
- The Operational Sectoral Programme "Increasing Economic Competitiveness" (SOP-IEC)/
- Priority axis 2 Increasing Economic Competitiveness through research and innovation
- The Programme INFRATECH (ended)
- The Programme IMPACT (suspended for 2009)
- The core research programmes

ii) coordinated by economic profile ministries:

Sectoral R&D Plans

Program owners:

- 1. National Authority for Scientific Research;
- Romanian Academy public body financed by the state budget. Has its own network of research institutes and it offers grants for research in fundamental fields of science (humanities and social sciences, mathematics, natural and exact sciences, bio-medical sciences, technical sciences, information sciences);
- Ministry of Regional Development and Housing MRDH/MDRL has as main areas of activity planning, national and regional territorial development, cross-border, transnational and interregional cooperation, urban planning, spatial planning. In these areas, the MRDH manages 48 programmes financed from European and national funds: the Regional Operational Programme 2007-2013 (REGIO), European territorial cooperation programmes, PHARE - Economic and Social Cohesion programmes, PHARE - Cross-border cooperation programmes, programmes of territorial development;
- 4. **Ministry of Environment** the most important organism which is involved in a cooperation with countries around Black Sea in problems regarding contamination and waste product that can have dangerous effects on Black Sea fauna.

Part B: Overview of most important PO and PMs

National Authority for Scientific Research (ANCS)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

The National Authority for Scientific Research exercises the responsibilities of the state authority for research-development and carries out its activity in compliance with the provisions of the Government Ordinance No. 57/2002 on the scientific research and technological development, approved with amendments and additions by the Law No. 324/2003, with subsequent amendments.

The Authority's mission is to ensure the elaboration, application, monitoring and evaluation of the policies in the field of research-development and innovation, consistent with the strategy and the Governing Programme, for the purpose of ensuring on this basis the enlargement of the national and international technological and innovation patrimony, the sustainable economic development, the access on the internal, European market and on the global markets, the creation of the informational knowledge-based society, the satisfaction of the citizens' needs and a growth in the quality of their lives.









The Authority has the role and responsibility:

a) to ensure the strategic and tactical planning;

b) to define the strategic and tactical objectives;

c) to define, apply, monitor and evaluate the policies necessary in order to achieve the objectives;

d) to define the normative and methodological, functional, operational and financial framework necessary to apply the policies, to follow up the harmonisation of the national legislation with the legislation of the

European Union and to absorb the acquis communitaire;

e) to ensure communication with the other public authorities in order to achieve a coherent approach of the government policies;

f) to ensure communication with the civil society structures and with the citizens;

g) to define, finance, apply, monitor and evaluate programmes, for the purpose to achieve the objectives;

h) to stimulate the regional and local development, as well as the one in the private sector;

i) to stimulate the development of international partnership.

With a view to completing its role, the Authority exercises the following functions:

a) political - the function to present and harmonise the political viewpoint regarding the researchdevelopment and innovation field;

b) strategic - by which it strategically plans and ensures the elaboration and implementation of the policies in the field of research-development and innovation;

c) administrative - by which it forecasts, plans, assigns, monitors and evaluates the use of resources for the implementation of the policies in the field;

d) of monitoring, evaluation and control of carrying out the policies in the field of development-research and innovation;

e) of elaboration of the normative and methodological framework, functional and operational and financial framework in which the policies in the field are carried out;

f) of communication both with the other structures of the public administration and with the civil society and the citizen;

g) of international co-operation - which ensures the application of international agreements in the related field and the promotion of new agreements;

h) of state authority - which ensures the monitoring and control of the settlements in its filed;

i) of representing – which ensures, on behalf of the Government, its representation in national, regional and international bodies and organizations, as a state authority for its field.

The statute of National Authority for Scientific Research is settled by the Governmental Decision no. 1449/Nov. 17, 2005 (see document at http://www.ancs.ro/index.php?action=viewart&artid=656&idcat=113)

International cooperation funding options and in particular within the BS region

- ANCS has programmes/funds targeting countries from the BS region. They are transposed in bilateral cooperation agreements and in what concerns BS region ANCS has active bilateral agreements with Ukraine, Turkey and Bulgaria.
- ANCS has no valid national R&D programmes which can be opened for international cooperation.
 ANCS has previous experience in ERA NETs finalized with a Joint Call for proposals, namely SEE-
- ERA.NET which generated SEE-ERA.NET PLUS which is currently running and the call has been recently open. The budget dedicated by ANCS to this call is 300.000 EUR.

