

Ministry of Education and Science Republic of Bulgaria

# Governance, Operation and Funding Instruments of a New Promotion Agency for Research and Innovation in Bulgaria

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Sofa, Bulgaria 1 MARCH, 2017







- Setting Up the Context
- Output of the National Science System
- Governance of Science and Innovation
- ✓ Conclusions





# Pillar I: Setting the Context







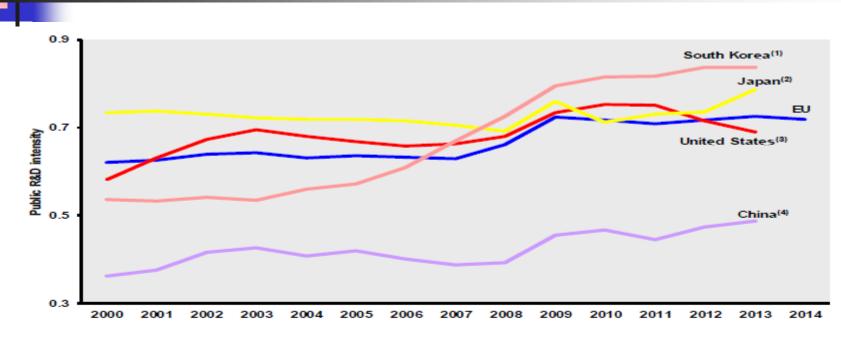


- Global Political and Economic Instability
- Different Approach Required for Economic Prosperity
- R&D and Innovation continue to be the key drivers of economic growth and high quality job creation





# **EU R&D System is Getting Stronger**



Science, Research and Innovation performance of the EU 2016

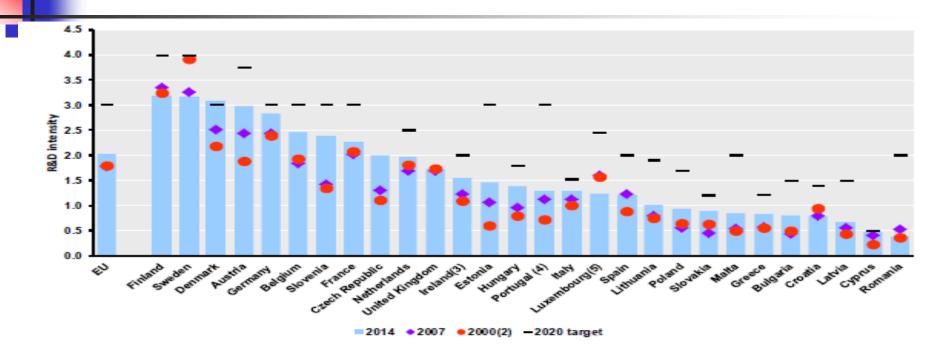
Source: DG Research and Innovation - Unit for the Analysis and Monitoring of National Research Policies Data: Eurostat, OECD

*Notes:* <sup>(1)</sup>KR: There is a break in series between 2007 and the previous years. <sup>(2)</sup>JP: There is a break in series between 2008 and the previous years. <sup>(3)</sup>US: (i) Government intramural expenditure on R&D (GOVERD) refers to federal or central government only; (ii) Higher education expenditure on R&D (HERD) does not include most or all capital expenditure; (iii) There is a break in series between 2003 and the previous years. <sup>(4)</sup>CN: There is a break in series between 2009 and the previous years.





# Sweden, Luxembourg, and Croatia Go Beyond National R&D Targets. Yet, Bulgaria falls behind!



Science, Research and Innovation performance of the EU 2016 onitoring of National Research Policies

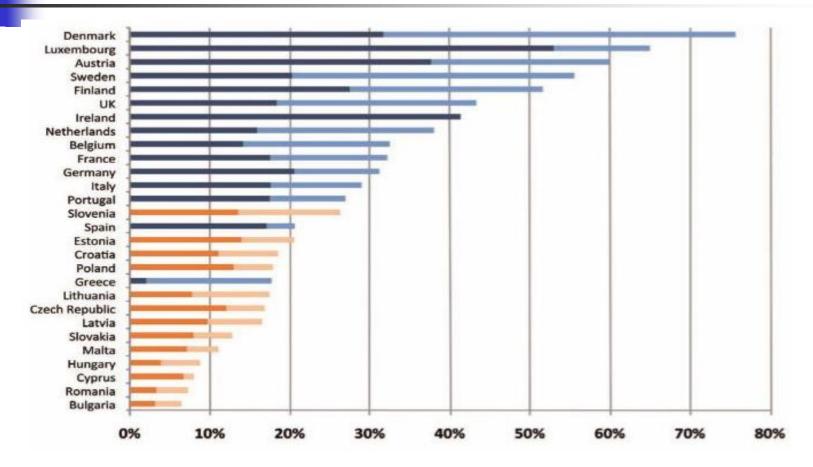
Source: DG Research and Innovation - Unit for the Analysis and Monitoring of National Research Policies Data: Eurostat

