

## Country Profile: Bulgaria

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### 1. Political, institutional and economic framework and important actors

After a decrease from 0.57% of GDP in 1999 to 0.47% in 2001, Bulgaria's R&D intensity has only slightly recovered to 0.51% in 2004. The Private Sector contributed 26.8% of all R&D expenditure in 2004<sup>1</sup>. This wide gap to the Lisbon target of an R&D intensity of 3% with a 2/3 share of the Private Sector reflects the general context of delayed reforms in the country in the area of Science and Technology (S&T), as well as the lack of consensus about the research and innovation policy, priorities etc.<sup>2</sup> discussed elsewhere.

The wider policy and institutional context in which policies for publicly funded research are developed and implemented is marked by the impact of the accession process. The Accession Treaty for EU membership was signed on April 25 April, 2005, which provides that the country will join the EU by 2007.

The 2003 Regular Report on Bulgaria's progress towards EU accession states that Bulgaria fulfils the political criteria for membership in the Union, displays the functioning market economy and is able to, in the short-term, cope with EU competitive pressure and market forces.

Economically, the country has achieved a high degree of macroeconomic stability, and market mechanisms are now working sufficiently to allow for a better allocation of resources. During the past four years good progress has been made in structural reforms and in the restructuring of the financial sector and privatisation. The average annual real growth rate was 4.1% between 1997 and 2002, while the share of the Private Sector as a proportion of GDP was 71.4% in 2004. However the transformation of the national innovation system still does not display recovery trends.

In recognition of this problem, the Government has initiated in the last 18 months several actions to stop or reverse the previous trends. Among other, it has adopted an Innovation Strategy and an Innovation Fund to support activities in this area. A National Council on Innovations started to operate at the Ministry of Economy & Energy (MEE) to support decision-makers in their work. Although these actions show the Government's awareness of the problem and its dedication to solve it, the time since the initiation of these steps is too short to have realised already major changes in the Science and Innovation System.

The current main actors of the Bulgarian Science and Innovation System are the following:

#### **a. Political and governmental authorities**

On the political level, the *Parliament* and its *Commission on Education and Science* discuss and adopt all acts concerning S&T and relating decisions and budget allocations. Through his statements pointing to issues related to research and innovation policies at different occasions, the Bulgarian *President* has an important, active role. The Bulgarian *Government* plays an active role in R&D and innovation policy and approves all R&T&I strategic documents. Through its *National Agency for Evaluation and Accreditation*, and the *Higher Attestation Commission*, it supervises the Public Sector policy in higher education and science. The involvement of the Private Sector in decision making on a governmental level, including S&T&I related issues, is effectuated through its participation in the *Council for Economic Growth* (CEG, an advisory body to the Council of Ministers), which deals with important economic decisions (including innovation policy) and thus plays an important role in the policy-making process. The CEG brings together representatives of government and business in a co-operative and continuous effort to work for long-term and sustainable