Country	Horizontal Priorities	Thematic Priorities	Obstacles for S&T cooperation
Bulgaria	Basic Research, Technology	Food, agriculture and fisheries; Biotechnology; Nanotechnologies/Materials	Legal problems







	Research, innovation Research	; Environment (incl. climate change); Information and Communication Technologies (ICT); Others: basic sciences.	
Moldova	Basic Research, Technology Research, innovation Research	Health; Food, agriculture and fisheries; Nanotechnologies/Materials ; Environment (incl. climate change); Information and Communication Technologies (ICT);	Legal problems
Ukraine	Basic Research, Technology Research, innovation Research	Nanotechnologies/Materials ; Socio-economic sciences and humanities; Environment (incl. climate change)	Legal problems
Turkey	Basic Research, Technology Research, innovation Research	Nanotechnologies/Material; Energy;	Legal problems

Programme owner: Romanian Academy

Offers grants for research in fundamental fields of science: humanities and social sciences, mathematics, natural and exact sciences, bio-medical sciences, technical sciences, information sciences. No specific Work Programme, even though for 2009 a work programme was intended, but due to the general shortage of budget for research, the project had to be suspended.

How the system works: open competition, in the absence of a work programme. There are 14 thematic sections/departments, each one having its own committee for evaluation and each committee decides for the number of proposals that pass and their budget based on the quality criteria.

Contact person: Dr. Eng. Acad. Florin Filip, Vice-president (ffilip@acad.ro)

Part C: Programmes

ANCS: Bilateral agreements of Romania

Programme title: Bilateral S&T agreements of Romania

Policy Maker:

National Authority for Scientific Research within the National Plan for Research and Development

Programme Owner:

National Authority for Scientific Research

Contact Person: Anca Ghinescu, Director - European Affairs and International Cooperation









Programme Manager:

National Authority for Scientific Research - European Affairs and International Cooperation

Web page: http://www.ancs.ro/index.php?action=view&idcat=447 (not available in English)

Involved Countries:

A separate bi-lateral agreement with all BS-countries

Programme start, end:

Country	Duration	Details
Armenia	S&T agreement 30.02.1995 Bucharest	Never activated ¹⁴
Azerbaijan	S&T agreement 31.10.1996 Baku	Never activated
Bulgaria	S&T agreement 14.04.2003 Sofia	Active, last protocol 2008- 2009
Georgia	-	-
Greece	S&T agreement 05.10.1994	Last protocol 2006-2007
Moldova	S&T agreement 19.05.1992 Chişinău	Never activated
Turkey	S&T agreement 06.07.1999, Ankara	Active, last protocols 2008- 2009 and 2010-2011
	27.03.2007 Ankara	
Ukraine	S&T agreement	Active, last protocol 2008- 2009, to be renewed
	29.03.1996Ismail	
Russia	S&T agreement 02.03.1995Bucharest	Never activated

Programme setting-up

The bilateral programmes can only exist within a larger and previous frame, the bilateral agreement between the Governments of the two countries, through their Ministries of Foreign Affairs. The bilateral S&T agreements of Romania are defined by the NASR - Department of European Affairs and International Cooperation. It also defines the initial budget and the number of project to be financed, after consultation with the other side. Once a protocol is signed, it must also be approved by the Ministry of Foreign Affairs and then the call can be launched. Usually, the protocol is active for two consecutive years and it provides the scientific fields of cooperation, the number of projects/mobilities, the procedures for submitting, the

¹⁴ The activation means that a call is issued and a number of projects are funded within a 2-3 years period.









deadlines, the persons in charge, etc. Within an S&T agreement an infinite number of protocols can be issued, pending on the success rate of the previous protocol and the available funds of the two countries.

Aim and scope of the programmes

Strengthening the bi-lateral S&T cooperation of Romania

Funded Activities

All bi-lateral agreements of Romania support **mobility of researchers** on the condition that such mobility is within the framework of a concrete **research project**.

Beneficiaries

Romanian researchers from public or private universities or research centres, involved in a research project with the other specific country

Thematic priorities

Mathematics Informatics, Information Technology, Communication Technology	 Geosciences, Climate Research, Environmental Research and Technologies Energy, Energy Technologies
Physics, Physical Technologies	Engineering
 Materials, Chemistry, Chemical Technologies Biology and Biotechnology 	 Aeronautics, Space Economics, Social Sciences, Humanities
Medicine	Depending on each Work Programme, but most of the fields mentioned above are covered.
	Thematically open - no particular priority

Additional Comments:

✓ The thematic priorities are determined within the single calls (in the execution protocols).

Funding

Budget

Country	Notes	Initial Budget	Budget 2007	Budget 2008	Budget 2009
Armenia	Never activated		0	0	0
Azerbaijan	Never activated		0	0	0
Bulgaria	Active	1.061.749 RON	0	0	0









Georgia	Never activated		0	0	0
Greece	Last active 2006-2007		??	??	??
Moldova	Never activated, some negotiations took part in 2009		0	0	0
Turkey	Active	910.126 RON			
Ukraine	Active	584.964 RON			
Russia	Never activated		??	??	??