Notes: <sup>(1)</sup>CZ, UK: R&D intensity targets are not available. <sup>(3)</sup>EL, SE: 2001; HR: 2002; LT, MT: 2004. <sup>(3)</sup>IE: The R&D intensity target is 2.5% of GNP which is estimated to be equivalent to 2.0% of GDP. <sup>(4)</sup>PT: The R&D intensity target is between 2.70% and 3.30% (3.00% was assumed). <sup>(3)</sup>LU: The R&D intensity target is between 2.30% and 2.60% (2.45% was assumed). <sup>(4)</sup>DK, EL, FR, HU, NL, PT, RO, SI, SE: Breaks in series occur between 2000 and 2014.





# Share of EU Structural Funds, initially allocated under Research & Technical Development Infrastructure

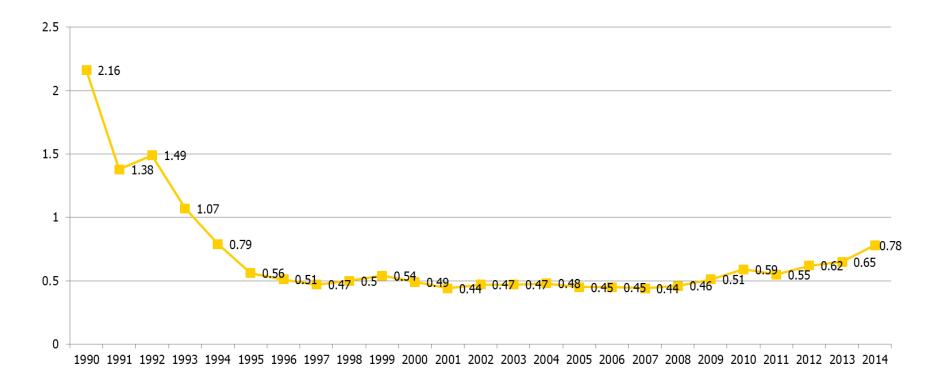




Source: DG Regional and Urban Policy, EC (2014)



## **R&D Funding in Bulgaria**



Source: DG Research and Innovation, European Commission; Data: EUROSTAT; DG ECFIN.





## **BULGARIA: EU FPs/ National Funding Instruments**

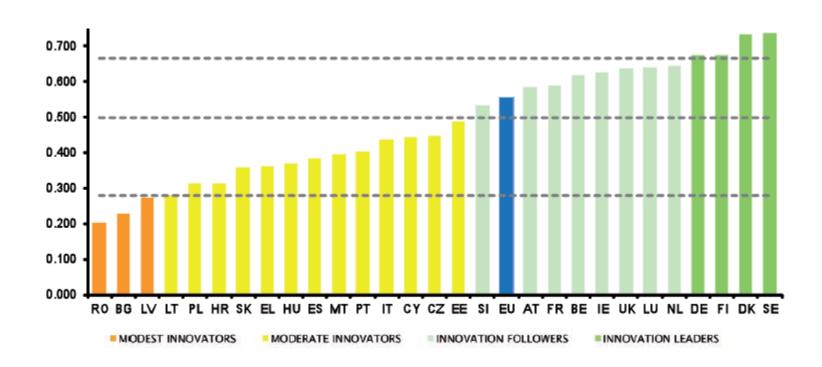
5-th Framework (1998-2002)	6-th Framework 2002-2006		7-th Framework 2007-2013
20 mln. USD	45 mln. USD		105 mln. USD
NATIONAL FUNDING INSTRUMENTS		<b>AVAILABLE FUNDING (in USD)</b>	
National Innovation Fund (2005-2016)		50 mln.	
National Science Fund (2005-2016)		168 mln.	