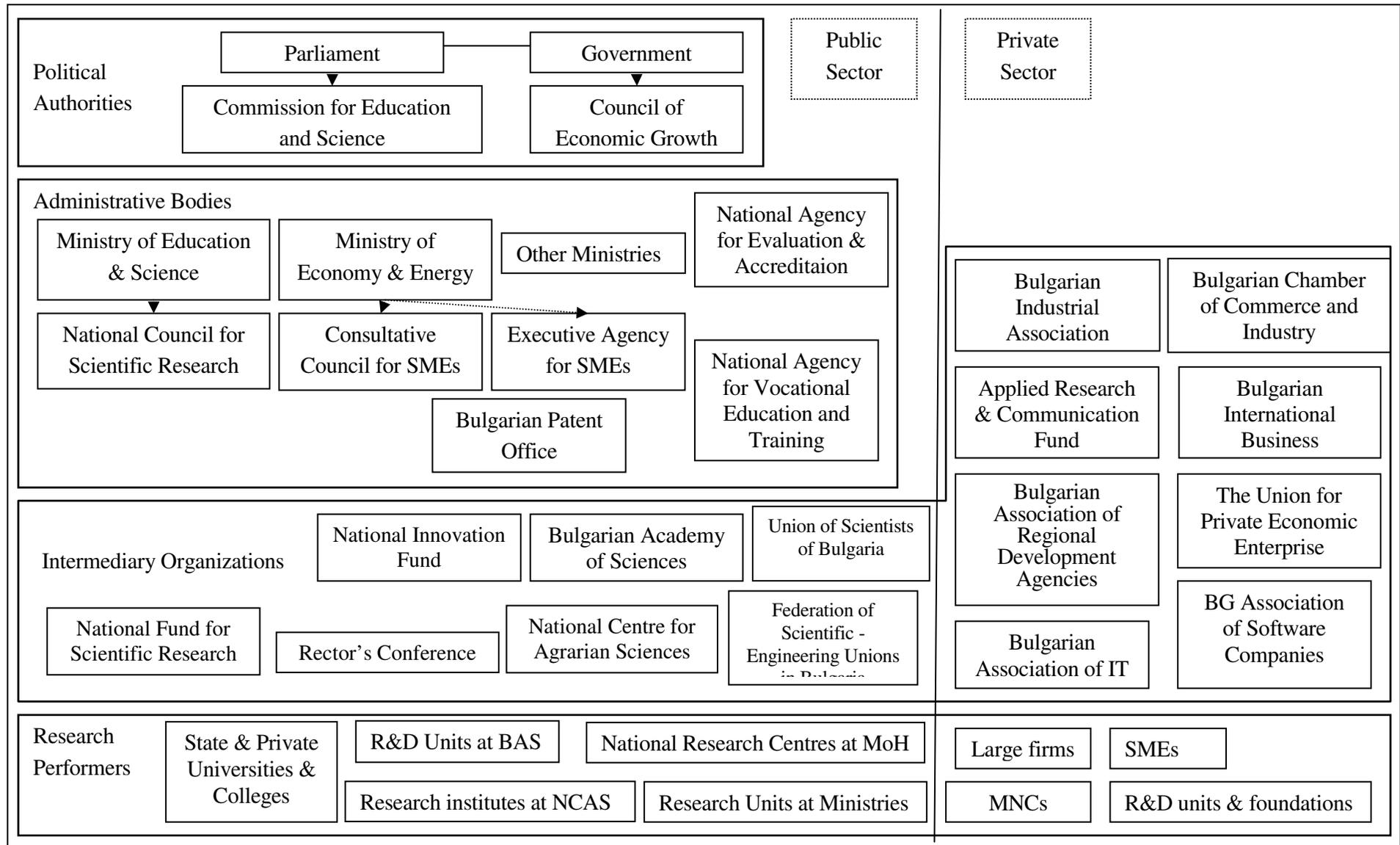
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<sup>1</sup> Source of data: Eurostat, *Science and Technology in Europe, Data 1990-2004*, Luxembourg, 2006

<sup>2</sup> Simeonova in: Meske, 2004

## Country Profile: Bulgaria

**Figure 1: Structure of the Bulgarian STI system** (model inspired by ENIP-PRIME network)



## Country Profile: Bulgaria

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economic growth. Most strategic documents are first discussed and approved by the CEG and only then passed on to the Parliament or to the *Council of Ministers*.

The main administrative bodies are The *Ministry of Education and Science* (MES) which runs national S&T policy and is responsible for shaping policies to develop S&T in the country, and the *Ministry of Economy and Energy* (MEE) which is responsible for the national innovation policy. MES' main advisory body for the state research policy is the *National Council for Scientific Research* (NCSR), where the Private Sector is duly represented. The NCSR was founded in 2004 with 19 members appointed by the Minister of Education and Science, who are representatives of universities (7 members), the Bulgarian Academy of Sciences BAS (4 members), the Ministry of Economy (1 member), the Ministry of Finance (1 member), national business organisations (2 members), the Bulgarian Chamber of Commerce and Industry (BCCI) and Bulgarian Industrial Association (BIA) and other organisations, including the Federation of Scientific and Engineering Unions in Bulgaria (1 member each). The MEE works on innovation strategy and policy implementation in the enterprise sector.

In 2004, the former State agency for SMEs was reorganised and renamed as the *Executive Agency for Encouragement of SMEs* (EAESME) (Decree 252 of the President, Darzaven vestnik N 64/2004). EAESME proposes policies aiming at increasing competitiveness and developing entrepreneurship as well as involving different actors in the realisation of the measures of the Work Program of the National Innovation Strategy. These include for example: support for innovation and technology development, including a network of high-technology incubators, facilitating the access to R&D-capabilities, research-based products and new technologies, supporting the participation of SMEs in the EU Framework programs, and developing pilot projects for cooperation between academic research and the business sector and knowledge/technology transfer.

In 2005, the *National Council on Innovations* (NCI) was set up to aid the work of the MEE. The members of the NCI are representatives of state administration, scientific organisations, education, non-profit organisations and the Private Sector. The functions of the NCI include support the Minister of Economy and Energy in the implementation of the national innovation strategy, coordination of activities of different actors in innovation-related matters and technology transfer. Sectoral S&T policies are designed and implemented by the responsible ministries.