Funding Mechanism

S&T grants to researchers for mobility between the two countries.

For the Romanian researchers: Medical insurance and international travel costs to the location where joint work will be carried out.

For the foreign researchers: Daily allowance, internal travel costs necessary for the implementation of the joint work, accommodation

Funds distribution mechanism

Ad-hoc calls (issued within the validity period of executive protocols, see programme setting-up mechanisms).

Evaluation procedures

The evaluation procedure is carried in two stages: a national evaluation followed by a joint evaluation. The evaluators are selected from a Consultative Assembly (national experts in all scientific fields). The list is available on NASR website (http://www.ancs.ro/index.php?action=view&idcat=17).

Selection criteria (max. 400 characters)

- Scientific relevance of the project (methodology, originality and innovation, scientific qualifications of the proposers);
- Quality of the documentation and presentation of the project;
- Research infrastructures adequacy;
- Need for the bi-lateral cooperation and the roles of the participating research units;
- Potential for creation of R&D collaborations between the two countries;
- Exploitation and dissemination of research results

The following are optional criteria, which influence positively the evaluation:

- Participation of more than 2 research centres or universities in the project, as well as the participation of enterprises and industries (also from third countries);
- Additional financial resources from the proponents or from other organisations (e.g., research institutes, public and private organisations);
- Industrial impact of the results;









- Involvement in other multilateral and European programmes, in particular in the 7th FP of the EC.

International cooperation options

The mobility of researchers or the projects funded under these bi-lateral programmes allow for participation of third-country organisations (which will not be funded under a specific bi-lateral agreement). Participation of third-country organisations (or of additional organisations from the two countries) is evaluated positively.







COUNTRY: TURKEY

Part A: Main players in the R&D system: list of PO and PM and policy makers

Established in 1983, *the Supreme Council of Science and Technology (SCST)* is a legally formalised body which determines, directs and coordinates science, technology and innovation policies in Turkey. The tasks of the Council designated by the law are; implementation of the Turkish Science Policy, assisting the government in determination of long termed S&T policies, identification of targets, elaboration of plans and programs, assignment of public organs, establishment of collaboration with private establishments, elaboration of required laws and legislation, provision of human resources development for researches, implementation of coordination services.

The Scientific and Technological Research Council of Turkey (TUBITAK), which was created in 1963, is affiliated to the Prime Ministry and acts as the secretariat of the SCST. The SCST is headed by the prime minister and composed of relevant ministers, heads of public and private bodies, universities and non-governmental organisations. The Supreme Council, which convenes at least twice a year pursuant to the law, held its first meeting on October 9th, 1989.

The State Planning Organisation (DPT) and the High Planning Council (YPK) are two other important actors in the design and implementation of science, technology and innovation policies. The Money-Credit and Coordination Council (P-KKK), an operational arm of the DPT, is responsible for the determination of monetary policies for state support programmes and the allocation of funds for this purpose. It is chaired by the state minister for DPT, and consists of the ministers appointed by the prime minister as well as the undersecretaries of the Ministry of Finance, DPT, the Treasury and Foreign Trade and the Governor of the Central Bank.

The Ministry of National Education and the Council of Higher Education (YOK) design and implement education and training policies and integrate them with research and innovation policies. The Under-Secretariat of the Treasury (HM) and Under-Secretariat of Foreign Trade (DTM) are actively involved in the formulation of policies and in policy implementation as they mainly provide finance to research and innovation programmes. The Turkish Statistics Institution (TURKSTAT) is responsible for conducting R&D and innovation surveys. The Turkish Academy of Sciences (TUBA) determines and recommends scientific priority areas and proposes legislation to the government on issues related to scientists and researchers. TUBA also designs and implements programmes to encourage scientific studies.

On the implementation side, TUBITAK itself is the main body managing research programmes. For more detailed information on TUBITAK, see section B.

Part B: Overview of most important PO and PMs

The Scientific and Technological Research Council of Turkey (TUBITAK)

Brief description of the programme owner and programme managment agencies: roles played by the PO and PM with respect to R&D policy and financing

TÜBİTAK is the leading agency for management, funding and conduct of research in Turkey. It was established in 1963 with a mission to advance science and technology, conduct research and support Turkish researchers. The Council is an autonomous institution and is governed by a Scientific Board whose members are selected from prominent scholars from universities, industry and research institutions.







TÜBİTAK is responsible for promoting, developing, organizing, conducting and coordinating research and development in line with national targets and priorities.

