# Introduction

Applied Research and Communications Fund's mission is to foster social, business and technological innovations, to provide research-based policy solutions and to facilitate the development of a knowledge-based society.

ARC Fund is proud to announce that 2011 marks the 20th anniversary since its foundation. Throughout these years, ARC Fund has continued and expanded its efforts to improve the knowledge economy, foster an innovative culture, as well as the internationalization of public institutions and private sector businesses, Specifically, ARC Fund has enhanced its capacity to effect positive change in the country through the use of the most modern public policy development tools based on European and global best practice. This consisted of legitimizing public policy decisions by the provision of a venue for democratic deliberation by bringing together key stakeholders from government, industry and civil society into a constructive dialogue. Strengthening the interface between the government, businesses and civil society is an essential precondition for developing inclusive stakeholder-driven public policies and thriving private sector. ARC Fund helps promote this interaction in order to improve economic opportunities in the country that respect environmental and social challenges. Exposing the merits and faults of ideas and opinions to each other in a transparent venue with the ability to act on results, is an essential foundation to the achievement of ARC Fund's goals.

However, strengthening this process does not only come about in a top-down way through deliberative public policy development. ARC Fund recognizes this fact as it continually supports activities in the country which aim to encourage involvement even at the grassroots level. With respect to supporting the innovation and knowledge economy, the organization undertakes specialized trainings for professional groups in the country as well as provides technology brokering, innovation incubation and consulting services to Bulgarian and foreign companies. At present over 5,000 clients benefit from ARC Fund's offerings. With respect to the strengthening of civil society, ARC Fund undertakes projects which help to demonstrate the value of technology in strengthening governance (such as e-governance), those which help to decentralize and democratize informational inputs into the policy-making process (for example through online social networks), and in improving the competitiveness of Bulgarian businesses (through the facilitation of partnerships and the transfer of knowledge and international best practice). By supporting these societal pillars from multiple entry points, ARC Fund aims to increase their interaction in order to check and balance each of them into providing optimal societal outcomes for Bulgaria and Europe.

# **Policy Impact**

Throughout 2011, ARC Fund continued its efforts to provide the most up-to-date information and analysis to Bulgarian policy-makers in innovation, science and technology policy. Of particular importance was the development and presenta-

tion of the 2011 Innovation.bg report, which identified both the positive trends, as well as the challenges, to innovation in the country. This analysis was presented to policy-makers at the Seventh National Innovation Forum in Sofia. ARC Fund's expertise was also utilized by the Ministry of Economy, Energy and Tourism in the development of the Law on Innovation. A draft version of this law was presented for discussion among the Bulgarian authorities at the end of 2011 and is currently under discussion.

ARC Fund worked closely with government agencies on improving the information society in the country, including the Ministry of Transport, Information Technology and Communications. ARC Fund is represented on the ICT Consultative Council at the Ministry, where it provided information on current developments of ICT in Bulgaria as well as offers advice to improve broadband and penetration of ICT in the country.

ARC Fund also took an active civic role in Bulgaria through its efforts to encourage the safe and responsible use of internet and mobile technologies and its cooperation with the Ministry of Interior to prevent child abuse online. ARC Fund was instrumental for the provision for a register of sexual abusers of children in the new Child Protection Act, which is under discussion in the Parliament. Nearly 5,000 Facebook users supported the cause, which makes it one of the most popular policy causes after the environmental ones. ARC Fund's long-time advocacy campaign on the Council of Europe's Convention on Protection of Children against Sexual Exploitation and Sexual Abuse finally resulted in ratification by the Parliament in November. Through its coordination of the Safer Internet Center (SIC), ARC Fund helped raise awareness among children, parents, teachers and other professionals through the development of educational materials, organizing information campaigns, monitoring emerging trends in informational use, and supporting cooperation between relevant stakeholders. As part of the SIC, in 2011 the Bulgarian Safer Internet Hotline received over 600 reports of illegal and harmful content and numerous reports were transferred to the appropriate authorities and partner hotlines in other countries, which led to several law enforcement actions and convictions. The national Helpline has consulted over 320 clients since its launch in April.

