

Applied Research and Communication • Fund •

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Annual Report

2015

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# **Applied Research and Communications Fund 2015 Annual Report**

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# Introduction

Twenty-four years since it was established in 1991 as an innovation policy and research institute, the **Applied Research and Communications Fund** (ARC Fund) remains dedicated to fulfilling its mission of promoting and shaping the information society and the knowledge economy in a national, regional, European and global context. The means ARC Fund employs to realize this goal are applied research and analyses, design of innovative solutions to development problems, formation of new policy concepts and innovative policy-making tools. As an active and reliable partner, ARC Fund has encouraged coalition-building and public-private partnerships, provided trainings and facilitated the transfer of knowledge and good practices in order to strengthen the capacity of various professional groups.

During 2015, ARC Fund's research and advocacy work covered a wide range of areas:

- Tackling environmental challenges by enhancing green growth and promoting green innovation;
- Promotion of innovative entrepreneurship in Bulgaria and fostering of innovation in trans-national cooperation;
- Assessment and management of sustainable innovation;
- Research and analysis of social innovation practices in education, environment and energy policy fields;
- Enhancement of collaborations and networks for facilitating a more efficient knowledge and technology transfer;
- Formulation of policy recommendations to support the public sector innovation;
- Inclusion of all relevant stakeholders in setting research agendas, based on societal visions, needs and demands.

As each year, in 2015 ARC Fund published its trademark *Innovation.bg* report, which analyzes the strengths and weaknesses of Bulgarian companies in terms of their innovation potential. One of the main findings of the report is the fact that although Bulgaria is expected to improve its innovation performance, mainly in the field of incremental innovation, it will remain below the average EU-28 level. The report identifies human potential as the most serious growth barrier in Bulgaria. This is a direct result of the insufficient quality of the Bulgarian higher education, which has so far failed to participate in the creation of new research-based knowledge.

For a second time, the *Green Innovation.bg* report was published. The report examines the progress made over the year in terms of the overall shift towards low-carbon economy, analyzes the main policy measures aimed at helping SMEs achieve green growth, and looks at the examples of local companies, which have successfully integrated green practices in their work. It also provides policy recommendations for achieving the greening of the economy.

Apart from the *Green Innovation.bg* report, ARC Fund produced another important output aimed at fostering the greening of innovative SMEs in Bulgaria: the online self-assessment tool for SMEs on green behavior and performance.

The annual National Innovation Forum has been organized for the eleventh time. The Forum gathered prominent decision-makers, including the President of the Republic of Bulgaria, academics and business leaders. The Forum also featured the award ceremony of the Innovative Enterprise of the Year 2015 national contest.

ARC Fund confirmed its strong track record in performing high-quality applied research, providing support for the development and implementation of innovation policies, and

establishing productive partnerships with policy institutions and science centers in Bulgaria and across Europe. This was demonstrated by its involvement in numerous international projects and networks.

During the year, ARC Fund has succeeded in promoting the concept and practice of (parliamentary) technology assessment (TA or PTA) as an important tool for elaborating better policies, designing more consistent legislation, and raising public awareness of scientific and technological advances. A policy report presented to the European Commission included specific recommendations based on the input of more than 1000 citizens across Europe. Another significant outcome in this field was the book “Policy-Oriented Technology Assessment across Europe - Expanding Capacities.” ARC Fund’s team co-authored several of its chapters.

In 2015, ARC Fund also explored how members of the society could be more directly involved in research, innovation and related activities. The use of public engagement methods and instruments in research and innovation was promoted through the development of an Action Catalogue online tool and policy briefs on six different aspects of public engagement.

Advancing innovation in transport by fostering trans-national cooperation and promoting the active participation of different actors and regions in EU Transport research calls and projects, especially Horizon 2020, was another focus area of the Fund during the year.

ARC Fund performed extensive mapping of innovation cases from the 28 EU countries, which was used for the elaboration of an assessment and management framework for sustainable innovation practices. Stakeholder workshops, where the framework was tested, were held in addition to organizing national citizen consultation panels for elaboration of citizens’ vision for sustainable future.

In the beginning of 2015, ARC Fund conducted a thorough desk research on social innovation practices in the fields of education, environment and energy. Based on the research, country reports and policy field reports were produced. Then, towards the end of the year, ARC Fund prepared an *Eastern European Regional Report*, including information about Bulgaria, Hungary, Poland, Slovakia, and the Czech Republic. The report focused on general social innovation strategies, which were defining social innovation in Eastern Europe.

During the year ARC Fund employed peer learning (identification of practices, experiences, pilot projects) to enhance and amplify collaborations, networks and ecosystems of knowledge and technology transfer. Improvement of knowledge transfer should contribute to the creation of a favorable ecosystem for SME innovation through active collaboration of public enterprises, SME intermediaries, end users and suppliers. In order to accomplish this objective, ARC Fund cooperated with partners from Belgium, France and Italy.

The Fund was also involved in: sustainably enhancing STI cooperation between the EU and the Black Sea region; increasing the understanding of cluster policies and cluster management; establishing direct business contacts between cluster managers from the EU and target countries and raising awareness on the programming of as well as on the advantages of inclusive, sustainable and social innovation. These activities were executed in cooperation with 19 partners from 16 countries.

Another focus area was the establishment of genuine dialogue between citizens, stakeholders, scientists and policy-makers in order to develop visions and scenarios for the desirable futures and produce recommendations and suggestions for research and innovation policies and topics. To do that, the Fund established partnerships with 29 organizations from across Europe.

ARC Fund continued its intensive work as the coordinator of Enterprise Europe Network's national consortium, which includes 12 partner organizations from 8 Bulgarian cities. This year marked the beginning of the new program period for the Network (2015-2020). A new portal [www.een.bg](http://www.een.bg) for business information, advice, and opportunities for cooperation was launched. Other activities included the ongoing information and advisory support to SMEs from different industries with traditional focus on sectors like ICT, machine building, mechatronics and automation, textiles, food and beverages.

Apart from its focus on the innovation and on the knowledge and technology transfer, ARC Fund remained fully engaged as the coordinator of the Safer Internet Center, where it has been working since 2005 to provide a safer and more positive online environment for children and young people. During the year, the Center's Hotline has received and processed 2,463 reports about online content and conduct, which was illegal and/or harmful for children. Additionally, 322 children, young people, parents and teachers were consulted by the Helpline for online safety. Towards the end of the year, the Safer Internet Center launched its new website – [www.safenet.bg](http://www.safenet.bg).

The Safer Internet Center was very effective in awareness raising. Among its most prominent campaigns were "Children, parents and teachers against the hate speech and discrimination," "National campaign against gender-based violence" and "Mobile clinic for digital devices used by children." As prevention is essential for protecting children in the Internet, ARC Fund has developed various educational materials and resources, and organized numerous trainings for children and professionals working with them. One of the most successful training initiatives undertaken this year was the Cyberscout program, with the participation of 126 children from 5 Bulgarian towns.

ARC Fund marked the international Safer Internet Day 2015 with the public discussion "Is there a national policy on protection of children from the online sexual exploitation in Bulgaria?" held in the Information Office of the Representation of the European Commission and the European Parliament in Sofia. To celebrate the International Human Rights Day (December 10), ARC Fund and the Center for the Study of Democracy in partnership with the Council of Europe and the Bulgarian Chairmanship to the Council of Europe, hosted the international conference "Human Rights of the Internet users."

Major milestones for ARC Fund and ARC Consulting in 2015 include:

- Publishing of the reports *Innovation.bg* and *Green Innovation.bg*.
- Safer Internet Day 2015, celebrated for the 12th time. The event included a public discussion on the topic "Is there a national policy on protection of children from the online sexual exploitation in Bulgaria?" (10 February, Sofia).
- International Brokerage Event in the field of ICT at Mobile World Congress 2015, co-organized by Enterprise Europe Network at ARC Fund for the fifth time (2-4 March, Barcelona).
- Industry MatchMaking 2015 – International bilateral business meetings for trade cooperation and technology transfer, co-organized by ARC Fund and the Bulgarian Industrial Association in the framework of Enterprise Europe Network (12 March, Sofia).
- Seminar "Innovations based on design in Europe: Political frame, priorities and challenges (12 March, Sofia).
- Go Green 2 Environment 2015 – International bilateral business meetings for trade cooperation and technology transfer, co-organized by ARC Fund and the Bulgarian Industrial Association in the framework of Enterprise Europe Network (13 March, Sofia).
- Future Match 2015 – International ICT Brokerage Event at CeBIT-Hannover, organized

- by Enterprise Europe Network and Leibniz University Hannover (16-20 March, Hannover).
- Organization of two consultancy meetings on sustainable future with citizens in Sofia (April) and in Plovdiv (November).
- Cyberscout training program (April-November, Vidin, Pleven, Smolyan, Targovishte, Shumen).
- Public discussion “International competitiveness of Bulgaria for 2015,” presenting the results of the IMD World Competitiveness Yearbook 2015 (27 May, Sofia).
- “Online business in the EU: Regulation, possibilities and financing” – an open door meeting for representatives of Bulgarian SMEs, organized by Enterprise Europe Network and Dnevnik.bg (5 June, Sofia).
- Round table “The role of primary education in prevention of hate speech, discrimination and radicalization” (15 June, Sofia).
- “Mobile clinic for digital devices used by children” initiative (June-September, Sofia).
- Start of the National campaign against gender-based violence (September, Sofia).
- Business mission of companies from Bulgaria, Serbia and Republic of Macedonia to Gothenburg, Sweden as part of Enterprise Europe Network (21-22 October, Gothenburg).
- Go International – ICT brokerage event in the framework of Enterprise Europe Network (13 November, Skopje).
- The Eleventh National Innovation Forum and the national contest Innovative Enterprise of the Year 2015 (8 December, Sofia).
- International Conference “Human Rights of Internet Users”, marking the Bulgarian Chairmanship to the Council of Europe and honoring the International Human Rights Day (10 December, Sofia).
- A special award of the Ministry of Interior for civic contribution to the work of the police, given to the ARC Fund’s Safer Internet Center (29 December, Sofia).