Setting its vision as to be an innovative, guiding, participating and cooperating institution in the fields of science and technology, which serves for improvement of the life standards of Turkish society and sustainable development of Turkey, TÜBİTAK not only supports innovation, academic and industrial R&D studies but also in line with national priorities develops scientific and technological policies and manages R&D institutes, carrying on research, technology and development studies. Furthermore, TÜBİTAK funds research projects carried out in universities and other public and private organizations, conducts research on strategic areas, develops support programs for public and private sectors, publishes scientific journals, popular science magazines and books, organizes science and society activities and supports undergraduate and graduate students through scholarships.

More than 1,500 researchers work in 15 different research institutes of TÜBİTAK where contract research as well as targeted and nation-wide research is conducted.

International cooperation funding options and in particular within the BS region

TUBITAK has bilateral cooperation programmes¹⁵ with Russia, Ukraine, Romania and Bulgaria. Other than that, concerning the other BS-ERA.NET project partners, it has ongoing bilateral agreements with Greece, Germany, France and Italy.

TUBITAK has many programmes to support academic and industrial research. It has also many fellowship programmes that would help to strengthen human resources in the scientific and technological sphere. Detailed information can be found on the Master Fact Sheets about these programmes.

International Cooperation in R&D with countries from BS Region

Country	Horizontal Priorities	Thematic Priorities	Obstacles for S&T cooperation
Armenia			Lack of Information
Azerbaijan			Lack of Information
Bulgaria	Basic / Applied Research	No thematic priority	
Georgia			Lack of Information
Moldova			Lack of Information
Romania	Basic / Applied Research		
Russia	Basic / Applied Research	Mathematics, mechanics and informatics;	
		Physics and astronomy;	

¹⁵ For all the bilateral cooperation programmes of TUBITAK, additional information can be gathered at: http://tubitak.gov.tr/home.do?ot=1&sid=999&pid=553.

¹³⁴







		Chemistry;	
		Biology and medical sciences;	
		Earth sciences;	
		Humanities and social sciences;	
		Telecommunications and information;	
		Fundamentals of engineering sciences;	
Ukraine	Basic / Applied Research		









COUNTRY: Ukraine

Part A: Main players in the R&D system: list of PO and PM and policy makers

In Ukraine, the key players in the field of management and funding of scientific researches are, on the one hand, the Ministry of Education and Science of Ukraine, on the other hand, the National Academy of Sciences of Ukraine and Field Academies of Science. It is under the auspices of these institutions are most universities and research institutes of the country.

Besides, the considerable scientific, material and technical potential is concentrated in field ministries, where there are strong industry, research institutions, funded from the budgets of relevant ministries.

Modern scientific research organization of Ukraine was inherited from the Soviet Union that includes the majority of problems that arise in the way of the country integration into the international, particularly European, scientific space.

The scheme shows the structure of national policy in the field of scientific and technical activity.









List of PO and PMs and Policy Makers

- Ministry of Education and Science of Ukraine (MESU)
 <u>http://www.mon.gov.ua/</u>
 - National Academy of Science of Ukraine (NASU) http://www.nas.gov.ua/
- Academy of Medical Sciences of Ukraine (AMS) http://www.amnu.kiev.ua/
- Ukrainian Academy of Agrarian Sciences (UAAS) http://www.uaan.gov.ua/
- Academy of Pedagogical Sciences of Ukraine (APSU) <u>http://www.apsu.org.ua/en/</u>
- Field Ministries

Features of the Financial Policy in the field of Science of Ukraine

The main source of funding for science in Ukraine is the state budget divided between the main bodies in the field of scientific and technical activity.









PO and PMs	Thousand €
Ministry of Education and Science of Ukraine	36832
National Academy of Science of Ukraine	186686
Academy of Medical Sciences of Ukraine	69694
Ukrainian Academy of Agrarian Sciences	40913
The Academy of Pedagogical Sciences of Ukraine	6866
Field Ministries	39522

Distribution of the State budget allocated for research and technology development in 2009

In addition to the funds of state budget, scientific institutions use their own funds, funds of customers, the funds received from the various funds to conduct research.

The average rates as for the financing structure of scientific and technical activities sources in Ukraine in 2006-2008 are on the chart.



As an example, the figure shows the structure of funds for science, coming from Ukrainian customers





Part B: Overview of most importent Pos

Ministry of Education and Science of Ukraine (MESU)

MESU is a central executive authority in Ukraine, governed and coordinated by the Cabinet of Ministers of Ukraine, which implements government policy in fields of education, S&T research and development, identifies the main directions for future development in the field of S&T and education, ensures national science and education integration into the global system.

