

# Innovation.bg

*Innovation.bg* is the flagship initiative of ARC Fund.

- The *Innovation.bg* report provides annual assessments of the Bulgarian economy's innovation performance and of the innovation system's current status and development prospects. *Innovation.bg* 2018 presents the progress in the implementation of the national Innovation Strategy for Smart Specialization (S3) for the period 2014-2020, reviews the main challenges faced by national and regional authorities, and provides recommendations for better understanding of the process of entrepreneurial discovery and for improvement of the science–business relationships lying at its basis. The report concludes that authorities at all levels of governance should target their efforts at improving the implementation of S3 to strengthen the impact of smart specialization on the national economy and make Bulgaria a moderate-innovator country.
- *The National Innovation Forum* is a platform for exchange of ideas and cooperation among the government, business community and research organizations. It enhances the performance of Bulgarian companies and boosts the innovation potential of the economy by promoting the introduction of new products and technologies and by facilitating business contacts with European partners. The Forum's policy agenda is based on the findings of the *Innovation.bg* 2018 report.
- *The Innovative Enterprise of the Year contest* is open to participants from all sectors of the industry nationwide. The award acknowledges innovative enterprises which have developed new, or have significantly improved their old products, services or processes over the last three years. In 2018, ARC Fund introduced the Excellence in Innovation label given to contest finalists to boost their visibility and recognition across boundaries.

## *Innovation.bg* 2018



*Innovation.bg* is Applied Research and Communications Fund's overall program for shaping the national innovation policy agenda. It combines several components which offer expertise and policy advice.

Since 2004, the *Innovation.bg* report has been used as a tool, based on survey and micro-studies, for independent, comprehensive annual performance assessment of the national innovation system and the national economy. *Innovation.bg* applies an original methodology to assess the degree of business innovation activity based on the types of innovation and the degree of novelty of introduced innovation products and processes. Traditionally, the *Innovation.bg* report assesses Bulgaria's innovation po-

tential in five major fields:

1) Gross Innovation Product reviews the results of the national innovation system, the main innovation targets of the enterprises and the problems they face in their innovation activities.

2) Entrepreneurship and Innovation Networks outlines the characteristics of two major sources of innovation in the Bulgarian economy – the setting up of new enterprises and the participation of Bulgarian producers in national and international value chains for the development of new products and services.

3) Investment and Financing of Innovation considers the role of foreign direct investment and the import of R&D products and knowledge as well as the available instruments for R&D investment.

4) Human Capital for Innovation reviews the available human resources for the adoption of foreign and the creation of local innovation in the economy.

5) Information and Communication Technologies (ICT) analyses the existing ICT infrastructure as an R&D catalyst.

The *Innovation.bg* report provides valuable analytical framework and expertise for a number of stakeholder groups:

- European project partners, such as the Joint Research Centre, cited the re-

port's findings and recommendations with regard to the new trends of the process of smart specialization at European and national level.

- Central and regional authorities, including the Ministry of Economy, the SME Promotion Agency, the Ministry of Foreign Affairs, the Municipalities of Sofia, Gabrovo and Ruse, etc., use the analyses of the innovation capacity of the national and regional economies as a tool for rationalizing the decision-making process in the field of business support.
- The private sector and academic community acknowledge the good practices described within the report as an important benchmark.

The key topic of *Innovation.bg 2018* was the smart specialization concept and instrument introduced by the European Commission in 2013 – 2014 in order to allow Member States and their regions to draft their own development concepts based on the strengths of local businesses and to make better use of the European funds to be granted by 2020. Bulgaria had postponed the adoption of its Smart Specialization Strategy until 2016 when it was finally adopted and approved by the European Commission, although discussions on it with the Bulgarian government continued.

### Regional Innovation Centers

At the insistence of the European Commission to encourage cooperation between business and researchers at the regional level and offset the concentration of Centers of Competence and Centers of Excellence in Sofia, the government has transferred BGN 100 million from the Science and Education for Smart Growth Operational Program (OP SESG) to the Innovations and Competitiveness Operational Program (OP IC) to fund the establishment of Regional Innovation Centers (at least one center for each ISSS<sup>1</sup> thematic priority in each of the six NUTS II regions in Bulgaria). To achieve sustainability, Regional Innovation Centers should be allied to innovative private companies or clusters in each region.

ARC Fund contributed to the development of the concept of the Regional Innovation Centers. It was commissioned by the Ministry of Economy to draw up recommendations based on focus-groups and stakeholder interviews across the country, and on an in-depth analysis of European good practices.

<sup>1</sup> *Innovation Strategy for Smart Specialization (ISSS)* of the Republic of Bulgaria

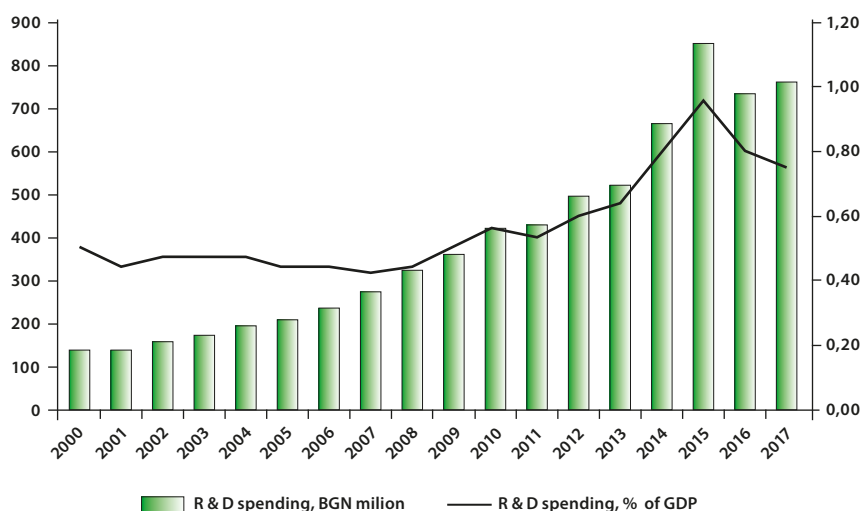
Analyzing the experience of the Sofia Tech Park, Centers of Competence and Centers of Excellence, the report concludes that the Bulgarian public and private sectors struggle to manage such a complex infrastructure even within the most developed region of the country –the capital Sofia. ISSS and its thematic priorities are hard to implement due to a number of strategic, managerial and financial obstacles. The lack of a sustainable mechanism for interfacing with innovative Bulgarian businesses is a main weakness hampering the improvement of measures and projects.