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# **PART ONE**

## **Program Areas**

# Research and Innovation Policy

*Innovation.bg 2015*

For the eleventh consecutive year the annual report ***Innovation.bg* assesses the innovation potential of the Bulgarian economy** as well as the status and potential for growth of the Bulgarian innovation system. It makes **recommendations for improving the public innovation** policies in Bulgaria and in the EU, building on the most recent theoretical and empirical studies and taking into account the specific economic, political, cultural and institutional framework in which the country's innovation system operates. Over the past 10 years, *Innovation.bg* has proposed numerous specific measures for improving the country's innovation policy and practice, which have been supported by business and academia. The lack of specific and sustainable actions by Bulgarian governments on the proposals made – despite their commitment to the process at the highest political level – reveals a serious institutional deficit in the development and application of policies in the field.

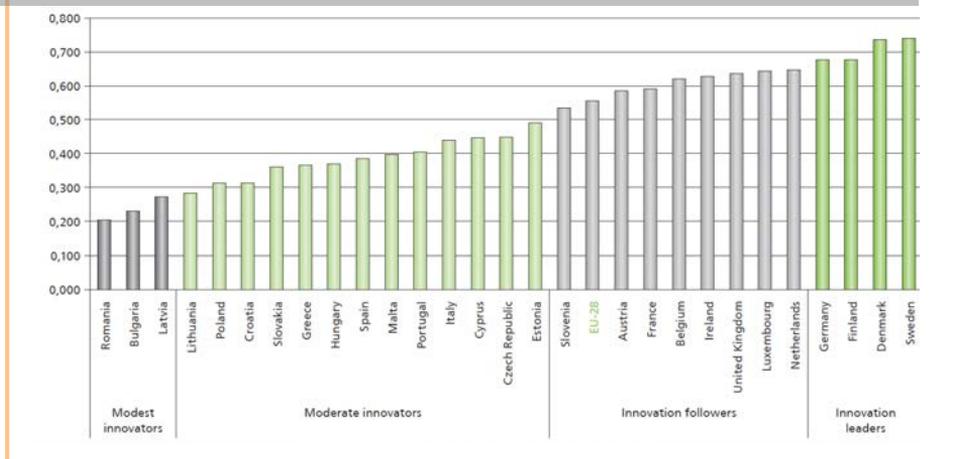
*Innovation.bg 2015* analyzes the status and potential for growth of the national innovation system based on five groups of indicators:

- aggregate innovation product;
- entrepreneurship;
- investment and financing for innovations;
- human capital for innovation;
- information and communication technologies.

A highlight in *Innovation.bg 2015* is the **analysis of the management of innovation-related activities** applied by Bulgarian innovation enterprises. Innovation is a creative process and its successful launch entails many risks. Nevertheless, most of the activities for generation, development and implementation of new ideas can be fostered, guided and assessed so as to facilitate the innovation process and enhance its positive impact on the performance and market positions of a company.



Figure 1. Innovation Union Scoreboard 2015



Source: Innovation Union Scoreboard 2015.

### National Innovation Policy in 2015

As a number of international indices and rankings indicate, a typical feature of innovation leaders is a well-functioning innovation ecosystem built on the basis of a streamlined interaction among stakeholders, investment in human capital and a developed innovation infrastructure. The lack of such growth-enabling factors in the other countries creates a pronounced dividing line between innovation leaders and followers – a divider which is gaining an ever increasing importance, to the extent that it started to substitute the familiar categories of “developed” and “developing” countries.

One of the main findings of the 2015 *Innovation.bg* report is that **Bulgaria is expected to improve its innovation performance**, mainly in the field of incremental innovation, while still lagging behind the average EU-28 level.

Despite the ambitious strategic framework adopted for the new EC programming period 2014 – 2020, **a number of problems persist:**

- The innovation potential of the Bulgarian economy is driven primarily by the impact of external factors (European structural financing, EC pressure for developing an innovation-

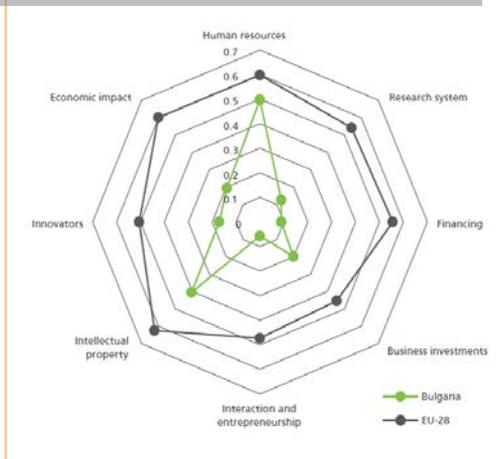
oriented policy framework), and hampered by the existing obstacles at the national and local levels (lack of understanding among policymakers of the importance of innovation; low administrative capacity; lack of mechanisms for promoting entrepreneurial and innovation culture; corruption).

- Numerous cases of misappropriation of public funds intended for science have gone unpunished.
- There is no comprehensive vision on the priorities of the national economy and the innovation system in particular, resulting in ad hoc policies and inconsistent and unsustainable measures for their enforcement. The input indicators of the national innovation ecosystem and of its functioning vary significantly from year to year, thus highlighting the precariousness of the Bulgarian innovation policy, which has no clear direction and parameters.

R&D spending in Bulgaria rose by about 26% in 2014 as compared to the previous year – the highest growth of this indicator since 2000, mostly as a result of the



**Figure 3. Innovation Union Scoreboard: Bulgaria compared to EU-28**



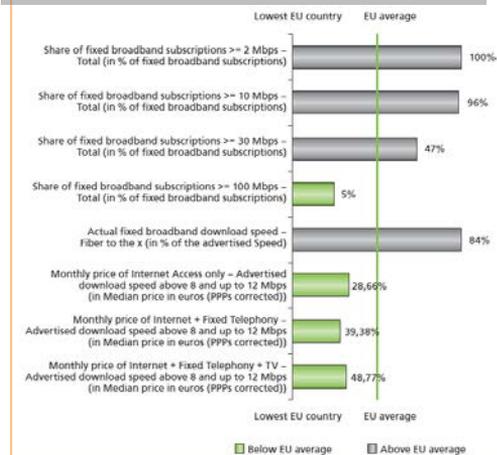
Source: Innovation Union Scoreboard, 2015.

The Bulgarian ICT sector continues to be a key source of national competitiveness, making up 10% of exports and over 6.5% of GDP. In 2015, Bulgaria won the European Outsourcing Association award in the category "Offshoring Destination of the Year" by generating investment in cities other than the capital – mainly Plovdiv, Varna and Burgas – thus creating expectations for increased employment in this sector. In addition to higher remuneration of staff, some companies outsourced their R&D in the country. In this context, it is worrying that the government took a position in favor of the status quo and against innovation in a landmark case against a shared travel company, regardless of the fact that the company had established an R&D unit in Bulgaria.

While business enterprises have internal drivers for growth generation, supported further by European financing, higher education is the component of the national innovation ecosystem sustaining the heaviest adverse effects:

- For a fifth year in a row, the R&D budget of the higher education sector is decreasing. In 2014, spending through university research funds for R&D was halved, while the decrease compared to the peak 2009 was 90%.

**Figure 4. Bulgaria Country Profile by Broadband Speed and Prices Indicators, 2014**



Source: Digital Agenda Scoreboard, 2015.

The intention to make education a priority in the 2016 budget is a step in the right direction provided that it is sustained in the long term until 2030.

- A worrying sign is the extremely low patent activity of the higher education sector. Only 8 out of 51 higher education institutions have registered patents. In 2014, for a second year in a row there was a fall in the number of research publications.
- While universities form the largest share of beneficiaries in EU-28, in Bulgaria they hold the fourth (last) place among the institutional sectors with only 9 higher education institutions receiving financing under Horizon 2020.
- In 2014, for the first time in the last seven-year period there was a reduction in the number of graduates with bachelor's (-7%) and master's (-3%) degrees, resulting from the continued reduction of the number of students over the recent years. Evidently, Bulgarian higher education does not manage to offset negative demographic trends at home by attracting foreign students, which also indicates that there has been no improvement in the quality of education.
- The number of Bulgarian students abroad is about 10% of the students

studying in Bulgaria. As the data of the second edition of the Global Talent Competitiveness Index 2014 show, among 93 surveyed countries Bulgaria holds the 89<sup>th</sup> place by "brain drain" and the unenviable 88<sup>th</sup> place by "brain gain".

- Among the 61 countries in the World Talent Report 2015 of the Institute of Management Development in Switzerland, Bulgaria holds the last place and has regressed from the result in the preceding year, including in the indicators investment and development – 54<sup>th</sup> place; appeal – 60<sup>th</sup> place; readiness – 60<sup>th</sup> place.
- Bulgaria and the other Central and East European countries continue to be net donors of highly qualified human resources because of the difference in the remuneration rates applied in the EU for researchers participating in European research projects. A qualified researcher can significantly increase his or her rate in a project by registering, for example, in an Austrian university instead in a Bulgarian one. The continued discrimination of Bulgarian and East European talent in the EU undermines the convergence policies of the Union.

- Low educational quality makes for limited human resources in software outsourcing (software engineers/programmers) and customer service centers (good language skills), both of which enhance the competitiveness of the national economy. Poor teaching of mathematics and IT is likely to continue being an obstacle (given, for example, the teaching of software coding in preschool education in China).

Education is among the national priorities only in government documents and in political speeches. It is obvious that the artificial (not governed by market rationale and not reflecting the changes in society) inflation of the sector (unjustified number of higher education institutions, growing number of academic staff) does not lead to qualitative changes such as more patents and research publications, and participation in EU research projects.

It can be expected that more sectors will share the experience of ICT services, machine manufacturing and other fields which face serious growth barriers not in terms of demand, quality, or productivity but in terms of human potential. Reversing this trend would require serious political commitment.

### *Eleventh National Innovation Forum and Contest for Innovative Enterprises 2015*

On 8 December 2015 the Applied Research and Communications Fund, Enterprise Europe Network – Bulgaria and the Representation of the European Commission in Bulgaria, with the support of Directorate General GROW, EC, the Executive Agency for SMEs, EC, and the Norway Grants, organized **the Eleventh National Innovation Forum "Development of the innovation ecosystem for sustainable economic growth in Bulgaria."** The Forum featured the award ceremony of the Innovative Enterprise of the Year 2015 national contest.