Basic Tasks of MESU in the Field of Scientific and Technical Activity:

- drafts principles of scientific and technical development of Ukraine;
- provides development of scientific and technical potential of Ukraine;
- coordinates development of national system of scientific and technical information;
- organizes analytical research and prognosis of scientific, technical and innovational tendencies of development;
- forms priority directions of development of science and technology;
- supervises the system of scientific and technical expertise;
- ensures integration of national science into global science while preserving and protecting national priorities;









 coordinates activity of bodies of executive power in the scope of development of state specialpurpose scientific and technical programs, scientific parts of other state special-purpose programs and controls their implementation.

MESU launches national S&T programmes on the basis of targeted projects and programmes that are selected on the competitive basis.

Law on Priority Directions of Innovation Activities (N433-IV, January 16, 2003) determines strategic and medium–range priorities for innovation development.

Medium-range priorities are established on the basis of the state law "On State Forecasting and Development of the Programs of Economic and Social Development of Ukraine". In fact, medium-term priorities are based on proposition of branch ministries, other state agencies, National Academy of Sciences and other academies and regional authorities.

They have to be included into regional or branch programs of development. Current medium-range priorities include (for 2003-2007, Clause 8 of the Law):

- Modernization of electric power-stations; new and renewable sources of energy; new resourcesaving technologies.
- Engineering industry as a base for high-tech development of all branches; development of modern, quality–oriented metallurgy.
- Nanotechnologies; microelectronics; ICT.
- Development of chemical technologies; new materials; biotechnologies.
- High-tech development of agriculture and manufacturing industry.
- Transportation systems: Construction and reconstruction.
- Protection and improvement of health care and environment.
- Development of innovation culture of society.

The Parliament has also determined strategic (long-term) priorities of development for 2003-2013 (Clause 7 of the Law). These coincide with medium-term priorities. The only difference is that medium-term priorities contain more details. So, the first priority 'Modernization of power-stations; new and renewable sources of energy; new resource-saving technologies' include such sub-goals:

- methods of protection of work in coal-mining sector; coal-mining equipment for specific conditions, protection from gas eruptions and method of mining gas utilization;
- new generators for all basic branches of industry; electric machines, equipment for power stations and new lightning devices;
- modernization of power stations and grids, equipment for nuclear stations and equipment for burning low-grade fuel;
- equipment for drilling oil wells and gas wells;
- compressor equipment for coal-mining and transportation sectors.

MESU promotes cooperation of scientific and educational organizations of Ukraine with the foreign partners in the following directions:

- scientific exchange;
- exchange of the scientific and technical information;









- development and performance of joint S&T programmes and calls (with the BS countries Bulgaria, Turkey, Romania, Russia and the EU countries in whole;
- creation of joint technological parks, laboratories, centers and enterprises;
- conducting of joint exhibitions, seminars, workshops and conferences

The programmes and projects in sphere of the international S&T cooperation are the base for scientific researches aimed on integration of domestic science in ERA with keeping and protection of national interests. Financing of S&T programmes and projects within international S&T cooperation is carried out annually at a rate of 83-88% from budget programme "Implementation of commitments of Ukraine in sphere of the international S&T cooperation".

Ukraine is involved in a wide range of S&T cooperation on the basis of bilateral agreements. A key priority is given to S&T cooperation based on the Agreement on co-operation in Science and Technology between the European Community and Ukraine signed on July 4, 2002, which gave base for further enlargement and enhancement of collaboration between scientists and Agreements with EU countries in line with European inspiration of Ukraine.

MESU co-ordinates the scientific co-operation of Ukraine with more than 50 countries over the world.

The MESU concludes and ensures the implementation of international agreements in science and education and promotes the cooperation with foreign institutions. Intergovernmental Agreements on S&T cooperation exist with almost all the EU-members and associated states as well as with the International Organizations and Funds (including the BSEC).

National Academy of Science of Ukraine (NASU)

The National Academy of Sciences of Ukraine is the highest state-supported research organization, enrolling academicians, corresponding members and foreign members. It integrates all researchers of its institutions and carries out studies in various branches of knowledge, develops scientific fundamentals for technological, socio-economic and cultural advancement of the nation. According to its Statute, the Academy enjoys the rights of self-government in making decisions about its own activities.

The National Academy of Sciences comprises three sections incorporating 14 research Departments - those of Mathematics; Information Science; Mechanics; Physics and Astronomy; Earth Sciences; Physicaland-Technical Problems of Materials Science; Physical-and-Technical Problems of Power Engineering; Nuclear Physics and Power Engineering; Chemistry; Biochemistry, Physiology and Molecular Biology; General Biology; Economics; History, Philosophy and Law; Literature, Language and Art Studies. The Academy has 6 Regional Science Centers, which are also subordinated to the Ministry of Education and Science of Ukraine. Their activities are aimed towards promoting R&D potential of respective regions, combining scientists' efforts for addressing priority regional issues. The basic elements in NAS structure are research institutes and other similar institutions. Their activities are guided by their own statutes, approved and registered by NAS.

