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RESEARCH, TECHNOLOGY AND REGIONAL POLICY IN AN ENLARGING EUROPE

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Title:

RESEARCH AND TECHNOLOGY IN BULGARIA - CHALLENGES BOTH FOR POLICY AND ECONOMIC ACTORS

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1. Role and importance of R&D in Bulgaria's economy

After 1997 Bulgarian economy is characterised by permanent GDP growth of approximately 5% yearly. Nevertheless the R&D intensity (R&D/GDP) is constant – 0.5%, in which the business has only 1/5 contribution.

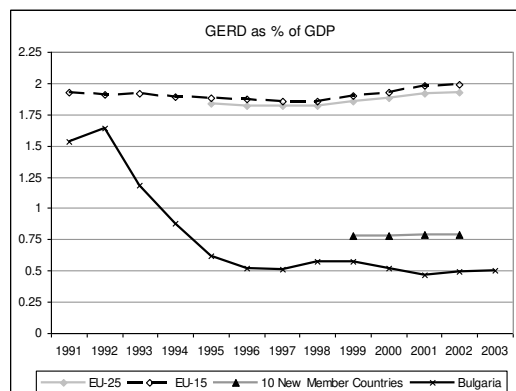


Figure 1: GERD as % of GDP

Now the R&D potential in the country is close to the EC-25 average, but the internal demand for R&D is quite lower.

The share of high-educated population in the age group 25-64 in Bulgaria is the same as in EC-15 average and higher than EC-10 new. But there is a tendency of decreasing traditionally high level of quality of education. From the other side, the change of structure of high-educated population towards increasing the share of natural and engineering sciences is a positive sign.

Table 1: Share of high-educated population in the age group 25-64

Country	% of high-educated population in 25-64 age group
Bulgaria(2003)	21
EC-15 (2002)	21
EC-10, new (2002)	19
Cyprus (2002)	29
Poland (2002)	12
Czech Republic (2002)	12
Slovakia (2002)	11
Romania (2002)	10

Source: NSI, Eurostat, 2004 г.

This state of the art of R&D potential in Bulgaria is a base for deeper R&D cooperation in an enlarging Europe and a challenge both for policy and economic actors of the country and of abroad.

2. Challenges both for policy and economic actors in the present situation and in the future

The challenges could be summarised as follow:

- Increasing internal demand for domestic R&D activities and outcomes, mainly the business demand
- Increasing foreign demand for domestic R&D activities and outcomes
- Increasing the quality of R&D potential and quantity of R&D personnel

Table 2: R&D personnel in EC and South Eastern Europe 2002

Countries	Researchers FTE	Number of researchers	Researchers (FTE) per 1000 inhabitants
Albania
Bulgaria	9223	10445	1.16
Greece (2001)	14371	26340	1.36
Romania	20286	24636	0.91
Serbia and Monte Negro		10855	1.33
Turkey	23995	71288	0.34
EC-25 ⁺	1160305		2.55
EC-15 ⁺	1046547		2.74

Source: UNESCO, ⁺OECD

A policy towards increasing the foreign demand for domestic R&D activities and outcomes could be realized through intensification of the regional research, technology and business cooperation.

3. Potential for Bulgarian cooperation in an enlarged Europe with an emphasis on South Eastern Europe

The major share of the Bulgarian foreign trade and R&D cooperation is oriented toward EC: 53.5% of the import and 58.6% of its export.

There is a large potential for increasing the Bulgarian R&D and economic cooperation in South Eastern Europe and in this way furthering integration of European economic area.

One direction of the policy in this respect could be: increasing the hi-tech import from European and other world technology leaders as a condition for increasing of the volume and quality of specific areas of R&D and economic activities in the country, which may lead to increasing Bulgarian export and intensifying regional R&D and economic integration.

The specific areas of R&D and economic activities are those, which may increase absolute and comparative advantages of the country in European and world economy and science community. The identified such areas are those of service sector (other services), manufacture, agriculture and forestry, transport and communications.

The EC could play significant role in realization of the Bulgarian R&D and economic cooperation in South Eastern Europe and in this way furthering integration of European economic area.