Dr. Ognian Shentov, Chairman of the Applied Research and Communications Fund, opened the Forum by outlining the key external and internal factors for the development of the innovation potential

of the Bulgarian economy and highlighted the growing input of the ICT sector to the national GDP. Dr. Shentov emphasized the importance of the external funding for the national innovation ecosystem's further development and the role of the higher education, which continues to lag behind in recent years and is characterized by the ever growing brain drain.

Mr. Ognian Zlatev, Head of EC Representation in Bulgaria, highlighted the importance of the economic growth, based on knowledge and innovation, which remains one of the top priorities of the European Commission despite the topical issues related to security. He also stressed on the high potential of the country's advanced economic sectors and on the significance



*The President of the Republic of Bulgaria Mr. Rosen Plevneliev speaking at the Eleventh National Innovation Forum*

of the public investment in the national entrepreneurial ecosystem, mentioning in particular the Juncker Plan for 315 billion Euros of investments in the EU economy.

The President of the Republic of Bulgaria Mr. Rosen Plevneliev acknowledged the importance of the findings in the annual Innovation.bg report. He also emphasized the high potential of the Bulgarian innovation ecosystem and the

importance of education and innovations for the growth of every modern economy. Mr. Plevneliev highlighted the strategic place of the ICT sector in the country's economy and gave examples of innovative Bulgarian enterprises that earned leading positions on the international markets – Walltopia, Aglika Trade, Roo'Bar. The reform in the education system and the need for implementation of e-government were also outlined in his speech.

During the forum, President Plevneliev presented awards to the **winners in the National Contest for Innovative Enterprise of the Year 2015**. The impact of innovations was recognized in nine areas:

- 1) "Innovative technologies in traditional sectors" – *Bulteh 2000 Ltd*. The company is the leading distributor of control and automation systems for the dairy and food industries in the world's biggest markets, e.g. India, Brazil, China and Mexico.
- 2) "Technological leader in a global value chain" – *Aiger Engineering Ltd*. Aiger Engineering designs and manufactures innovative solutions for the tobacco business, which can also be applied in the



*Eleventh National Innovation Forum "Development of the innovation eco-system for sustainable economic growth in Bulgaria", from left to right: Dr. Ognian Shentov, Chairman of the Board of the Applied Research and Communications Fund and Mr. Rosen Plevneliev, President of the Republic of Bulgaria.*

pharmaceutical and packaging industries.

3) “Innovation for market leadership” – *Mobile Systems Ltd.* Mobile Systems is a leading Bulgarian IT company, which has developed the global top 3 most downloaded word processing application for Android devices *OfficeSuite*.

4) “Workplace innovation” – *Solvay Sodi Jsc.* The company was recognized for its integrated cycle for collecting, analyzing and implementing employees’ innovative ideas.

5) “Innovation for a better quality of life” – *Aleks 1977 Ltd.* Aleks 1977 uses its in-house method to harmlessly draw snail extract, which is a key component of cosmetic and medicinal products used to treat the digestive system and promote skin regeneration.

6) “Social innovation” – *Triada Soft Ltd.* Triada Soft Ltd has developed “Magical world,” an interactive learning system for children with special educational needs.

7) “Green innovative start-up” – *Make Bulgaria Ltd.* The company has developed an innovative system for thermal wall

insulation.

8) “Innovative business cluster” – *Srednogie Med Industrial Cluster.* The cluster is recognized for its commitment towards the development of the economic competitiveness of the Srednogie region in Bulgaria, based on the innovative “Shared Value” concept.

9) “Innovation management,” in line with the IMP<sup>3</sup>rove methodology – *A Data Pro Ltd.* A Data Pro is a provider of knowledge intensive services for content processing, analysis and creation. It received the highest marks among over 10 innovative Bulgarian companies that were benchmarked in 2015 by IMP<sup>3</sup>rove innovation management assessment.

During the National Innovation Forum, Mr. Ruslan Stefanov, Coordinator of the *Innovation.bg* group at ARC Fund, presented the main challenges for the development of the national innovation system, as outlined in this year’s *Innovation.bg* and *Green Innovation.bg* reports. Mr. Stefanov highlighted the need to promote innovation in the public sector, especially on a regional level, and suggested that Bulgaria would



Finalists in the Innovative Enterprise of the Year 2015 National Contest

benefit greatly from a centralized institution that supports all innovation activities in the country, following the example of Innovation Norway.

Dr. Milen Vrabeviski, founder and executive director of Comac Medical, one of the three Bulgarian companies that were awarded an innovation grant under the SME Instrument in 2014-2015, emphasized the importance of working with young talents and investing in their development from an early age. He also presented his company's policy for selecting candidates from the leading Bulgarian universities and for providing scholarships to children from vulnerable groups. Furthermore, Mr. Vrabeviski shared his successful experience with the EU framework programs and Horizon 2020 in particular.

Mr. Vassil Momtchev, Member of the Board of Directors of Ontotext, which was among the winners of the 2014 edition of the National Contest for Innovative Enterprise of the Year, highlighted the difference between innovations and traditional research activities and expressed his

positive outlook on the development of innovations in Bulgaria, and more specifically in the IT industry. He shared his experience at Ontotext, which was founded exclusively with Bulgarian capital and has become one of the top three software providers of semantic technology in the world. Mr. Momtchev also pointed at the current positive trend of young motivated professionals, who return to Bulgaria in search of career development after finishing their studies abroad.

Mr. Elvin Guri, Executive Director of Empower Capital, concurred with the findings and conclusions of the *Innovation.bg* reports and shared his experience as an investor in the healthcare, software and food industries. He pointed out that despite the lack of good management practices and strategic thinking in Bulgaria, there are many strong local companies, which are already well-established on the international markets and are set to boost the growth of the national economy.

### Green Innovation.bg report



For a second consecutive year, ARC Fund published the **Green Innovation.bg report**. The report includes an overview of the progress made over the year in terms of the overall shift towards low-carbon economy, the main policy measures aimed at helping SMEs achieve green growth and examples of local companies, which have successfully integrated green practices in their work. It also provides **policy recommendations towards achieving the greening of the economy**.

The data suggest that Bulgaria is beginning to decouple its economic growth from greenhouse gas emissions by shifting towards a less carbon-intensive economy. Nevertheless, the CO<sub>2</sub> emissions relative to GDP remain relatively high (in 2011 they amounted to 0.44 kg, compared to 0.20 kg in the EU). On the other hand, emissions of fluorinated gases, which have a much higher global warming potential compared to the other greenhouse gases,

have increased sharply between 2000 and 2012 from 0.03 to 0.47 million tons of CO<sub>2</sub> equivalent per year, due to increased use of refrigeration and air conditioning technologies.

Despite the outdated and inefficient technological base, Bulgaria's energy productivity is slowly improving and reached 1.6 EUR/KOE in 2013. It remains lower than the EU average, which amounted to 7.1 EUR/KOE in the same year. Energy efficiency levels are also slowly improving in all sectors of the economy. Energy poverty among the population is slowly declining, both as a result of rising incomes and energy efficiency improvements in the residential sector. Nevertheless, it remains high in comparison with the rest of the EU. In 2014, households spent on average 12.6% of their income on energy products, compared to 14.4% in 2012.

The manufacturing and energy sectors are still lagging in terms of adopting greener, more efficient technologies, which would result in significant energy savings. The share of renewable energy sources in total energy consumption (18.9% in 2013) is rising and is set to continue to grow in the next decade. However, this growth has been associated with very high feed-in tariffs (FITs) and poor regulatory framework, causing financial losses in the energy sector, as well as with popular discontent and backlash against green energy investment.

Developments in the transport sector are primarily focused on road infrastructure, which accounted for 80.9% and 75.9% of passenger and freight modal split respectively. The share of renewable sources in road transport is about 5.6% and there are very little incentives to use biofuel or hybrid/electric technology in road transport.

Bulgaria will continue to rely mainly on external resources to fund the adoption and development of green innovations. The Operational Programs will remain the main source of funding for SMEs looking to introduce green innovations in their work. The Partnership Agreement on using EU

Structural and Investment Funds for the programming period 2014-2020 between Bulgaria and the EU and the newly approved Operational Programs place a strong emphasis on promoting energy efficiency, renewable energy sources, waste management and green transport systems.

Operational Program "Innovation and Competitiveness" will provide about EUR 1.4 billion in order to stimulate research and innovation, enhance SME competitiveness, support the shift towards low-carbon economy and promote resource efficiency. Operational Program "Environment" will also provide some funding opportunities for SMEs through Priority Axis 2: Improvement and Development of Waste Treatment Infrastructure, which focuses on municipal waste management. About 20% of funds made available through Operational Program "Regions in Growth" will be dedicated to improving energy efficiency in municipal and residential buildings, which will likely provide funding opportunities for companies working in this field. An additional source of funding for green innovations is the Norway Grants funding mechanism. Currently, the government of Norway and the European Commission have agreed on a total of EUR 210 million for the next programming period, part of which will be allocated to support green industry innovation.

**Bulgarian SMEs must overcome several challenges to improve their competitiveness** on the EU level and help the economy shift to low-carbon growth. First, as a result of the financial crisis, on average they had to make redundant 8% of their staff and their added value decreased by 4% between 2008 and 2013. Their recovery was slower compared to bigger enterprises due to their lower productivity and difficulty in diversifying their markets. Despite the positive attitude towards entrepreneurship and the relatively easy procedures to set up a new business, there are a number of structural obstacles that slow down SME growth. Business owners are still burdened with complex administrative red tape, especially in applying for and implementing

EU-funded projects, as well as the slow progress in e-government rollout and lack of coordination between different authorities. Furthermore, local companies suffer from the lack of available funding, low levels of research and innovation, and poor environmental performance. In this regard, **not many companies are**

**investing in green technologies**, with the exception of resource efficiency measures, which were mainly funded by Operational Program “Competitiveness 2007-2013” (with a period for implementation ending in 2015). Only 11% of local companies have tapped into the eco-friendly market and offer green products to their customers.

# Technology Transfer and Business Support

## Capacity Building for Greening Bulgarian Innovative SMEs

In 2015, ARC Fund continued its work on **fostering the greening of innovative SMEs in Bulgaria**. This was done within the framework of the “**Capacity Building for Greening Bulgarian Innovative SMEs**” action, executed in cooperation with the Nordic Institute for Studies in Innovation, Research and Education (NIFU) and funded by the Norwegian Financial Mechanism and Innovation Norway. In order to tackle environmental challenges, accelerate the uptake of environmental technologies and

increase local competitiveness, the project team developed an **online self-assessment tool for SMEs** on green behavior and performance, and prepared the **Green Innovation.bg report**. The report was based on an analysis of the overall progress of the country in terms of green growth, the national and EU-level policy and regulatory framework promoting green innovation in Bulgaria, and the current technological activities in SMEs from the green perspective.