List of the most important directions of scientific researches and exploitations

(Resolution of the Bureau of the National Academy of Science of Ukraine № 23

Kyiv 31.01.2008.)

1. Nanomaterials and nanotechnologies:

- Nanostructural materials with given properties, technological equipment;
- Nanoelectronics;
- Nanochemical and nanobiological technologies.

2. Informational technologies and resources:









- Implementation of grid-technologies on the basis of informationally computing network for the needs
 of medicine, pharmacology, genetic engineering, research in the field of high-energy physics and
 astrophysics;
- Theory, models, methods and technical means of optimization and system analysis for solving transcomputational problems (ecology, market economy functioning, demographic processes);
- Development of competitive software for computer technologies and systems, information security in computer systems;
- Management of complex systems, methods and means of information and analytical activities support and decision making by of public authorities;
- Development of the national informational resources and introduction of the world sources of scientific information.

3. Fuel and energy complex, energy saving:

- Economically legal ensuring of energetics development;
- · Problems of unified energy system of Ukraine integration to the Trans-European energy system;
- Complex modernization of the municipal heat and power engineering system.
- Effective use and extension of the gas-transport system resources;
- Energy-saving solid-state light sources;
- Increase of reliability and extension of power equipment and systems resources;
- Alternative and renewable energy sources.

4. Nuclear energy:

- Extension of resources service, modernization, reconstruction of nuclear power plants to increase their safety and effective operation;
- Creation of the elements of nuclear fuel cycle in Ukraine;
- Treatment with the spent nuclear fuel and radioactive waste products;
- · New nuclear power energy sources with high efficiency and guaranteed manageability.

5. New materials, methods of their connection and processing:

- Structural metal and composite materials for heavy, transport, chemical and power engineering, aviation and space technology;
- Functional materials for electronics, instrument making, and medicine;
- Materials for the rock-destroying and cutting instrument;
- Materials for the sources of power and hydrogen energetics;
- Resources and energy saving production technologies and combination of materials;
- Engineering of surface;
- Methods and means of technical diagnostics of materials and long-term operation construction









(bridges, gas-transport system, tanks for oil and gas conservation);

- Sorption materials of wide application;
- Substances and materials for household chemicals and food industries.

6. Rational use of natural resources potential:

- Scientific support of effective methods and search technologies, significant increase of stocks exploration and ecologically safe output of minerals in Ukraine;
- Development and implementation of the principles of environmental state policy on the basis of sustainable development;
- Saving of biotic and landscape diversity and the future development of the national ecological network;
- Climate change predicting on the system basis and the Ukraine obligations implementation under the Kyoto Protocol to the UNO Framework Convention on Climate Change;
- Problems of waste management and development and implementation of cleaner production principles.

7. New biotechnologies for health care, pharmacology and agriculture:

- Cellular and molecular technologies for medicine and agriculture;
- Genetically engineered technologies with the use of recombinant proteins for diagnosis and treatment of infectious and other common diseases;
- Methods of molecular diagnosis of hereditary and malignant diseases;
- A new generation of drugs for the prevention and treatment of cardiovascular, neurological and infectious diseases;
- Creation of detection and monitoring system of genetically modified organisms in Ukrainian market;
- Creation of the effective counteraction system to biothreats of different origin, namely: biosafety related to drugs, epidemics, manifestations of bioterrorism.

8. High-performance agriculture:

- Genetics and breeding of high-performance crops and animals;
- Economic and legal issues for ensuring the effective agricultural production and rural development of agricultural territories;
- Qualified and safe production of plant cultivation and cattle breeding for food stuff and industrial raw materials;
- Systems for remote monitoring of soil states and agricultural crops.

9. Political, legal, economical and administrative mechanisms of the Ukraine competitiveness strengthening:

- Economical, legal and organizational support of scientifically technological and innovational breakthrough, markets infrastructure development of highly technological products;
- · Policy stimulation of economic development and its institutional support;
- Competitiveness in the context of globalization. Modern civilization processes and international









relations;

- Historical, political and legal aspects in the strategy of state building, administration quality increase;
- Problems of national legal system formation.
- 10. Social and Human Factors of formation society and economics of knowledge in Ukraine:
 - Demography and perspectives of human development. Forecasting of the political, social changes and social consciousness dynamics;
 - Cultural development and humanitarian policy, the place of language areas in its implementation;
 - Economics of knowledge as a basis of contemporary modernization project. Innovational education;
 - Legal mechanisms of citizens' human rights and freedoms protection;
 - Historical memory and European values.