#### Impact on Firm Level

ARC Fund is also heavily involved in the provision of business support services to enterprises. This is evidenced by the fact that ARC Fund is the coordinator of the **European Enterprise Network (EEN)** in Bulgaria, which consists of 14 partnering organizations from 8 cities. The EEN is Europe's largest business support network and helps SMEs internationalize, innovate and gain information about available EU finance and funding opportunities, consulting, matchmaking, internationalization and business optimization services. In 2011, ARC Fund delivered services to over 200 companies in these areas. The economic sectors covered included manufacturing, ICT, tourism, aviation, and management consulting. ARC Fund also organizes matchmaking and technology brokerage events and facilitates the participation of Bulgarian SME's in them. ARC Fund services resulted in new contracts for Bulgarian companies in Azerbaijan, Belgium, Germany, Poland and Turkey.

About a dozen aviation firms benefited from funding by the Ministry of Economy, Energy and Tourism for participation in the largest light-aviation fair in Friedrichshafen in April 2011, which was promoted by ARC Fund and the Bulgarian Association of Light Aviation.

In addition, the **annual Innovation Award** is presented by ARC Fund at the annual Innovation Forum to businesses for technological or process innovations over the preceding year in order to highlight and recognize Bulgarian innovators. In 2011, first prize went to PRIMAVET Sofia Ltd. in the 'Small Innovative Enterprise' category (up to 50 employees) for innovations in veterinary medical products for bees, pets and farm animals. First prize also went to OPTIX Co in the 'Medium and Large Innovative Enterprise' category (over 50 employees) for their work on thermal vision devices. A special award was given to ORAK Engineering for sustainable innovation with respect to their work on software for tourism management.

### **International Impact**

ARC Fund's activity at the European level also extended to ERAWATCH and the Regional Innovation Monitor (RIM) through the aggregation and analysis of RTDI policies and activities in Bulgaria. Such work allows for international benchmarking exercises as well as the transfer of best practices within Europe, and shows the important role that ARC Fund plays in providing a transparent and independent analysis on economic developments within the country. ARC Fund's coordination of the Network of Business Incubators and Technology Parks in Eastern Europe and Central Asia (ECAbit) from 2008 to 2011 positioned the network as a trusted, reliable and valuable partner for policy makers in the Commonwealth of Independent States and to international donors and organizations by working with all stakeholders in public and private sectors and NGO's. During 2011, ARC Fund helped to initiate 'Mobile Monday' chapters in Moldova and Azerbaijan.

Over the past 10 years, ARC Fund has been continuously increasing its competencies in future-oriented studies through the use of best practices in foresight methodologies and tools in public policy development. This has culminated in coordination and partnership roles in over twelve EU funded projects, which utilize foresight elements. In 2011, ARC Fund made use of these tools in areas such as: parliamentary technology assessment, environmental policies, food quality and safety, citizen participation in identifying European research priorities, and in the identification of new energy sources. These projects range from the joint identification of future environmental priorities between the EU and China (SPRING), to increasing the use of technology assessment among European parliaments when formulating scientific and technological policies (PACITA). ARC Fund also participated in the RIFI project on "Research Infrastructures: Foresight and Impact", which concluded in 2011 with the main result being a methodology for assessing the socio-economic impacts of future research infrastructure projects.

ARC Fund provides policy assistance to the Ministry of Economy and Regional Development and the National Agency for Regional Development on innovation scanning of Serbian SMEs in order to identify and address barriers to innovation at firm level.