## Online self-assessment tool

ARC Fund’s team performed numerous in-depth interviews to assess the measures and technologies Bulgarian SMEs use to improve their green performance. Overall, most Bulgarian SMEs have not yet made the most of the financial and environmental benefits of green innovations. This is largely the result of lack of funding, both within the companies and from external sources. Many companies also lack the human and financial resources to assess their energy performance and therefore to identify the most suitable measures to improve their energy management. In light of these conclusions, ARC Fund, in cooperation with external energy experts, developed

an online self-assessment tool to help local SMEs in their first steps towards improving their energy management and environmental performance. The tool allows them to evaluate their energy management practices and establish how their energy expenditures affect their final production costs. Furthermore, registered users can see how they perform in comparison to their competitors in terms of size, sector and location. The tool will be promoted through a series of events, so that it reaches a large number of Bulgarian SMEs and helps them to start improving their energy performance.



## Ефективен енергиен мениджмънт

Направете оценка и анализ на енергийната ефективност на вашата компания

**Започнете теста**

● намерете повече за проекта и организацията

## TRANSINNOV

In 2015, ARC Fund commenced the implementation of the action **TRANSINNOV**, together with three partners: Agence de Stimulation Technologique (Wallonia, Belgium), Bretagne Développement Innovation (Bretagne, France) and ASTER (Emilia Romagna, Italy). The project aims to **better structure and drive innovation ecosystems, based on knowledge and technology**, which lead to all types of innovation into SMEs. This is to be achieved by identification of practices, experiences and pilot projects, set up by the project partners in order to enhance and amplify collaborations, networks and ecosystems of knowledge and technology transfer.

Identified good practices will be shared among partners and serve as the basis for the first draft of the design options plan (DOP). The draft will be distributed to the local actors and SMEs. In order to stimulate the local innovation ecosystems of each partner and to start a learning process at the European level, the result of the project will be disseminated as widely as possible. Improvement of knowledge transfer in a structured ecosystem should contribute to the creation of a favorable ecosystem for SME innovation in which public enterprises, SME intermediaries, end users, suppliers and enterprises are encouraged to collaborate for radical innovation that may not yet be described and formulated as a project.

## European Transport Network Alliance

The overall objective of **ETNA Plus** is to **foster innovation in trans-national transport cooperation** with a focus on promoting the active participation of new actors and regions in EU research calls and projects. Transport National Contact Points (NCPs) are key players in this mechanism, but their role has been complemented and enhanced by other relevant stakeholders and knowledge hubs like ARC Fund.

In 2015, the ETNA Plus partners further developed their **partner search service** to facilitate participation in Horizon 2020 Transport calls and other relevant funding sources.

The network organized two **ETNA Plus webinars** and two **ETNA Plus Academies** for capacity building and knowledge exchange on Horizon 2020 Transport proposal building and project management.

Within the Framework of the **Horizon 2020 Transport Information Day (5 November 2015, Brussels)**, the project **ETNA Plus organized a networking and brokerage event** – jointly supported by ETNA plus and Enterprise Europe Network, represented by ARC Consulting. The b2b event was focused on the topics covered by the Transport Work Program 2016-2017. The networking and brokerage event took place in the afternoon, following the information sessions carried out by the European Commission in the morning. The b2b event was attended by 208 participants from 31 countries across Europe and more than 280 bilateral meetings were held.

The project web site [www.transport-ncps.net](http://www.transport-ncps.net) features all relevant information in the field of transport such as news, factsheets, newsletters, open calls, partner search tool and training materials.



ETNA Plus networking and brokerage event during the Horizon 2020 Transport Information Day (5 November 2015, Brussels)



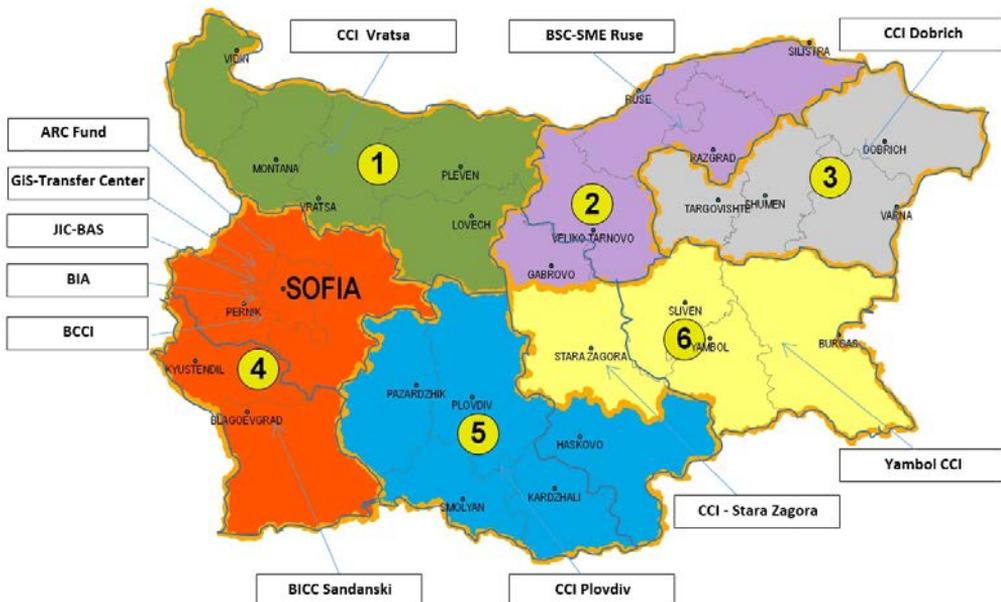
ETNA Plus participation in the Horizon 2020 Transport Information Day (5 November 2015, Brussels)

**Enterprise Europe Network – world’s largest support network for SMEs with international ambitions**

Since its launch in 2008, the **Enterprise Europe Network (EEN)** has evolved as a key instrument in the EU’s strategy to boost growth and jobs. At present it is the **world’s largest business support network** that brings together over 600 partner organizations, such as chambers of commerce and industry, technology centers, universities and development agencies in 60 countries in Europe and across the world. EEN’s main focus is to help small and medium-sized companies (SMEs) seize opportunities for business and technology development in the EU single market. Fulfilling this mission,

the EEN partner organizations are linked up through powerful databases with over 13,000 business and technology profiles, sharing their knowledge and sourcing technologies and business partners across all Network countries.

At the same time, EEN serves also as a gear between the European SMEs and the EU institutions. The European Union runs various programs and initiatives that offer financing and development support to SMEs, which the 4,500 EEN advisors promote among entrepreneurs, often



Map of EEN-Bulgaria nodes

providing advisory guidance as well. Furthermore, EEN is the shortest channel for the European Commission to collect opinions and feedback from SMEs for better design of its prospective policies and initiatives that concern the European business.

This year marked the beginning of the new program period for the Enterprise Europe Network (2015-2020), which is co-funded by the European Commission. ARC Fund continued its engagement as coordinator of Enterprise Europe Network's national consortium through its consulting subsidiary ARC Consulting Ltd. The Enterprise Europe Network – Bulgaria includes 12 partner organizations in Sofia, Plovdiv, Stara Zagora, Yambol, Sandanski, Vratsa, Dobrich and Russe.

One of the important events this year was the launching of the new portal [www.een.bg](http://www.een.bg) for business information, advice, and opportunities for cooperation. The portal operates according to the priorities set by the EEN's work program, which requires that each partner, including ARC Fund, maintains its own regional EEN website.

Other activities in 2015 included the ongoing information and advisory support to SMEs from different industries with traditional focus on sectors like ICT (a major driver for growth of the Bulgarian economy), machine building, mechatronics and automation, textiles, food and beverages. With its expertise in project management,

smart specialization and technology transfer, ARC Fund regularly delivers capacity building support to the business clusters in Bulgaria. ARC Fund is a founding member of the Cluster of Mechatronics and Automation and the Association of the Business Clusters – the umbrella organization of around 20 of the largest clusters in Bulgaria.

### Brokerage meetings, business missions and seminars

Every year ARC Fund organizes **business missions and technological brokerage events in various economic sectors**, e.g. ICT, green industry, engineering, and machine building. Such pre-arranged meetings facilitate contacts between businesses and research organizations looking for business, technology and project partnerships (e.g. for EU funding programs in research and development).

As in previous years, in 2015 ARC Fund was among the co-organizers of the International Brokerage Events at the Mobile World Congress (in Barcelona, March 2015) and CeBIT (in Hannover, March 2015) – leading international events in the mobile communications and ICT industry. Five Bulgarian ICT companies took the opportunity to visit the exhibitions at preferential conditions (reduced participation fee, participation in parallel events, professional consultations in the fields of industrial property, project financing, etc.) and to conduct fruitful negotiations on-site with potential suppliers of new products and technologies. Another



The new website of Enterprise Europe Network – Bulgaria

global ICT event, during which the EEN team at ARC Fund co-organized business-to-business meetings, was Horizon 2020 ICT Conference in Lisbon in October. Other five Bulgarian companies had the opportunity to arrange almost 60 meetings with future R&D partners and business clients. In November, ARC Fund participated in the



*B2B meetings on the EEN stand at Mobile World Congress, Barcelona (2-4 March 2015)*

A driver for the increased involvement of ARC Fund in ICT supporting events was its renewed membership in the EEN's Sector Group "ICT Industry and Services" during its semestrial meeting on the sidelines of CeBIT-Hannover. The group combines business expertise with local contacts and knowledge of the ICT industry and provides tailored support to help SMEs innovate and grow internationally.

By tradition, in March ARC Fund, together with the Bulgarian Industrial Association, partner in EEN – Bulgaria, organized two brokerage meetings during thematic fairs at Inter Expo Center Sofia – Industry Matchmaking IMM 2015 and Go Green 2 Environment. Over 70 companies from Bulgaria and abroad shared experiences and ideas, showcased their achievements and learned more about the news and trends in their respective industries.