The National Academy of Sciences of Ukraine represents country in a number of scientific institutions around the world. In 1992 NASU joined, as the national member to the International Scientific Council and some NASU institutions became members of the corresponding international scientific unions. From 1994 Ukraine became a member of the International Institute of the Applied System Analysis (IIASA, Luxemburg, Austria) (www.iiasa.ac.at).

Today, the NASU institutions have membership in more than 30 different international unions, associations and councils, in particular the Committee of Space Research, the International Welding Institute, Association of the European Institutes of Cancer etc. NASU is a member of the All-European Federation of Academies (ALLEA) and the International Union of Academies. The initiative to establish in 1993 the International Association of the Academies of Sciences, headed by the President of the National Academy of Sciences, Academician Borys Paton is a very important to secure scientific links and common scientific-technological area. The Association has close links with the UNESCO. Today NASU has 100 Agreements on Cooperation with more than 45 countries.

International Cooperation funding options in particular within the BS region

Ukrainian RTD priorities are very similar to the thematic priorities of the FP7. Law of Ukraine on Priorities of the S&T Development (2001; Draft - 2007)

Annex 9. Draft of Law of Ukraine "About amendments to the Law of Ukraine "About Priorities of the S&T development for 2007-2012"

- 1. Harmonic development of the Ukraine citizen and building of the knowledge based society;
- 2. Fundamental researches in most actual problems of natural, social and humanitarian sciences;
- 3. Energy Security, Energy- efficient Technologies;
- 4. Development and rational utilization of resources;
- 5. Sustainable development, rational nature management and biological diversity protection;
- 6. Healthcare, enhanced health promotion, common diseases prevention and treatment, innovation biotechnologies;
- 7. Physicochemical biotechnology, innovation biotechnologies;
- 8. Information technologies and resources;
- 9. New technologies of Agroindustrial complex and processing industry;
- 10. New materials and substances

In line with these national priorities, the main areas with high potential for future bi- and multilateral cooperation with EU and other countries are from the top-down, policy-driven perspective as








- nanotechnologies (including e. g. nanobiotechnology, nanophysics, and nanomaterials)
- biotechnology
- new energies / new resources of energy
- environment including climate change
- health.

Part C: Programmes

Programme title "Implementation of commitments of Ukraine in sphere of the international S&T cooperation".

Main programme owner and programme managment agencies: Ministry of Education and Science of Ukraine

The programmes and projects in the sphere of international S&T cooperation are the base of scientific researches aimed on integration of domestic science in ERA. Financing of S&T programmes and projects within international S&T cooperation is carried out annually at 83-88% from the budget of the programme "Implementation of commitments of Ukraine in sphere of the international S&T cooperation". The Intergovernmental international agreements on science and technology concluded with almost all the EU-members and associated states as well as with the International Organizations and Funds (including the BSEC) provide a legal base for in development of the bilateral S&T programmes with Ukraine. The programmes developed within the S&T agreements define principles of future cooperation: thematic fields, amount of financing and regulations of budget allocation, scope of cooperation, evaluation procedure principles and requirements for structure and terms of calls. In most cases the programmes launched within bilateral S&T agreements of Ukraine support mobility of researchers within implementation of research project. The evaluation procedure is carried out in two stages: on the national level, conducted by independent evaluators and second stage when selected projects are submitted for joint evaluation conducted by both sides.

International Cooperation in R&D with countries from BS Region

Country	Legal Framework	Horizontal Priorities	Thematic Priorities	Obstacle for S&T cooperation
Bulgaria	MESU and MES of Bulgaria Between National Academy of Sciences of Ukraine (NASU) Academy of Science of Bulgaria	Basic Research	ICT, FAB,NMP, ENV, Space	Budget problems
Greece	Agreement between the Government of Ukraine and the Government of Greek Republic on cooperation in the fields of Education, Science and Culture	Basic Research	FAB, Health, ICT, ENV	
Moldova	Agreement between the Government of Ukraine and the Government of Moldova	Basic Research		

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	on Cooperation in the Fields of Science, Education and Culture;			
	Between NASU and Academy of Sciences of Moldova			
Romania	Agreement on S&T Cooperation between the Government of Ukraine and Government of Romania	Basic Research	FAB, Health, NMP, ICT	
	Academy of Science of Romania and NASU			
Russia	Government of Ukraine Government of Russia, Agreement on Cooperation in the fields of Science, Education and Culture; Russian Academy of Sciences, (Siberian Branch) and NASU	Basic Research	NMP, Health	
Turkey	Agreement between the Ministry of Science and Technologies of Ukraine and TUBITAK; and between NASU and TUBITAK,	Basic Research	NMP, FAB, Health, ICT	