The *National Agency for Vocational Education and Training* (NAVET) is involved in educational policy formation, including Higher Education. NAVET is a good example of Private Sector involvement in decisions related to human capacity development. It is a specialised body of the Council of Ministers, established under the provisions of the Vocational education and training Act (1999) for the licensing of activities in vocational education and training as well as the co-ordination and reforming of the institutions related to Vocational Education and Training (VET). Among its functions are its interactions with the MES and the formulation of proposals for the list of professions and state educational requirements for the attention of the relevant professional qualifications. NAVET organises and funds also R&D activities in the fields of professional education, training and professional orientation. NAVET's activities are based on a tripartite principle (government, trade unions and employers). NAVET's Managing Board is constituted of 25 members of whom 8 are representatives of business organisations, including two members from each of the following organisations: the Bulgarian Industrial Association; the Bulgarian Chamber of Commerce and Industry; the Union for Private Economic Enterprise (UPEE); and the Bulgarian Union for Private Entrepreneurs "Vazrazdane". The executive bodies of NAVET are Expert Commissions which are constituted on a similar tripartite principle and are specialised in professional directions. According to the Vocational Education and Training ACT (Art.7) in each of 14 professional directions, 3 representatives of the business organisations are included, i.e. 42 individuals take part in the decisions of NAVET.

### **b. Intermediate Bodies**

The *Bulgarian Academy of Sciences* (BAS) operates as a national research center and is responsible for most fundamental research in Bulgaria. It was founded in 1869 and carries out R&D in all of its 74 research fields. The Act of BAS of 1991 confirmed its status as an independent public institution and a national research centre. It was dismissed from its previous nation wide co-ordination functions, and its research units gained substantial autonomy in running operational and international activities. BAS' staff was reduced considerably, but it still displays the biggest share in publication output and international cooperation.

The *National Centre for Agrarian Sciences* (NCAS – formerly the Academy for Agricultural Sciences), was founded in 1999 as an integrated element of the structure of the Ministry of Agriculture and Forestry. It is responsible for scientific services in this sector and operates 29 research institutions. NCAS takes strategic decisions in the field of agrarian research, but it has no administrative formats for involving the Private Sector, although different relevant Private Sector associations are present in the country.

The *Union of Scientists in Bulgaria* (USB) and the *Federation of Scientific - Engineering Unions in Bulgaria* (FSTUB) take part in preparing legislative acts and mediate international co-operation. The USB is a “national, voluntary, non-governmental and democratic, creative and professional organisation of scientists”<sup>3</sup>. It participates as an independent partner and consultant in the elaboration and implementation of the national strategy for the development of science and higher education. The USB performs its activities through units, organised by field of research and/or by geographical area. USB membership is voluntary. Members can be persons or corporate bodies. The Management bodies are elected at conferences of representatives every four years. Its sources of financing are mixed: members' fees, donations, projects, grants, training, rent from property and income from transfer of intellectual property and from publishing and service activities. The FSTUB is made up of 19 national and 33 territorial scientific and technical organisations in the fields of science, engineering, economics and agriculture.

The *National Fund “Scientific Research”* (NSF) is the main operational instrument to realise the funding activity of MES. It finances and supports the implementation of scientific research, evaluates the results obtained, organises and promotes international collaboration. The NSF's financial means are distributed on a competitive basis for the implementation of: the national strategy and national programs, fundamental research and demonstration projects. However neither in its Scientific Support Committee nor in its Expert panels the business representation is observable.

### **c. Research performing institutions**

*Higher Education (HE) Institutions* (universities and colleges) represent an important segment of the national R&D system. The HE sector in Bulgaria comprises 99 R&D organisations, including 42 universities, three of which are private universities accredited by the *National Agency of Accreditation*. The *Rectors' conference* represents the higher education institutions on a governmental level. It is set up and operates in accordance with the Higher Education Act. The interaction of HE institutions with the Private Sector is weak<sup>4</sup>. With respect to Private Sector interaction in the decision-making, there are marked differences between private and public universities in the favour of the former group which has more intense connections.

*State R&D institutions* (18 in total) are still placed in the structures of different ministries. These include other R&D institutes and centres in the structure of BAS in Mathematics,

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<sup>3</sup> For details see [www.usb-bg.org](http://www.usb-bg.org)

<sup>4</sup> Source: Center for Economic Development, 2005

## Country Profile: Bulgaria

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Natural, Technical, and Social sciences and Humanities and institutes and centres of the National Centre for Agrarian Sciences.

There are also a few private R&D centres for applied research.

### **d. Private Sector**

According to its Statute (Ar.3), the *Bulgarian Chamber of Commerce and Industry* (BCCI, Bulgarska targovsko-promishlena palata) has the main task of partnership with state institutions to promote decisions in favour of business in the country. Among the 2005 list of its 184 participations in state bodies and decision processes, approximately 10% are reported with the agencies or consultative commissions in the field of S&T&I. General view is that during the last years the role of BCCI has increased due to its closer links with branch organisations and the increasing demands for its opinion from the state bodies. The activities of BCCI are concentrated on the submission of opinions on the drafts of new laws, programmes and strategies. However, it participates also in more operational bodies for the implementation of programmes, for instance in relation with Marie Curie fellowships in MES.<sup>5</sup>