Throughout the year, ARC Fund co-organized together with its EEN partners abroad 4 company missions – one incoming of Croatian companies to Sofia in May and 3 outbound in Thessaloniki (May), London (September), and Gothenburg (October).

In its role as coordinator of the national

very successful "ICT - Go International" brokerage event in Skopje (Republic of Macedonia) – a pilot forum organized by EEN members in South East Europe. Also in November, ARC Fund participated in the H2020 Transport Information Day and Brokerage Event that took place at the European Commission in Brussels.



*B2B meetings during EEN international brokerage event at CeBIT, Hannover (16-20 March 2015)*

EEN consortium, ARC Fund continuously organizes intra-consortium activities, stakeholder meetings (in the framework of the Innovation Business Club and the Association of Business Clusters), as well as information days and capacity-building seminars on access to EU funding for the 2014-2020 period, innovation management, green business and others.

The EEN advisors at ARC Fund have provided support and extensive consultation on business internationalization, technology transfer and EU programs participation to almost one hundred new organizations (in addition to already registered network clients), the majority among them being small and medium-sized enterprises. Twenty-five Bulgarian companies have participated in brokerage meetings and business missions, organized by EEN in Bulgaria and abroad, which resulted in over 140 business and technology cooperation contacts between local and foreign companies.

The European Commission has entrusted the Applied Research and Communications Fund the role of information and advisory service provider for the SME Instrument

– a new financial instrument, aimed at highly innovative small and medium-sized European enterprises under the “Horizon 2020” framework program for research and development. Two ARC Fund experts were awarded licenses by the *European*

*Innovation Management Academy*, allowing them to provide innovation management consulting services with the *IMP<sup>3</sup>rove tool* — a proven international methodology for assessing and improving the innovation management of companies.



Top left: participants in Go Green 2 Environment brokerage event in Inter Expo Center Sofia (13 March 2015); top right: cluster conference in Varna, co-organized by Enterprise Europe Network at ARC Fund (12 June 2015); bottom left: meetings during the ICT Company Mission in Gothenburg (Sweden), co-organized by Enterprise Europe Network at ARC Fund (22 October 2015); bottom right: ICT Go International brokerage event in Skopje (Republic of Macedonia) (13 November 2015).

**IMP<sup>3</sup>rove innovation management assessment of SMEs**

**IMP<sup>3</sup>rove**

IMP<sup>3</sup>rove is a **methodology for systematic assessment of all aspects and activities, related to the management of innovation products and processes in companies.** The methodology was approved by the European Commission in 2006 and at present it is part of the services provided by certified EEN advisers. The assessment is based on the “House of Innovation” concept of A. T. Kearney, which analyzes the innovation management performance



Source: A.T. Kearney

*House of Innovation concept for innovation management*

along the following key dimensions: innovation strategy; innovation organization and culture; innovation life-cycle management; innovation enabling factors; and innovation results. Thanks to the unique and large IMP<sup>3</sup>rove Benchmarking Database, the innovation management assessments allow for national and international benchmarking.

As member of the EEN Network, ARC Fund is entitled to a number of Enhancing Innovation Management Capacities (EIMC) service packages that provide IMP<sup>3</sup>rove innovation management assessment free of charge for SMEs with high innovation potential.

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# Foresight and Public Engagement in Research and Innovation

*PACITA: Parliaments and Civil Societies for Technology Assessment*

2015 marked the end of a successful project and a great learning experience for all parties involved – the **Parliaments and Civil Societies for Technology Assessment (PACITA)** project, which was supported through the EU's 7<sup>th</sup> Framework Program for Research and Innovation and involved 15 partners from 13 European countries. Partner institutions included national and regional parliamentary offices for science and technology, science academies, research institutions, universities, and civil society organizations. The project ran from March 2011 to March 2015.

In early January 2015, following a round of national-level events on the topic of Sustainable Consumption, showcasing the World Wide Views engagement method, a **policy report** was released, summarizing the results of the method's application. ARC Fund took part in a joint meeting with European Commission representatives in Brussels, where the report's findings were presented and further discussed. The policy report details specific recommendations, based on the input of more than 1000 citizens across Europe.

In February, a team from ARC Fund participated in an international Technology Assessment conference in Berlin, Germany. The conference was a significant and highly visible international event of the PACITA project and aimed to further support the exchange of experience and capacity building in the field of TA across Europe and the world. In March 2015, ARC Fund welcomed the entire PACITA consortium in Sofia, hosting its final meeting, which marked the official closure of the project.

A long-anticipated outcome of the project was published at the end of 2015 by Palgrave Macmillan. The book "**Policy-Oriented Technology Assessment across Europe - Expanding Capacities,**" which

was authored by the PACITA partners, offers an up-to-date account of the expansion of technology assessment capacities across Europe, and particularly in Member States without established technology assessment traditions. ARC Fund's team co-authored several chapters of the book focusing on i) training TA professionals and enhancing capacity for knowledge-based policy making; ii) adopting TA in Central and Eastern European Countries; and iii) the application of the World Wide Views engagement method on the topic of Sustainable Consumption across Europe.

ARC Fund takes special pride in being a pioneer in championing **the concept of technology assessment and practice** within the domestic policy discourse. We build on our strong track record in supporting the development and implementation of innovation policies, in performing high-quality applied research, in networking with policy institutions and science centers, and in mainstreaming technological advances and solutions.



*Second European Technology Assessment conference in Berlin, Germany (25 February 2015)*



### CASI: Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation

With the end of 2015, ARC Fund marked another successful year of implementation of the **CASI** action, focused on **public participation in developing a common framework for assessment and management of sustainable innovation**. The CASI project is an FP7-funded action, coordinated by ARC Fund. The consortium consists of 19 partner organizations from 12 European countries. CASI responds to the 5th Grand Societal Challenge as set out in the Horizon 2020 program of the European Commission, namely “Climate Action, Environment, Resource Efficiency and Raw Materials.” The partners are supported by an extended network of national experts in the remaining 16 EU countries not part of the consortium, as well as by an Advisory Panel of leading experts in the field of environment, sustainability and innovation. CASI investigates the scope of sustainable innovation as a societal phenomenon, exploring not only the impacts of social and technological innovation on European and global society, but also the types of actors involved and their inherent interests.

In 2015, the consortium advanced towards achieving one of the major CASI objectives, namely the elaboration of an assessment and management framework for sustainable innovation practices. The draft framework is based on the **extensive mapping of 540 sustainable innovation cases from the 28**

**EU member states**, which was completed by the consortium in the beginning of the year. The draft framework was discussed with stakeholders in all 12 CASI countries with view of improving it, so as to serve a wide range of actors in planning and implementing sustainable innovation practices. As part of this endeavor, on 22 October ARC Fund hosted a stakeholder workshop attended by 12 representatives of the business sector, government, civil society and academia. The draft framework was presented and **participants were asked to test it in a real-case simulation**. This exercise kick-started an interesting and thoughtful discussion and valuable opinions were offered as to how the framework could be further improved and successfully applied.

A major CASI activity in 2015 was the organization of **national citizen consultation panels in 12 European countries (involving altogether close to 250 citizens)** for the discussion and elaboration of citizen visions for a more sustainable future in 2050. The vision elaboration reflects individual and societal concerns, fears, aspirations, challenges, hopes and dreams for the future, and is seen as “ideal picture of a desired reality.” The Bulgarian panel met on 25 April and included 25 citizens.

Following all twelve national panels, a panel of leading European experts in inno-



*Second national Citizen Panel in Sofia, Bulgaria (17 October 2015)*

vation and sustainability convened in Copenhagen in June to analyze 50 citizens' visions and **translate them into 27 research priorities to offer for consideration to the European Commission in its subsequent program planning cycle.** To strengthen the validity of these priorities, the same citizens were invited for a second round of consultations. ARC Fund hosted the Bulgarian consultation on 17 October and participants ranked their top 10 priorities. Having analyzed all national inputs and rankings, the project elaborated a list of 10 research priorities for the EU. A policy recommendations report will be finalized in early 2016.

ARC Fund has also designed and conducted an EU-wide online survey on sustainable innovation, receiving **1,793**

**responses from innovation and sustainability experts across the EU.** The survey was closed at the end of September. Early analyses of the data indicate a **strong interest in sustainable innovation management and assessment across all organizational and professional domains.**

In December, CASI's results were shared with a wide range of experts and interested parties in a 2-day webinar, discussing various CASI-related themes. As part of the webinar's program, **ARC Fund's team presented the CASI project and held a session on the topic of "Why sustainability is driving innovations today."** More information about CASI activities is available on the project's website at: <http://www.casi2020.eu>.



CASI Expert workshop in Copenhagen, Denmark (8 June 2015)

**CASI**  
Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation

**NEWS**

- 04/01/2016 - by Miroslava Prosen  
8th EU-level CASI Policy Brief published
- 01/12/2015 - by Stjepanica Chirkova  
CASI at International Social Innovation Conference

**EVENTS**

- 26/11/2015 - by Stjepanica Chirkova  
CASI at the EU Engage2020 Conference in Brussels
- 18/01/2016 - 20/01/2016  
7th Consortium Management Meeting - Vienna

**LATEST DOCUMENTS UPLOADED**

- Crowdfunding in sustainable...  
Cristian Moisoiu, Kaisa Mätschoss, Petteri
- Crowdfunding in sustainable...  
Sarah Barsby, Kaisa Mätschoss, Petteri
- Crowdfunding in sustainable...  
Michal Markuljak, Radovan Geist, Kaisa
- Crowdfunding in sustainable...  
Mitja Ruzzier, Alek Lionik, Mala Cerrot

Website of the CASI project (<http://www.casi2020.eu>)

*SI-DRIVE: Social Innovation – Driving Force of Social Change*

ARC Fund continued to work on the **SI-Drive project**, launched in the beginning of 2014. In January, the ARC Fund team performed a thorough desk research in order to identify **social innovation (SI) practices in three policy fields – education, environment and energy**. The examined education cases included SI initiatives from Bulgaria, the Czech Republic, Hungary and Poland; the environmental cases were from Bulgaria only and the energy actions were from Bulgaria, Estonia, Latvia, Lithuania, Poland, and Romania. These case studies were then clustered according to the social need that they were responding to. The final step was to group them into “practice fields” depending on the specific field/topic/issue they were addressing (e.g. acquisition of ICT skills and new teaching practices are two practice fields in education).