According to the general analysis of some national S&T programmes (mentioned in the Short Fact Sheets) to date implementation of these programmes is restricted by national authorities involved. To date the development mechanisms permit to involve third parties in implementation of the National Programmes, but it needs additional consideration, information and discussion on the level of PO and PMs. At the same time, existing bilateral agreements with the EU (and the BS) countries, experience of the programmes development and available budget of the programme "Implementation of commitments of Ukraine in the sphere of international S&T cooperation" provide good opportunities to open a joint call. But the final decision is to be taken by a PO and PM (e.g. MESU, NASU, etc.)

Programme title: Program of International Cooperation in Science (PICS)

Programme owner: National Academy of Science of Ukraine

As a good practice of funding mechanism for BS joint call is bilateral agreement between governmental research organizations. As example, in the frame of bilateral agreement between National Academy of Science of Ukraine and Centre National de la Recherche Scientifique (CNRS), France, and Ukrainian research institutions have possibility to implement joint project with CNRS organisation.

A PICS is a research project involving two teams, one in a CNRS-affiliated laboratory and the other abroad. It is awarded for a 3-year non-renewable period, and aims at consolidating an ongoing collaboration that has already produced joint publications with a partner abroad. Funding received in the framework of PICS is intended to cover research travel as well as the organization of seminars and meetings.

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ANNEX 2 Programmes analysed for their setting-up procedures

The table below lists all the programmes, which were extracted from part B and C of the country reports, and which has been analysed in Section 3. Only clearly identified programmes with for which setting-up procedures applicable in the context of the Pilot Joint Call ort he BSRP have been considered.

PO	Country	Funding instrument/programme	Programme type
		dedicated budegt for international	
SCA-RA	Armenia	cooperation	new programme
ANAS	Azerbaijan	3 state programmes	national
ANAS- GIA	Azerbaijan	available budget	new programme
			inter-
MES	Bulgaria	National Science Fund	governmental
		International Programme for Scientific	ad-hoc bi- and
CNRS	France	Cooperation	multi-lateral
			international,
MESR	France	Mobility of researchers to France	uni-lateral
		dedicated budegt for international	
GNSF	Georgia	cooperation	new programme
BMBF/IB	Germany		new programme
		International exchange of students	international,
DAAD	Germany	and scolars (250 programmes)	uni-lateral
		International exchange of scientists	international,
AvH	Germany	and scolars	uni-lateral
PO Network	Germany	Thematic national programmes	national
		Initiation and Enchancement of	ad-hoc bi- and
DFG	Germany	Bilateral and Multilateral Programmes	multi-lateral
		International Research Training	international,
DFG	Germany	Groups	uni-lateral
		Bi-lateral governmental cooperation	inter-
GSRT	Greece	agreements	governmental
			inter-
CEI	Italy	CEI Cooperation Fund	governmental
		Research Fellowship Programme	inter-
CEI	Italy	(CERES)	governmental
MIUR	Italy	FAR (Applied Research Fund)	national
MIUR	Italy	FIRB (Basic Research Fund)	national
		Fund for Technological Innovation	
MSE	Italy	(FIT)	national
MSE	Italy	RIDIIT	national
		Bi-lateral governmental cooperation	inter-
MAE	Italy	agreements	governmental
		Programme for International	ad-hoc bi- and
CNR	Italy	cooperation	multi-lateral

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ASM- SCSTD	Moldova	Programme for International cooperation	ad-hoc bi- and multi-lateral
ASM -Center for			
Projects	Moldova	ASM and with third countries	multi-lateral
ANCS	Romania	Bi-lateral governmental cooperation agreements	inter- governmental
RAS	Romania	Research Fellowship Programme	ad-hoc bi- and multi-lateral
TUBITAK	Turkey	International Industry R&D projetcs support programme	international, uni-lateral
TUBITAK	Turkey	TUBITAL Fellowship Programme	international, uni-lateral
TUBITAK	Turkey	Bi-lateral governmental cooperation agreements	ad-hoc bi- and multi-lateral
TUBITAK	Turkey	Bi-lateral governmental cooperation agreements	inter- governmental
MESU	Ukraine	Implementation of commitments of Ukraine in sphere of the international S&T cooperation	inter- governmental
MESU	Ukraine	National S&T programmes	national
NASU	Ukraine	dedicated budegt for international cooperation	new programme
MAEE	France	Bi-lateral governmental cooperation agreements	inter- governmental
MAEE	France	International Programme for Scientific Cooperation	international, uni-lateral