The *Bulgarian Industrial Association* (BIA, Bulgarska stopanska kamara) with 87 branch chambers in 7 different economic sectors is the main organiser of the annual Bulgarian Investment Forum (BIF), which was set up in 1998. The members are 29 organisations (state agencies and private organisations) with a mission to improve the image of Bulgaria as a place for investment in Southeast Europe. Enhanced interaction between the government and business is BIF's main objective, for which it has organised 18 national and/or international events. In its dissemination and networking activities, the BIF uses also other channels like publications, catalogues and web-sites. At a recent event (April 2005) organised in a regional centre of the South Central Region (Plovdiv), such important issues as innovation and SMEs, improvement of legislation and business environment, and the labour market were discussed and a proposal to the government was submitted subsequently. The regional dimension was strongly emphasised by a vast representation of the regional and local authorities, business organisations and banks. The MRD, MF and ME were represented as well and HE representatives were also given the floor to present their views on the discussed issues. In 2006, these regional activities to promote research and innovation gain importance as the five ongoing Regional Innovation Strategy (RIS) projects have a very important fostering role.

The *Bulgarian International Business Association* (BIBA) is an association of foreign investors in Bulgaria, founded in 1992. It is considered to be one of the most influential non-governmental organisations in Bulgaria, particularly after it opened its doors to Bulgarian owned companies (since 2001) which are involved in international trade and strive to reach world class operational and business standards. The main mission of BIBA is to favourably influence the business climate in Bulgaria and to improve member companies' competitiveness (and thus national competitiveness). Among its activities are the facilitation of a dialogue between government and business and the promotion of Public-Private-Partnerships. The activities of its Human Resource Committee are especially relevant for Private Sector involvement, because it prepared the Chapter on human resources in the White Paper on Health and Education and the statements on the Operational Program "Human Resources Development" of the National Plan for 2007-2013.

The *Union for Private Economic Enterprise* (UPEE) (Sauz za stopanska iniciativa - SSI) was established in 1989 as a non-governmental, non-profit organisation. It is the first voluntary association of Private Sector enterprises in Bulgaria. It has several branch organisations which have officially authorised the UPEE to represent them in the *National Council for Tripartite Cooperation* (between Government, Employers and Trade Unions) and in the other

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<sup>5</sup> Source: [www.bcci.bg](http://www.bcci.bg)

## Country Profile: Bulgaria

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national bodies of tripartite or bipartite cooperation although its main focus is much more general than R&D&I policies.

The *Applied Research and Communication Fund* (ARC Fund) is at present one of the leading organisations working to advance the development of a modern knowledge-based society that uses the power of information technologies and innovation. The ARC-Fund is active in the promotion of S&T policy, serving a wide community of policy makers and practitioners in central government, businesses and industry associations, non-profit organisations and civil society actors. It has thus become an important actor in Public-Private-Partnerships in a range of issues. The ARC Fund pursues its mission by

- conducting applied research and analyses that assist the development and implementation of public policies;
- introducing new policy-making tools, such as foresight;
- building capacity in various professional groups through the provision of specialised training and transfer of knowledge and best practices;
- enhancing the capacities of commercial enterprises to innovate through technology brokering and consulting services;
- promoting public policy consensus by bringing together the key actors in research and innovation;
- promoting innovative solutions to development problems through the initiation of pilot projects to demonstrate the value of technologies (including Information and Communication Technologies), in strengthening the civil society, and developing competitive business environment”.

Among the S&T-related activities of the ARC Fund which are related to research policy, the setting up of an *Expert Council on Innovation* (ECI) to assist the ARC Fund's activity and to increase the impact of its policy-related work in 2003 is noteworthy. This Council is an advisory body which consists of distinguished professors and senior experts in innovation from the BAS, the University of National and World Economy, the Technical University Sofia, the National Statistical Institute, technology and business innovation centres and technology-based companies. During the year 2003, the council reviewed and discussed a draft of the National Innovation Strategy, prepared by the Ministry of Economy. Members of the council produced a detailed policy brief with recommendations to the government, many of which were incorporated in the final strategy. The design of the national system for benchmarking innovation ([www.innovation.bg](http://www.innovation.bg)) was another important outcome of the activity of the Council.

## 2. National research policy decisions and Private Sector involvement

The relevant *legislative environment* is created by the following acts (newly adopted or amended):

- The *Scientific Research Promotion Act* (2003) improves considerably the conditions for the Private Sector to interact in public research-related decision-making, in particular on fundamental and applied R&D.
- The *Small and Medium Enterprises Act* (1999, amended 2000, 2001 and 2004) creates provisions for the improvement of the state innovation policy and for Public Sector-Private Sector interaction in implementing the policy of investment and capacity development in the business sector.
- The *Regional Development Act* (2004) creates provisions for institutional interaction at the regional level and for business sector involvement in decision-making in the regions.
- The *Vocational Education and Training Act* (1999) stipulates the involvement of the Private Sector in decision-making on professional structures, requirements and programs in institutions of higher education (HE).