The next phase of the project methodology was focused on the preparation of country reports, analyzing the overall SI environment in the target states. ARC Fund prepared such reports in the environmental field, the education field, and the energy field for all the countries it has studied during the identification of cases. The reports included information on the governance structure, national challenges as well as more comprehensive information on the SI practice fields and corresponding SI projects/initiatives in the respective area. Thus, an overview of social innovation and its different regional characteristics,

stemming from culture and other factors, was provided. These country reports were then incorporated into Policy Field Reports, together with the country reports, prepared by the other project partners. As a result, three Policy Field Reports, namely Education Policy Field Report, Energy Policy Field Report, and Environment Policy Field Report were developed.

In the next stage, some of the SI initiatives were shortlisted for further study. ARC Fund completed an online survey of 35 cases in the areas of education, energy and environment. The survey was the basis for establishing the project’s database with SI practices, aiming to contribute to the global mapping of social innovations.

In November, ARC Fund prepared an **Eastern European Regional Report**, including information about Bulgaria, Hungary, Poland, Slovakia, and the Czech Republic. The report focused on general social innovation strategies, which were defining social innovation in Eastern Europe. It also presented social needs, challenges and opportunities that drive social innovation in the region, describing relevant governance, networks and actors as well as emerging trends and impacts of social innovation.

What lies ahead in 2016 is further in-depth analysis of a number of SI cases selected across the various practice fields.



*SI-Drive Conference “Social Innovation 2015: Pathways to Social Change” in Vienna, Austria (18 November 2015)*

*BSH: Black Sea Horizon*

The year 2015 marked the launch of the **Black Sea Horizon** project, which has been designed to **sustainably enhance science, technology and innovation (STI) cooperation between EU member states and countries in the Black Sea region**. The project brings together 19 partners from 16 countries, including Bulgaria, Austria, Germany, Greece, Turkey, Hungary, France, Moldova, Poland, Portugal, Romania, Armenia, Russia, Ukraine, Georgia and Azerbaijan. The action aims at **supporting the EU's external relations with the target region** through contributing to STI policy dialogues and by increasing the knowledge base about the EU's external environment. It will stimulate bi-regional STI cooperation and strengthen the EU's economic competitiveness. The project will also facilitate the pooling of resources, and to this end, it brings together a group of committed funding parties, endowed with a functional call infrastructure and a clear set of rules and regulations, ready to implement a joint call for proposals. Furthermore, the project will increase understanding of cluster policies and cluster management, will establish direct business contacts between cluster managers from the EU and the target countries and will raise awareness on the programming and the advantages of inclusive, sustainable and social innovation.

The first task of ARC Fund, executed in the framework of the Black Sea Horizon project, was the development of a **guide on quality assurance of project results**, which provides a thorough description of the process of preparing high quality deliverables. Throughout the whole project, ARC Fund will supervise the timely submission of these deliverables according to the rules and procedures, set out in the quality assurance guidelines document.

In the autumn, ARC Fund began with the preparation of the upcoming (in March 2016) workshop on innovative materials, which will be held in Sofia. The working title of the event is "Applied research in chemistry: Smart materials for a smart future." The aim of the workshop is to discuss and identify pertinent research topics in the field of advanced materials, which are of mutual interest for research, technology and innovation cooperation among the EU Member States and the countries of the Black Sea region for further uptake in forthcoming Horizon 2020 calls for proposals as well as in future international or regional bilateral and multilateral research programs. Further steps in the organization of the workshop, including identification of potential participants and logistics, will be undertaken in the beginning of January 2016.

*CIMULACT: Citizen and Multi-Actor Consultation on Horizon 2020*

In 2015, ARC Fund commenced the implementation of the project "**Citizen and Multi-Actor Consultation on Horizon 2020**" (CIMULACT), in which the organization is partnering with 29 organizations from across Europe. It is a three-year endeavor that aims to contribute to the greater proliferation of responsible research and innovation (RRI) in Europe through inclusion of many relevant actors (citizens, stakeholders, scientists and policy-makers) in the co-creation of research agendas, based on real and validated societal visions, needs and demands. The action will expand the outlook and debate on STI issues, increase scientific literacy in a broad sense, and will thus help improve

the understanding of the societal role of Science, Technology and Innovation (STI), and create shared understanding between scientific stakeholders, policy-makers and citizens. This multi-actor approach will embrace EU28 plus Norway and Switzerland. CIMULACT is supported under Horizon 2020.

**National Citizen Vision Workshops** were organized in the autumn of 2015 (a few will take place in January 2016) in order to gather **citizens' visions for desirable and sustainable future**. In a friendly and very collaborative environment at these workshops, citizens were asked to imagine

a possible (ideal) future (30-40 years from now) and describe it into a consistent “vision” – a picture of a desired future. The method used builds upon the so-called CIVISTI methodology, co-developed by ARC Fund in 2007-2008, and frequently used for organizing participatory citizen consultations across the EU.

ARC Fund organized the national workshop for Bulgaria in November 2015 in the town of Plovdiv. Thirty-six citizens participated in the event. They were divided into groups of six people, each producing a vision. Thereby, six visions for desirable and sustainable future were generated:

- 1) The smart city – this is me!;
- 2) Green planet – everyone's responsibility;

- 3) Family, personal development and value system;
- 4) Good education – the way towards human and social development;
- 5) Towards better life through a change in thinking and attitudes of people;
- 6) Evolution in health care.

At a later stage of the project, all the visions created as a result of the National Citizen Vision Workshops will be transformed into recommendations and policy options for research and innovation policies and topics, which in turn will provide concrete input to Horizon 2020.



*National Citizen Vision Workshop in Plovdiv, Bulgaria (22 November 2015)*

## Safer Internet for Children

Marking its 10<sup>th</sup> anniversary as the coordinator of the **Bulgarian Safer Internet Center (SIC)**, ARC Fund continued to actively work for the improvement of the safety of children and young people using information and communication technologies. The Bulgarian Safer Internet Center is a member of the International Association of Internet Hotlines (INHOPE) and of the European Network of Safer Internet Centers Insafe.

A very prominent recognition of the work conducted by the Bulgarian Safer Internet Center occurred on 29 December at the annual “Policeman of the Year” ceremony. The Center and its Hotline received a special award of the Ministry of Interior for civic contribution to the work of the police. The coordinator Georgi Apostolov received the award on behalf of the SIC team from the Sofia Mayor Yordanka Fandakova in the presence of the Minister of Interior Rumyana Bachvarova, as well as previous Ministers, General Secretaries and Directors of Police Directorates.

This year, the **Hotline for fighting illegal and harmful for children content and conduct in Internet has received 2,463 reports** about potential illegal and harmful for children content and conduct online. The processing of the reports revealed that 96 of them referred to websites featuring illegal content or conduct (Child pornography – 52 cases; Child nudism – 2; Sexual grooming

of children – 3; Promotion of racism and xenophobia – 7; and Promotion of violence against the individual – 32). 20 of these reports were transmitted to the Bulgarian Ministry of Interior, 40 were forwarded to INHOPE Hotlines in other countries, while in 36 cases, the content owners were notified and asked to remove the illegal content.

No less important is the Center’s **Helpline for online safety** (operated by a partner organization Association Parents). **322 children, teenagers and parents** have contacted the Helpline to seek consultations and advice about problems related to children’s use of internet and digital technologies. Most enquiries dealt with the issues like online bullying, abuse of online identity, technical and security settings, illegal or harmful content, and unwanted contacts from strangers.

Towards the end of the year, the Bulgarian Safer Internet Center launched **its new website** – [www.safenet.bg](http://www.safenet.bg). It united both services of the Center (Hotline and Helpline) in one place, making it more convenient and straightforward for the users to submit reports or ask for consultations. The website provides information about the most common risks children can encounter online, and presents the initiatives, trainings and resources of the Center, aimed at developing the digital literacy of the young Internet users.



*The SIC coordinator Georgi Apostolov receiving the award from the Sofia Mayor Yordanka Fandakova*

## Prevention – resources and trainings

Prevention is essential for the protection of children online. Developing new materials and resources, as well as providing trainings, are therefore among the priorities of ARC Fund. On the occasion of the **International Safer Internet Day 2015**, the team of the Safer Internet Center provided a set of materials to the Bulgarian schools. The set included posters, presentations and lesson plans on the topic “Together for Better Internet” and was designed to help schools organize initiatives, workshops and lessons for pupils from the 1st to the 12th grade. Another handy resource developed by the Center is the guide for teachers “Online Life of Children and Teenagers.” The guide helps teachers to engage in a constructive dialogue with parents about the advantages and challenges the Internet represents for their children.

Like in previous years, training courses remained one of the Center’s trademarks. In April, the Safer Internet Center started a joint effort on fighting **cybercrimes against minors and the human trafficking** with the Varna Municipality. Over 40 young people from the municipal Prevention Clubs took part in two training seminars and four online sessions. The participants learned about the new tendencies in the computer crimes targeting children and young people. A handbook “Risky Behavior on the Internet

and Human Trafficking” was presented and distributed during the seminars. The seminars also improved the peer-to-peer training skills of the participants, who can use the handbook to instruct their peers or younger pupils.

In the frame of the same effort, a training session with professionals (members of the Local Commission for Combating Trafficking in Human Beings, and of the Municipal and Local Commissions for Combating Juvenile Delinquency) was also conducted. ARC Fund’s experts presented the online risks for children and young people, as well as the ways to protect them from becoming victims of human trafficking.

Another important and successful training program was the **Cyberscout initiative**. The program was financed by Telenor Bulgaria and was carried out with the assistance of the Ministry of Interior. Two-day trainings were conducted in five Bulgarian towns (Smolyan, Vidin, Shumen, Pleven and Targovishte) with the participation of a total of 126 children aged 10-14. During the trainings, the participants deepened their knowledge about the most common risks children face online and the ways to avoid them. The Cyberscouts were also trained to pass on what they have learned to



Homepage of the new Bulgarian Safer Internet Center website



*A team of Cyberscouts has received their certificates after successfully completing the training.*

their peers. During parallel sessions, their teachers were introduced to the program and told how they could assist the students in organizing various awareness activities with their peers. Having completed their training, the Cyberscout teams entered a competition, during which they had to organize an event to raise the awareness of the young people about the online dangers and the ways of addressing them. On 9 February 2016, when the International Safer Internet Day is marked, the three best initiatives will be awarded.