### **Human Capital**

In 2011, ARC Fund continued its tradition of promoting a multi-cultural work environment by employing motivated and skilled individuals with diverse interests and skills from around the world. The organization employed PhD and master's students from Europe and the USA as well as experienced engineers, computer scientists, economists, sociologists, political scientists and media experts. The ARC Fund staff includes professors and lecturers which taught at some of Bulgaria's most prominent education institutions, including: Sofia University, the University of National and World Economy, American University in Bulgaria and the International Business School. About one-third of ARC Fund's staff either hold or are pursuing a PhD degree. The staff has worked and studied in countries, which include the United States, Netherlands, Austria, Japan, Russia and UK. Additionally, ARC Fund employed individuals who served as independent evaluators to the European Commission for various EU programs.

# ARC Fund Highlights for 2011

- The Seventh National Innovation Forum entitled Innovation and Competitiveness was held in May, 2011 and was co-organized by ARC Fund, the Representation of the European Commission in Bulgaria, and the Ministry of Economy, Energy and Tourism. The forum was attended by the Prime Minister of Bulgaria, Mr. Boyko Borisov, who described the steps that the government was taking to support innovation in the country. The event was also attended by government Ministers and representatives from the European Commission, as well as business leaders, high level academicians and the heads of leading civil society organizations. ARC Fund presented the findings of the annual study of innovation in Bulgaria in the 2011 version of the Innovation.bg report.
- The 2011 Innovation.bg report was presented at the Seventh National Innovation Forum. The report highlighted some positive trends for innovation in Bulgaria, including high growth rates shown in the innovation index of the European Commission and that the economic crisis in Bulgaria resulted in increased competition in Bulgarian markets, resulting in marketing and organizational innovations.
- The Parliaments and Civil Society in Technology Assessment (PACITA) project began during the year. The project aims to spread and deepen the understanding of parliamentary technology assessment and technology assessment to policymakers across the EU with a particular emphasis on countries where the concept as well as its methodologies and tools are not well established. The project will run until 2015.
- The Fostering Evaluation Competencies in Research, Technology and Innovation in the SEE Region (EVAL-INNO) project started in May, 2011. The main objective of EVAL-INNO is to improve the evaluation capacity of research, technological development and innovation (RTDI) activities in order to improve their efficient provision of societal benefits. The project will run until 2014.

- As part of the Scoping China's Environmental Research Excellence and Major Infrastructure: Foresight, Potentials, and Roadmaps (SPRING) project, an international workshop took place in Beijing, China in July, 2011. The workshop was attended by environmental experts from China and Europe, who identified key environmental technologies likely to improve the quality of life for European and Chinese citizens over the next 20 years.
- The Third Aviation Show Gabrovo 2011, was co-organized by ARC Fund, the Bulgarian Association of Light Aviation, and the owner of the airport "Draganovtsi", Mr. Miroslav Hinkov, in partnership with the Municipality of Gabrovo. During the airshow, a sectoral meeting entitled 'Investing in the aviation industry' was held which brought together representatives of the Bulgarian SME Promotion Agency and Bulgarian Association of Light Aviation.
- ARC Fund developed the annual ERAWATCH Country Report 2011 which reviews the performance of the national innovation system over the year and identifies challenges and bottlenecks to an improved environment the country that is supportive of innovation.
- During the year, ARC Fund joined the METRIS network, an initiative of the Directorate-General for Research (DG RTD), which aims to be the leading repository of information on the health of social sciences and humanities across Europe as well as a foundation for benchmarking development in these areas in the attempt to improve public policies which support them.
- A number of significant events occurred within the Eastern European and Central Asian Business Incubators and Technology Parks Network (ECAbit). These included the Tambov International Innovative Camp held from August 24th-26th in Tambov, Russia in which a number of business support services were provided to over 150 participants, as well as the network's Sixth International Conference Advancing Innovation in Eastern Europe and Central Asia from November 6th-8th in Chisinau, Moldova and International Conference on Youth Incubation in December in Baku, Azerbaijan, where ARC Fund was co-organizer.
- The Safer Internet Centre (SIC) launched the national Helpline in April, 2011 which responds to the questions and concerns of young people, parents and teachers linked to minors' experiences online.