Smart specialization as a key EC tool for innovation support will keep its key importance after 2021. The task of the

Bulgarian government (central and local) is to come up with solutions for achieving a breakthrough in innovations and to raise growth levels above those of Central Europe and the Baltic countries.

*Innovation.bg 2018* also points out that for a second year in a row, the share of R&D costs in GDP has continued to decline to 0.75%. The decline in the number of staff engaged in R&D is 3.4% year-on-year. In addition, over 67% of the population aged 16 to 74 do not have digital skills, compared to 41% on average for EU-28. Only 2% of the population is engaged in forms of lifelong learning, versus 11% on average for EU-28. A mere 31% of companies (66% for EU-28) fund on-the-job training programs.

Fig. 1. R&D spending in Bulgaria, 2000-2017.



Source: NSI, 2018

The bottom line is that, remaining stuck at the 2010 levels of several innovation potential indicators, Bulgaria forgoes a number of opportunities and ultimately lags behind the developed European economies and the new EU Member States. A breakthrough could be achieved in the next two years, when the technical and substantive aspects

of the strategic framework for the next programming period will be prepared. In addition, policies for smart specialization at the national and regional level should be designed and consistently applied in order to further enhance the input of the private sector into the innovation economy of Bulgaria.

*The Fourteenth National Innovation Forum*

For a fourteenth year in a row, the National Innovation Forum gathered more than 250 representatives of the policy, research and business communities to share views on Bulgaria's position in the smart policies for innovation-driven growth. The event took place on 6 December 2018.

Dr. Ognian Shentov, Chairman of the Applied Research and Communications Fund, highlighted the main challenges to unlocking Bulgaria's innovation potential, such as low innovation activity, shrinking public spending for innovation and research, and a declining number of researchers in public institutions. He also noted the growth of private investments in innovation,

but pointed out the need for long-term government commitment and support.

The President of the Republic of Bulgaria Mr. Rumen Radev stated that innovations are "the most effective way to achieve sustainable economic growth". He observed that despite competitive advantages such as young talent, growing private investments in R&D and easy access to broadband internet, Bulgaria is still among Europe's modest innovators. The President expressed his support for comprehensive policy measures and incentives for innovations, targeted funding programs, investments in education, and lower administrative burden.



*President of the Republic of Bulgaria Mr. Rumen Radev at the 14th National Innovation Forum*



*(L–R): Dr. Ognian Shentov, Chairman of ARC Fund; Mr. Rumen Radev, President of Bulgaria; Ms. Karina Angelieva, Deputy Minister of Education and Science*



*14<sup>th</sup> National Innovation Forum, Sofia, 8 December 2018*

The 2018 Innovative Enterprise of the Year National Contest

Since 2004, **Innovative Enterprise of the Year** awards have been given to Bulgarian companies successfully integrating innovations or scientific achievements in their practice and thus streamlining their

activities and improving their long-term performance. Companies are assessed following a specific methodology by an expert group and an external jury by area of impact of the innovation.



President of the Republic of Bulgaria Mr. Rumen Radev (middle), Dr. Ognian Shentov, Chairman of ARC Fund (left) and award winners of Innovative Enterprise of the Year 2018

Twenty-five out of 100+ companies from various sectors of the economy were short-listed and a 17-member jury, in which public authorities, funding organizations, the business and academia were represented, selected the winners in the eight areas of in-

novation impact. President Radev presented the awards to the **winners in the national contest Innovative Enterprise of the Year 2018**.

**Spesima Ltd.** was granted the award for



President of the Republic of Bulgaria Rumen Radev and Ivana Slavkova and Svetoslav Savkov, Spesima Ltd.

Market Leadership for reengineering universal robots from the automobile industry and successfully selling them in over 35 countries. The company uses the robots' mechanic construction, and develops and equips it with new hardware and software, thus transforming its application to an entirely new one. The approach is ecological and energy-saving.

Innovation award for developing innovative software products based on blockchain and artificial intelligence. Founded by 16 cooperators, the company has created the blockchain infrastructure Wetonomy, used for the management of autonomous organizations via smart contracts. They have also developed the blockchain platform Scynet for creating and training artificial intelligence.

**Comrade Cooperative** received the Social



*President of the Republic of Bulgaria Rumen Radev and Todor Kolev, Comrade Cooperative*

*Introducing the Excellence in Innovation Label*



The Innovative Enterprise of the Year contest finalists also receive ARC Fund's newly introduced **Excellence in Innovation label** in recognition of their cutting-edge innovations. An independent jury of experts assesses them by a set of indicators such as high quality and originality of innovations, impact on national and world markets, the environment and society, and efficiency of the business model.