## Country Profile: Bulgaria

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Different official strategic documents, adopted by the government also constitute important elements of such an environment:

- *National Programmes in S&T*, adopted by the Government (2003). The Ministry of Education and Science is in charge of co-ordinating the implementation of these Programmes which are realised by several ministries.
- *Innovation Strategy of the Republic of Bulgaria and Measures for its Realization* (2004) creates new financial instruments and measures to facilitate Private Sector involvement. It is an expression of the firm commitment of the state to take an active position towards R&D in the country, with a clear vision of all type of measures by 2013. The support of entrepreneurial activity and the role of technological parks are recognised as being crucial for economic development, job creation and the improvement of the standard of living.

The precondition for the implementation of this innovation strategy is the improvement of socio-economic conditions: communications and high technology, energy, tourism, transportation, agriculture and forestry. These will be the area where state R&D programs will be concentrated. It will also support the combination between domestic R&D and transfer of foreign experience by attracting Foreign Direct Investment (FDI) in science and technology.

The Innovation Strategy especially focuses on industrial R&D and SMEs. It is stated in the Strategy that the scientific base of SMEs is weak; they seldom perform research and are mostly followers in the use of new technologies. The innovation capacities of SMEs must be developed by setting up bridging organisations like technological centres, which aim to create regional technological or industrial “clusters”. Another kind of mediators between public R&D institutions and the Private Sector are branch organisations, agencies for regional development and innovation centres.

In order to enhance the human resource base of SMEs, a new policy to subsidise jobs for younger engineering and research staff will be developed.

### **Instigation and design stages**

The main legislative provision for Private Sector involvement in the activities of the Ministry of Education and Science is the *Scientific Research Promotion Act* (SRPA), which stipulates the strategic role of the Government in accordance with the National Strategy for Scientific Research, which has to be adopted by Parliament.

The main MES body for design and implementation of the state research policy is the National Council for Scientific Research (NCSR). The most important outcome of its activity is the adopted National Strategy for Scientific Research.

The EAESME's activities are guided by the “Small and Medium Enterprises Act” (SMEA). Its Article 11 stipulates that a Consultative Council for SMEs (a state public advisory body), is set up by the Minister for Economy and Energy. The Council provides for and guarantees effective communication between state administration, non-profit organisations and business organisations and sets the desired standards for the effectiveness of state administration activities. According to the SMEA, 9 out of 16 members of the Consultative Council for SMEs represent business organisations. They come from branch chambers, unions and associations which support SMEs in the country. After the last amendment (2004), the recently approved members of the Council also represent the scientific community (in particular universities) and experts on the problems of economic policy (most of which come from the Private Sector). For example the agenda of the last session of the Consultative Council in March 2006 included a discussion of the annual report of the state of arts in SMEs, prepared by a non-profit organisation, the Center for Economic Development and the submission of proposals for changes and amendment of SMEA related mainly to e-government issues. In the frame of this topic it is worth mentioning that on its previous meeting, the Council adopted special directions for Public-Private-Partnership issues.

The implementation of the Innovation Strategy in fall 2004 marked a substantial improvement in the activity of EAESME in the realm of research policy-related Public Sector decision

## Country Profile: Bulgaria

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making. The National Innovation Fund (NIF) is one of 10 instruments for state intervention (both financial and organisational) in innovation. The National Innovation Strategy states: “The aim of this measure is to create a financial instrument to support innovation projects which include research or development, aiming at implementation of new manufactures and products, oriented towards improvement of innovation potential of enterprises.”<sup>6</sup>

In January 2005, the Government set up the NIF. The fund was created based on a government contribution of 5 million leva (approx. 2.5 million €). There are two tiers to the National Innovation Fund’s decision-making process:

- The NIF is managed by the *Board of Directors*, which consists of five members. A Deputy Minister for Economy (who is responsible for the EAESME) chairs the Board, while the other four members are drawn from the Ministry of Economy and Energy, the Ministry of Finance and the EAESME.
- The *Evaluation Committee* consists of 15 members, nominated by the President of the EAESME for a 3-year term. They are representatives of the business and science sectors with a recognised professional reputation. The Evaluation Committee operates on the base of peer reviews (two experts for a project).

The main functions of the Evaluation Committee are

- to elaborate evaluation methodology on the basis of funding criteria;
- to consider, evaluate and rank the projects submitted to the EAESME;
- to prepare a justified recommendation to the Executive Director of the EAESME for the funding of selected projects and for the budgetary framework of the contracts (including justifications for refused projects where appropriate).

The National Council of Innovations, in which the Private Sector is broadly represented, submits proposals for new measures to realise the National Innovation Strategy.