9

### Innovation Performance of Bulgaria: Lagging Behind ...and the role of RIS 3



Source: Innovation Union Scoreboard, EC (2015)



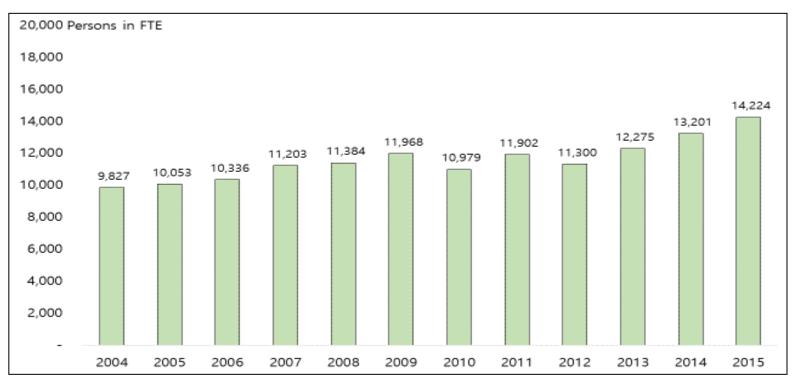


# **Pillar II: Output of the National Science System**





#### **Number of researchers in FTE**



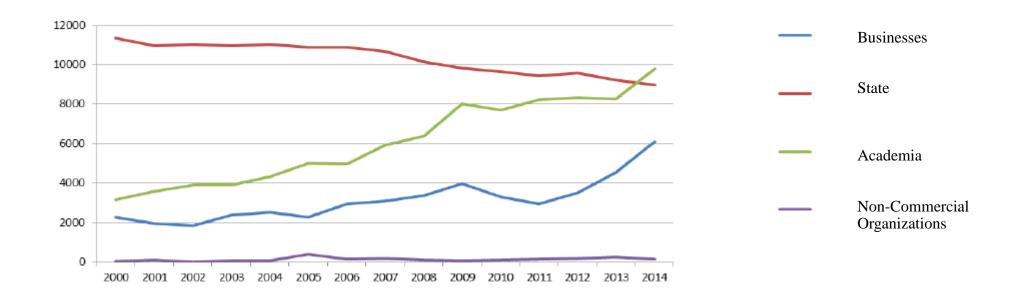
Source: Eurostat Database, Source:



http://ec.europa.eu/eurostat/data/database [14 January 2017].

## **R&D Researchers in Bulgaria**

(full-time contract)

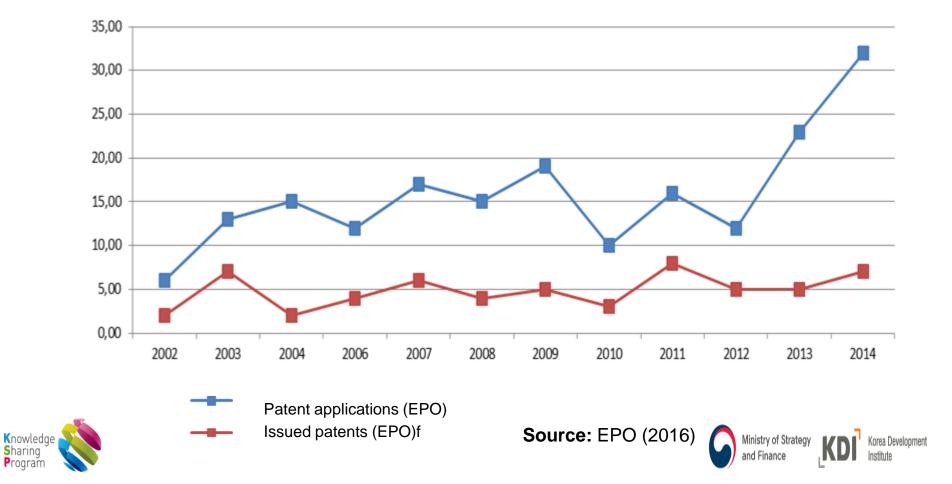


Source: National Statistical Institute (2016)