Throughout the year, numerous one-day trainings and lessons were held for children in various schools. The topics included online safety, cyberbullying and young people between real and virtual worlds. Professionals working with children and youth in education, prevention and intervention areas were trained how to apply in their work a methodology for prevention of online and offline violence, developed by the SIC.

### *International cooperation*

The Safer Internet Center was among the 180 civil and non-governmental organizations from 20 countries, which laid the foundations for the **European Youth Network against Violent Extremism** on 4 June in Oslo. The Network was formed as a reaction to the growing numbers of young people aged 13-17, who support or participate in radical movements. During the event, ARC Fund presented its work on the prevention of hate speech and discrimination through the interactive training “Children, Parents and Teachers against the Hate Speech and Discrimination.”

The Safer Internet Center also participated in the third global conference #CATS2015 (Children as Actors in Transforming Society) in Switzerland. The event brought together over 300 participants from 45 countries in an effort to actively involve children and young people in decision-making processes that concern them. In addition to the experts, the Center’s delegation included also two young women, who have participated in different initiatives and programs of the Center since 2013. One of them was chosen to be among the four young

people, who presented their experiences and impressions from CATS2015 at the special event in the European Parliament in November 2015.

Other important events in which the SIC experts took part, include:

- A working meeting of the European research network EU KIDS ONLINE to discuss emergent topics and exchange expertise with other European organizations working in the area of safer Internet (January in Brussels);
- A Conference on safeguarding teenagers' intimate relationships – topics such as sexting, abuse of partners' accounts and revenge porn were discussed (February in London);
- Insafe Steering Committee meeting (May in Prague);
- EuroDIG 2015; a session on Youth Empowerment was moderated by SIC (June in Sofia);
- Bursary visit by Dora Sheridan, analyst at Internet Watch Foundation, UK (July in Sofia);
- An international Hackathon for fighting trafficking in persons (September in Tallinn);
- A meeting of the Swiss-Bulgarian working group against human trafficking (November in Sofia).

On 18 November, the **European Day on the Protection of Children against Sexual Exploitation and Sexual Abuse** was marked for the first time. A coalition of 30 organizations, including ARC Fund as the coordinator of the Safer Internet Center, have signed a declaration, insisting on effective measures and a zero-tolerance policy against child sexual exploitation and abuse online. They called for an expanded focus and understanding of exploitative imagery, which falls into a “grey area” and remains outside the legal definition of child pornography (images and video materials depicting children in provocative or erotic positions).

To celebrate the International Human Rights Day (10 December), the Council of Europe and the Bulgarian Chairmanship to the Council of Europe, in partnership with the ARC Fund and the Center for the Study of Democracy, hosted the international conference **“Human Rights of the Internet users.”** The event was opened by Eva Paunova, member of the European Parliament, and Grigor Porozhanov, Director of the Foreign Economic Relations Directorate at the Ministry of Foreign Affairs. Distinguished Bulgarian and international experts from various institutions and organizations, representatives of business organizations, human rights activists and journalists discussed trends, developments and perspectives in the field of protection of fundamental human rights of Internet users.

### Initiatives

Like in previous years, the marking of the **International Safer Internet Day** was an important occasion for drawing the public attention to the work and goals of the Safer Internet Center. A public discussion **“Is there a national policy on protection of children from the online sexual exploitation in Bulgaria?”** was held in the Information Office of the Representation of the European Commission and the European Parliament in Sofia. The participants included representatives of relevant state institutions – State Agency for Protection of Children, Ministry of Interior, Ministry

of Youth and Sports, Cybercrime Unit of the State Agency for National Security, as well as teachers and students.

During the year, the Center continued its work on the project **“Children, Parents and Teachers against the Hate Speech and Discrimination,”** financed by the European Economic Area Financial Mechanism. In cooperation with a group of teachers, pedagogical counselors and experts, a special methodology for children from 1st to 4th grade was developed in order to encourage the development of tolerance and acceptance of difference among

them. It includes 10 work modules, which can be applied during the lessons of various subjects. In addition to the work in class, children have a homework, which they should accomplish together with a parent. The methodology also foresees an extracurricular activity with participation of children, their parents and teachers. The methodology is presented in a school textbook *Children, Parents and Teachers against Hate Speech*. The textbook has already been used in several schools in various Bulgarian cities and the teachers provided feedback and ideas for improvement of the methodology. The approval of the Ministry of Education and Science is pending.

At a press conference on 17 September, ARC Fund and its partners from Association Parents announced the beginning of the **National campaign against gender-based violence**, financed by Norway Grants. The campaign turns public attention to the issues such as early sexualization, the lack of parental control over the child's Internet use, and the increasing exposure of children to online content unsuitable for their age. These phenomena consolidate the stereotypes about the roles of the two sexes. Reinforced by the sexualized media and information environment, these stereotypes lead to the adoption of models and behavior in which gender-based violence is perceived as something normal. The campaign, including a variety of awareness raising materials, is being developed in active cooperation with a youth panel, consisting of 12 volunteers aged between 15 and 17. Methodological materials and a detailed 40-minute lesson plan "I want to be popular like the others" were developed through cooperation with the young volunteers and with teams of

psychologists and representatives of the law-enforcement bodies.

In 2015, the competition "**Teacher – leader in a virtual space**," which the Safer Internet Center organizes each year, was linked to the campaign against gender-based violence and early sexualization. Teachers from fifth to twelfth grades were invited to test the developed lesson plan and related methodology and to apply them in their classes, providing feedback and suggestions to the Center.

A very successful and attractive initiative, which the Safer Internet Center launched in 2015, is the "**Mobile clinic for digital devices used by children**" in which experts "examine" the smartphones, tablets and other mobile devices of children and determine whether they are well protected. The mobile clinics were set up in the warmer months of the year in Sofia parks, in Serdica Mall, or during events like Sofia Breaths Festival. The examinations consist of 10 questions. Nine of them are related to the security settings of the mobile devices, while the last one establishes whether the children know who to turn to (apart from their parents) in case they experience an online problem. The Mobile Doctors have established that roughly half of the "patients" were ill. To remedy this situation, they talked with the families and the youngsters about the measures they need to take in order to fix the flaws. Over 200 families participated in the examinations. Undoubtedly, many more will visit the clinic in the future. The original idea for the initiative came from the Luxembourg Safer Internet Center, which approved its adoption in Bulgaria. The Bulgarian rendition of the Mobile clinic was financed by Telenor Bulgaria.



*The mobile doctors in front of the clinic for digital devices used by children*

Continuing a successful initiative from the previous year, which brings together a parent and a child in an activity involving **creative use of technology**, several **CoderDojo events** were organized. CoderDojo are programming courses for young Internet users, aged between 7 and 17, during which they learn how to write code, how to develop websites,

applications, programs and games. The events, which were organized on the premises of the Center for the Study of Democracy, took place in an informal and creative atmosphere, and the youngsters and their parents shared knowledge and information about different aspects of technology and learned many new things while having fun.

#### *National cooperation and media appearances*

The Safer Internet Center's experts participated in:

- Working group "Prevention of violence and abuse of children" at the National Council for Child Protection (13 January, Sofia);
- A seminar with juvenile crime police officers dedicated to the prevention and reaction to online crimes against children (11 May, Razlog);
- Conference on protection of children online, presenting the SIC activities (Hotline, Helpline, awareness node) (18 May, Sofia);
- Conference "Assessment of youth participation in Bulgaria" (26 May, Sofia);
- National youth forum VOICE IT, orga-

nized by the National Network of Children (20 November, Sofia).

The Center's experts have made numerous appearances in print and electronic media, providing comments and opinions on issues like intimate violence in teenage relationships; online safety of young people; popularization of events like Safer Internet Day and Familathlon; risks for young children using Facebook and ways to prevent them; prevention activities of the Center; place of mobile devices in schools; cyberbullying among minors; online radicalization, extremism and hate speech; and what parents and schools could do to protect children online.

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**PART TWO**

**Management**

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# Institutional Development

The Applied Research and Communications Fund is registered as a public benefit organization in the Central Registry of Not-for-Profit Public Benefit Organizations of the Ministry of Justice. Public benefit organizations are obliged by law to conform to a number of additional financial reporting rules and to submit annual activity reports. In 2006, ARC Fund established ARC Consulting – a wholly-owned consulting company, designed to better leverage the organization’s expertise. The company provides consultancy services in the field of innovation and ICT. It also develops and implements national and international projects under the EU Framework Programs, and the Cohesion and Structural Funds.

ARC Fund and ARC Consulting form the ARC Fund Group.

In 2015, the ARC Fund Group employed a staff of 31, including part-time consultants. The ARC Fund’s team is a mixture of young, well-educated and highly motivated people and experienced experts renowned for their professionalism and the high quality of their work.

ARC Fund is managed in accordance with the principles of good governance, accountability and transparency. The application of these principles is expressed in the:

- execution of annual audits since 1992;
- individual project audits;
- publication of *Annual Reports* in Bulgarian and English;
- regular updates of the organization’s website to inform the public about ongoing projects and events;
- child protection policy, which contains an ethical code, principles and rules for working with children;
- publications in the media to enhance the impact of policy recommendations and increase public awareness of supported causes.

In 2015, ARC Fund and ARC Consulting worked on the implementation of 33 projects, funded by national bodies and international organizations. Among them were the European Commission (Innovation and Networks Executive Agency, Connecting Europe Facility, DG Research and Innovation, DG Regional and Urban Policy, DG Enterprise and Industry, and DG Communication Networks, Content and Technology, as well as the Executive Agency for SMEs), Oak Fund, Norway Grants, EEA Grants, the Bulgarian Ministry of Regional Development and the Ministry of Transport, Information Technology and Communications, as well as the European Foundation for the Improvement of Living and Working Conditions (Eurofound) and the European Commission Representation in Bulgaria.