At the sectoral level, the Private Sector participates also in the elaboration of the national strategies in given sectors, often with important implications for STI-related policies. An illustrative example is the National Vine and Wine Strategy for 2005-2025 (adopted in 2004), which was elaborated by the National Vine & Wine Chamber, (NV&WC) together with the Ministry of Agriculture and Forestry. In the Chapter 2.3 of the resulting document *Scientific Services in the Vine Sector*, a number of measures are envisaged for the improvement of the situation on the base of the critical assessment of science and higher education, concerning infrastructure and outdated university and research programs. These refer also the role of partnerships with government bodies like the State Fund “Agriculture” in funding the programs for education and research in the sector.

### Implementation and assessment stages

Private Sector involvement in general is realised through a range of channels, including the submission of comments, opinions, recommendations, analytical papers (“White papers” and Memorandums), discussions, public events and others. In this context, S&T issues are very often raised together with other problems, such as the general economic situation of the country, the demographic situation, the “brain drain”, reforms in education, competitiveness, EU membership, etc.

The National Council of Innovations prepares the Annual reports on the implementation and results of the realisation of the innovation strategy. The first report was prepared for 2005 and the program for the implementation of the measures, included in the strategy for the next year (2006) was adopted and approved by MEE.

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<sup>6</sup> Source: Innovation Strategy of Republic of Bulgaria and measures for its realization, Ministry of Economy, August, 2004, p. 29.

## Country Profile: Bulgaria

Non-profit organisations participate mostly through raising different problems and submitting recommendations on legislation, on different programmes and on strategies. One of the most active organisations is the ARC Fund (see more in part 5). The non-profit organisations participate in policy-decisions by promoting permanent forums for Public Sector-Private Sector interaction, thereby influencing policy decisions<sup>7</sup>.

The following table specifies the types of informal involvement of representatives of Private Sector organisations in S&T policy making. The informal participation of individual experts is based on ad hoc invitations, depending on the discussed issue.

Type of involvement	Stages of decision making			
	Instigation	Decision	Implementation	Assessment
Discussions	BIA, BCCI, BIBA, BIF, RC, ARC-Fund, BIF, Individuals, Branch Chambers	BIA, BCCI, Individuals	BIA, BCCI, ARC-Fund, Individuals	BIA, BCCI, ARC-Fund, BIF, Individuals
Memos	BIA, BCCI,		BIA, BCCI, BIBA	BIA, BCCI
White Papers	BIBA		BIBA	BIBA
Consultations	BIA, BCCI, BIBA, ARC-Fund, Branch Chambers, Individuals	BIA, BCCI, ARC-Fund, Individuals	BIA, BCCI, ARC-Fund, Individuals	BIA, BCCI, ARC-Fund, Individuals

**Note:** The abbreviations of Private Sector organizations are explained in the relevant places in the main text.

*Table 1: Overview of Private Sector involvement, 2005*

The Private Sector is formally represented in S&T policy-making by the *main business associations* of the country. A limited group of organisations (typically BIA, BCCI) participates in a multitude of events where Private Sector input is solicited or welcome and a limited group of individuals participates in related discussions of different issues. Their representation is a result of an agreement between different business associations in the country.

### Observations: Possible barriers and current initiatives

Since 2003, opportunities for the Private Sector to interact in government research policy-making have improved. In practice, this interaction is mostly carried out through the setting-up of committees, councils, etc., in which the Private Sector is represented. Formal participation in governmental bodies is based on the provision of relevant acts or regulations; while informal Private Sector involvement is effectuated through different channels like the submission of position papers, consultations, opinions, and discussions. In Parliament, the system of individual consultants (including individuals from non-profit organisations) is a practice used by the Commission on Education and Science.

This type of partnership-based approach has emerged only recently. Overall, Private Sector interventions have not yet become a frequent practice, if measured by the number of proposals, regularity of the meetings of respective bodies. However, it can become more intensive if a “hot” issue comes up on the legislative agenda. But even if Private Sector interaction is not yet very frequent, it covers the whole policy formulation cycle from instigation to assessment. The Private Sector is mostly involved in issues as

<sup>7</sup> This is illustrated by the activity of the association *Bulgarian Investment Forum* - BIF (Appendix 3)

## Country Profile: Bulgaria

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- human resources development and measures against brain drain;
- setting-up of technological parks;
- state measures to stimulate business investments in research and innovation;
- priorities and programmes of STI policies;
- different barriers to innovation and research; and
- support for human resources and capacities by specific tax incentives.

The state measures for stimulating Private Sector investment in R&D are a part of the Innovation Strategy. Parts of them are financial, such as the setting-up of the Innovation Fund in 2005. For policy makers, the main motivation to enhance Private Sector involvement comes from abroad (e.g. compliance with EU STI policy practices or in reaction to criticism expressed in regular reports about Bulgaria's progress towards EU accession with respect to its R&D policy). During the last few years, Private Sector participation has become more important as the national business sector has gained a stronger position and plays a more important and active role in national development.