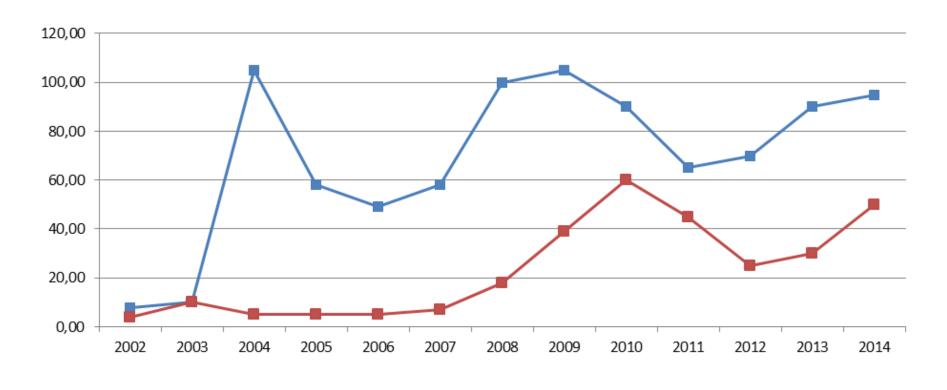




## **Bulgarian Patent Applications (EU)**



## **Bulgarian Patent Applications (USA)**



Patent applications (USPTO) Issued patents (USPTO)

Source: USPTO (2016)

Ministry of Strategy

and Finance



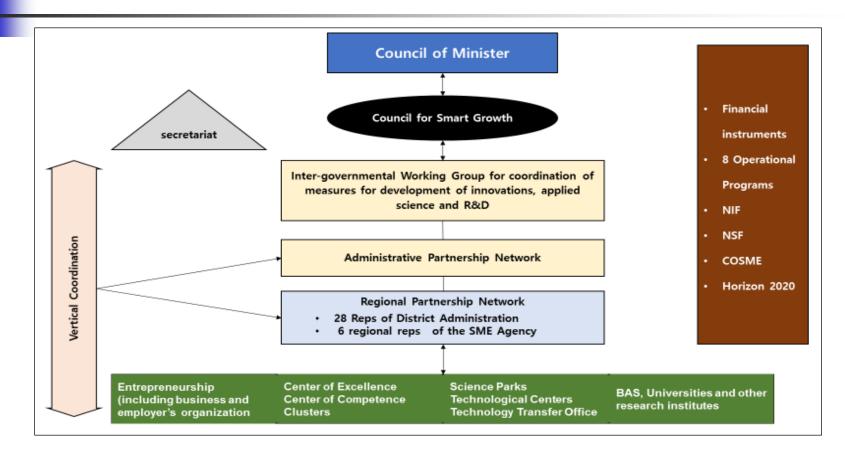
Korea Development

# Pillar III: Governance of Science and Innovation





## Governance Mechanism of the National Science and Innovation System of Bulgaria



Source: RI3S for Bulgaria.





# **Policy & Legal Framework**

- Increase of the R&D Funds up to 1,5% of GDP
- Establishment of Science Technology Parks and Centers of Excellence/Competence
- Reform of the National Science Fund towards transparency and monitoring for increase of the effectiveness of public financing

Law for Promotion of Scientific Research

National Strategy for Scientific Research 2025

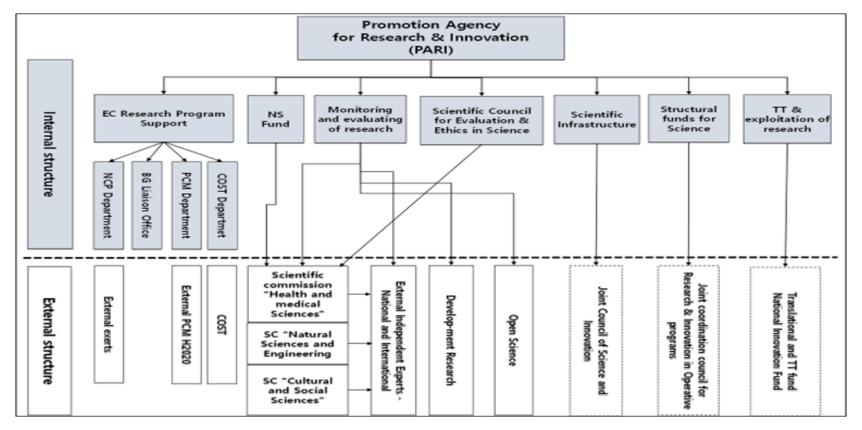
Regional Innovation Smart Specialization Strategy for Bulgaria

Law for Innovations (planning ahead)





#### **Conceptual structure of the New PARI Agency**









# Planning Ahead