The different stakeholders of the Private Sector play different roles. *Business associations* have the most established position in formal involvement:

- Their role in the different councils with PSI is mostly advisory. They also work on co-development of policies.
- In the case of EAESME, the role of business associations is also one of co-decision making (distribution of public funds) and thus implementation of policies.
- They participate also in HE supervisory bodies.

Among the barriers to a more intensive and efficient Private Sector interaction, attitudes and cultural perceptions play an important role. Mixed bodies face difficulties in balancing academic, economic and administrative cultures. Another "bottleneck" to improving Private Sector interaction is legislation. The criteria for representation of branch and business organisations are not well established, which raises some tensions among those organisations. In 2004, the Parliamentary Economic Commission considered a special law for branch organisations. In this context, a clearer legislative framework for this issue was defined.

But overall, Private Sector involvement in research policy decision making is increasing in Bulgaria. The driving forces are the growing strength of the Private Sector, the stabilisation of the political situation, adjustment to international trends and the increased importance of learning. Another important factor is the positive role of the new generation of young politicians coming back from abroad (mostly after studying at prestigious western universities).

The Private Sector is particularly active in drawing up future plans and raises proposals for the development of the ICT and Electro technical manufacturing sectors.

### **3. Other important examples of policy decisions with Private Sector involvement**

#### **Bulgarian Academy of Sciences**

In recent years, the Bulgarian Academy of Sciences (BAS) has shifted its policy orientation towards applied research. In 2004, the General Assembly (GA) of BAS adopted a strategy for closer co-operation with different ministries and for the support of innovation activities. Recently, the GA elected the President of the Bulgarian Industrial Association (BIA) to the Board of the Academy. According to the Code of the BAS, the Board of the Academy is an executive body which implements research policy and strategic decisions adopted by the

## Country Profile: Bulgaria

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GA. Thus, a Private Sector representative is formally involved in strategic decisions of the BAS and their implementation.

### Higher Education

According to the relevant legislation, the Private Sector is not formally involved in the decision making bodies of the Higher Education sector. Its involvement so far is limited to a general dialogue level and to informal channels. Concerns expressed by the Private Sector and the recent initiative of BIBA aim to extend Private Sector interaction in this area to the use of more formal instruments. Together with the Rector's Conference, the BIBA presented a "Memorandum on collaboration between Business and Higher education in Bulgaria" signed by both sides. Its objective was to stimulate Government action aiming at the involvement of business representatives in HE academic councils.

The situation is different at the three private universities in the country: New Bulgarian University, Varna Free University and Burgas Free University, where Private Sector involvement is already significant. Between two and five members of their Supervisory Boards are representatives of the Private Sector.

### Regional strategies

In Bulgaria, regions do not have a status of independent administrative structures in the country (i.e. Bulgaria is not a federation). The regional level is used mostly as a framework for planning (6 planning regions). According to the Regional Development Act (RDA), the main body for regional administration is the Council for Regional Development. It is also envisaged in the RDA that a special Private Sector-Public Sector interaction will be assured in the Innovation Council to run the S&T and innovation issues in the regions. Another line of improvement is the adoption of the National Regional Development Strategy. Both of these both are still in consideration. (The final approval is expected in the next months.)

Besides this formal line of action to enhance Private Sector interaction, activities towards the improvement of regional innovation strategies have been intensified in recent years, thanks to the support from EU and some western countries. The elaboration of such strategies is a good example of Private Sector involvement in strategic initiatives and is a basis for further Private Sector interaction in the realisation of such strategies.<sup>8</sup>

However, the interaction with business is still a weak point of regional and municipal authorities in the country. This may prevent the capability to absorb the resources offered by EU pre-accession funds and to use them efficiently.<sup>9</sup>

## 4. Overview: Types and extent of Private Sector involvement

*General discussion and networks* are the most developed form and type of involvement (e.g. meetings, conferences, public discussions). They are taking place on different occasions, mostly related to EU membership of the country and to the Lisbon strategy.

To *raise awareness and to create influence*, different initiatives are launched, mostly by the Private Sector. These include studies (example: Center for the Development of the Economy, ARC-Fund), white papers (example: BIBA in HE management bodies), forums (example: Bulgarian Investment Forum - BIF) and research funding (example: Open Society Foundation).

*Consultations* with individual experts, associations, non-profit organisations and advisory groups are also used both by policy institutions and the Private Sector for providing policy advice.

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<sup>8</sup> For example the South-central region.

<sup>9</sup> Annual report about Bulgarian economy the Center for Economic Development

## Country Profile: Bulgaria

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*(Co-)design and decision making* is a relatively new practice, related to recent legislation. They are realised mainly through the participation in advisory and decision-making bodies or supervisory boards of two ministries: MEE and MES. They are used for priority setting, elaboration of programmes, strategies, action plans and for assessment first applied by some big organisations (BIA, CCA, or BAS). Other joint activities are realised through consortia and result in structures like the European Innovation Centre (members: ARC-Fund, BAS, BIA, MEE), the Bulgarian Investment Forum and others. There are also private foundations that are funding research in public R&D units, including some foreign foundations such as the Soros, Egbert Nauman and Conrad Adenauer Foundations. Staff mobility and exchange is not yet used in Bulgaria as a means to create links between the Public and the Private Sector.

### **5. Selected useful examples of transferable approaches and experiences**

As the Bulgarian Science and Innovation system is still in an early development stage, it is difficult to find any transferable approaches developed in Bulgaria. The forms developed under the provision of recently adopted laws and strategic documents are still in relatively early stages of implementation and no significant experience has been gained from this practice yet.

As a specific case of Private Sector interaction, one could refer to the important role of non-profit organisations which have become a driving force for the promotion of new development trends in S&T in Bulgaria.

Seen from the perspective of their durability and influence as an eventual case for in-depth study, one could suggest the Applied Research and Communication Fund (ARC Fund), a private non-profit organisation established in Sofia in 1991. The most recent result of involvement of the ARC Fund in S&T policy-making is the proposal to the Ministry of Regional Development with respect to the Regional Development Act. It concerns the structure and functions of Regional Development Councils, which are to be public-private bodies responsible for the elaboration, implementation and assessment of regional innovation strategies.

Another example of ARC Fund activity is the ForeTech Project,(2003-2004) realized in a consortium of seven partners aiming at introducing foresight activities in two countries – Bulgaria and Romania, building upon the experience gained from projects and initiatives already supported by European Commission and STRATA program. Two pilot foresight initiatives for two identical sectors – ICT and biotechnology were performed in the two countries, contributing to the enhanced awareness about the role (and use) of foresight in policy development and resulted in many recommendations and suggestions for policy-makers for designing measures in R&D&I as well as in a few other foresight projects.

**Appendix 1: Overview of identified instruments for Private Sector involvement and their use in Bulgaria**

Instrument		Inten- sity of use	Initi- ated by	Used for	Used in				Examples and remarks
					Instigation	Design	Implement.	Review	
General discussion & networks	Informal contact / consultations	Growing	Public Sector	Information, proposals	✓	✓	✓	✓	Not specific, individual
	Conferences	Growing	Either side	Awareness building	✓				BIBA,ARC-Fund, BIF
	Discussion platforms	Regular	Both sides	Strategies, programs	✓	✓			CED,BIBA, ARC-Fund
	Networks	Regular	Either side	Analyses, recommendations, strategies	✓				IRC, BIF
	Staff mobility & exchange	-	-	-	-	-	-	-	-
Awareness & influence	Ad hoc studies	-	-	-	-	-	-	-	-
	Position papers	Regular	Both sides	Analyses, recommendations, strategies	✓	✓			BIBA,ARC-Fund, CED
	Ad hoc meetings and workshops	-	-	-	-	-	-	-	-
Advice	Formal consultations	Occa- sional	Both sides	Legislation, regulations Programs	✓	✓	✓	✓	BIA,BCCI, BIBA
	Advisory groups & committees	Occa- sional	Public Sector	Policy, strategies	✓	✓	✓	3	BIA.BCCI
(Co-)design & decision making	Evaluation studies	-	-	-	-	-	-	-	-
	(Steering) committee participation	Occa- sional	Both sides	Strategy, action plans, funding	-	✓	✓	✓	BAS, NCSR, EASMEs
	Board memberships	Occa- sional	Both sides	Policy, legislation, assessment	✓	✓	✓	✓	CCSMEs
	Task force	-	-	-	-	-	-	-	-
	(Co-)funding of research	Beginning to use	Public Sector	(Innovation) projects			✓	✓	IF, EASMEs

Table 1: Overview of instruments used for Private Sector involvement

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The patent fees are changing yearly: for the firsts 4 years they are 15 BGN, for the 20<sup>th</sup> Year it is 1700 BGN, and for 23<sup>rd</sup> – 3000 BGN (1 EURO = 2BGN).

According to the tax policy of Ministry of Finance, the importation of scientific instrumentation is duty free.

The functioning of Libraries is not based on a special law. Their activities are regulated by Government decrees N19 /1996 and N153/2000. It is also partly regulated by the *Deposit Act* (2001). The biggest scientific libraries in the country (BAS, University of Sofia) are regulated by institutional rules adopted by the relevant organizations.

### **3. Further information and feedback**

This country profile has been prepared by a team of IKU Innovation Research Centre under the leadership of Dr. Annámária Inzelt. For further information and feedback, please contact the responsible authors under [iku@uni-corvinus.hu](mailto:iku@uni-corvinus.hu).