## List of Staff

### *Board of Trustees*

Dr. Ognian Shentov, Chairman of the Board  
Vladimir Yordanov, Deputy Chairman of the Board  
Dr. Inko Razpopov, Member of the Board  
Lyubomir Christov, Member of the Board

### *Staff Directory*

Nikolay Badinski, Executive Director  
Zoya Damianova, Program Director  
Daniela Tchonkova, Program Coordinator  
Georgi Apostolov, Program Coordinator  
Todor Yalamov, Coordinator, IT group  
Ruslan Stefanov, Coordinator, Innovation.bg group  
Prof. Marin Petrov, Senior Advisor  
Prof. Teodora Georgieva, Senior Fellow  
Denitsa Marinova, Project Coordinator  
Adriana Dimova, Project Coordinator  
Ventseslav Kozarev, Project Coordinator  
Robert Hickey, Project Officer  
Blagovetsa Chonkova, Project Officer  
Desislava Asenova, Project Officer  
Metodi Naydenov, Project Officer  
Yasen Nestorov, Project Officer  
Luiza Shahbazyan, Project Officer  
Lubomir Sirkov, Project Officer  
Marko Hajdinjak, Project Officer  
Daniela Mineva, Project Officer  
Kristian Braikov, Project Officer  
Nadejda Gantcheva, Project Officer  
Elena Velkova, Project Officer

### *Finance and Administration*

Tsvetoslava Kioseva, Financial Manager  
Daniela Zain, Accountant  
Stanislav Kushlev, Project Assistant  
Dimitar Stamenov, System Administrator  
Kristina Tsvetkova, Financial Officer

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**PART THREE**  
**Financial Report**



APPLIED RESEARCH AND COMMUNICATIONS FUND

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)  
CONSOLIDATED ANNUAL FINANCIAL STATEMENTS  
31 DECEMBER 2015**

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## Consolidated Financial Statements

### APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP) CONSOLIDATED STATEMENT OF FINANCIAL POSITION

31 DECEMBER 2015

(all amounts in BGN  
thousand)

|                                     | Note | For the year ending: |                  |
|-------------------------------------|------|----------------------|------------------|
|                                     |      | 31 December 2015     | 31 December 2014 |
| <b>Assets</b>                       |      |                      |                  |
| Property, plant and equipment       | 5    | 14                   | 10               |
| Intangible assets                   | 6    | 1                    | 1                |
| Investment property                 | 7    | 130                  | 131              |
| <b>Total non-current assets</b>     |      | <b>145</b>           | <b>142</b>       |
| Trade and other receivables         | 8    | 769                  | 1 262            |
| Cash and cash equivalents           | 9    | 1 721                | 1 444            |
| Deferred expenses                   |      | 48                   | 60               |
| <b>Total current assets</b>         |      | <b>2 538</b>         | <b>2 766</b>     |
| <b>Total assets</b>                 |      | <b>2 683</b>         | <b>2 908</b>     |
| <b>Equity</b>                       |      |                      |                  |
| Reserves                            |      | 1 727                | 1 691            |
| Retained earnings                   |      | 142                  | 138              |
| Net profit for the period           |      | 16                   | 40               |
| <b>Total equity</b>                 |      | <b>1 885</b>         | <b>1 869</b>     |
| <b>Liabilities</b>                  |      |                      |                  |
| Trade and other payables            | 10   | 82                   | 122              |
| Deferred financing                  | 12   | 716                  | 917              |
| <b>Total current liabilities</b>    |      | <b>798</b>           | <b>1 039</b>     |
| <b>Total liabilities</b>            |      | <b>798</b>           | <b>1 039</b>     |
| <b>Total equity and liabilities</b> |      | <b>2 683</b>         | <b>2 908</b>     |

These consolidated financial statements were approved by the Board of Trustees on 27 July 2016. They are signed on behalf of the Board of Trustees by:

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Nikolay Badinski  
Executive Director  
27 July 2016

Initialled for identification purposes in reference to the audit report:

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Stoyan Donev  
Registered Auditor  
1 November 2016

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**  
**31 DECEMBER 2015**

| (all amounts in BGN thousand)                  | Note | For the year ending: |                     |
|--|------|----------------------|---------------------|
|  |      | 31 December<br>2015  | 31 December<br>2014 |
| Revenues                                       | 13   | 1 657                | 1 918               |
| Cost of Sales                                  | 14   | (1 524)              | (1 887)             |
| <b>Gross Profit</b>                            |      | <b>133</b>           | <b>31</b>           |
| Impairment losses                              |      | (124)                | (13)                |
| <b>Revenue from operating activities</b>       |      | <b>9</b>             | <b>18</b>           |
| Financial income                               |      | 12                   | 33                  |
| Financial expenses                             |      | (4)                  | (10)                |
| <b>Net financing costs</b>                     | 15   | <b>8</b>             | <b>23</b>           |
| <b>Profit before income tax</b>                |      | <b>17</b>            | <b>41</b>           |
| Income tax expense                             | 16   | (1)                  | (1)                 |
| <b>Net profit for the period</b>               |      | <b>16</b>            | <b>40</b>           |
| Other comprehensive income                     |      | -                    | -                   |
| <b>Total comprehensive income for the year</b> |      | <b>16</b>            | <b>40</b>           |

These consolidated financial statements were approved by the Board of Trustees on 27 July 2016. They are signed on behalf of the Board of Trustees by:

\_\_\_\_\_  
 Nikolay Badinski  
 Executive Director  
 27 July 2016

Initialled for identification purposes in reference to the audit report:

\_\_\_\_\_  
 Stoyan Donev  
 Registered Auditor  
 1 November 2016

## Consolidated Financial Statements

### APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP) CONSOLIDATED STATEMENT OF CHANGES IN EQUITY 31 DECEMBER 2015

| (all amounts in BGN thousand)         | Note | Retained earnings |
|---------------------------------------|------|-------------------|
| <b>Balance as of 1 January 2014</b>   |      | <u>1 829</u>      |
| Net profit for the year               |      | <u>40</u>         |
| <b>Balance as of 31 December 2014</b> |      | <u>1 869</u>      |
| <b>Balance as of 1 January 2015</b>   |      | <u>1 869</u>      |
| Net profit for the year               |      | <u>16</u>         |
| Other – reclassification              |      | <u>-</u>          |
| <b>Balance as of 31 December 2015</b> |      | <u>1 885</u>      |

These consolidated financial statements were approved by the Board of Trustees on 27 July 2016. They are signed on behalf of the Board of Trustees by:

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Nikolay Badinski  
Executive Director  
27 July 2016

Initialed for identification purposes in reference to the audit report:

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Stoyan Donev  
Registered Auditor  
1 November 2016

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**CONSOLIDATED CASH FLOW STATEMENT (continued)**  
**31 DECEMBER 2015**

|   | Notes | For the year ending: |                     |
|---|-------|----------------------|---------------------|
|   |       | 31 December<br>2015  | 31 December<br>2014 |
| <b>Cash flows from operating activities</b>                     |       |                      |                     |
| (Loss) / profit before income tax                               |       | 17                   | 40                  |
| <b>Adjustments for:</b>   |       |                      |                     |
| Accrued interest expense  |       | -                    | -                   |
| Depreciation and amortisation                                   |       | 7                    | 5                   |
| <b>Changes in working capital:</b>                              |       |                      |                     |
| Trade and other receivables                                     |       | 495                  | (381)               |
| Trade and other payables  |       | (40)                 | (180)               |
| Deferred expenses   |       | 12                   |                     |
| Deferred financing  |       | (201)                | 463                 |
| Income tax paid   |       | (1)                  | (1)                 |
| <b>Net cash flow from operating activities</b>                  |       | <b>289</b>           | <b>(53)</b>         |
| <b>Cash flow from investing activities</b>                      |       |                      |                     |
| Payments for acquisition of property, plant and equipment       |       | (20)                 | (6)                 |
| <b>Net cash flow from investing activities</b>                  |       | <b>(20)</b>          | <b>(6)</b>          |
| <b>Cash flow from financing activities</b>                      |       |                      |                     |
| Interest and commissions received / paid                        |       | 8                    | -                   |
| <b>Net cash flow from financing activities</b>                  |       | <b>8</b>             | <b>-</b>            |
| Net increase/(decrease) in cash and cash equivalents            |       | 277                  | (59)                |
| <b>Cash and cash equivalents at the beginning of the period</b> |       | <b>1 444</b>         | <b>1 503</b>        |
| <b>Cash and cash equivalents at the end of the period</b>       | 11    | <b>1 721</b>         | <b>1 444</b>        |

These consolidated financial statements were approved by the Board of Trustees on 27 July 2016. They are signed on behalf of the Board of Trustees by:

\_\_\_\_\_  
 Nikolay Badinski  
 Executive Director  
 27 July 2016

Initialed for identification purposes in reference to the audit report:

\_\_\_\_\_  
 Stoyan Donev  
 Registered Auditor  
 1 November 2016

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**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

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**1. Background and activities**

**Applied Research and Communications Fund (ARC Fund)**, established in 1991, is a not-for-profit organisation with its legal seat in Republic of Bulgaria. Its main objectives are:

- To drive the development of the **knowledge economy** in Bulgaria and Europe;
- To promote innovation and facilitate the transfer of new and advanced technologies and know-how;
- To support **cross-border networking** and **capacity building** of businesses, public agencies or private organizations, by using the advances in information and communication technologies.

In pursuit of these objectives, ARC Fund designs and implements strategies for capacity building of NGOs, information society development and technological innovation.

The consolidated financial statements of ARC Fund for the year ended 31 December 2015 comprise the Fund and its subsidiary ARC Consulting EOOD (together referred to as the "Group").

ARC Fund owns 100% of the share capital of its subsidiary ARC Consulting EOOD. ARC Consulting EOOD is a limited liability company established in Republic of Bulgaria. The company is registered in Sofia City Court with act № 9428/2006 from 28 August 2006. Its core activity is offering of consultancy services in the area of policies and practices of the European Union.

As of 31 December 2015 the Group has 34 employees.

These consolidated financial statements have been approved by the Board of Trustees of the Fund on 27 July 2016.

**2. Accounting policies**

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

**2.1. Basis of preparation**

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union. The financial statements have been prepared under the historical cost convention.

The consolidated financial statements comprise the financial statements of the Fund and its subsidiaries as of 31 December each year. The financial statements of subsidiaries are prepared for the same reporting period as the parent Fund, using consistent accounting policies. For consolidation purposes,

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

the financial information of the Group has been combined on a line-by-line basis by adding together like items of assets, liabilities, income and expenses. All intra-group balances, income and expenses and unrealized gains resulting from intra-group transactions are eliminated in full. Unrealised losses are also eliminated but considered an impairment indicator of the asset transferred. Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Subsidiaries are all entities (including special purpose entities) over which the Group has the power to govern the financial and operating policies generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity.

The purchase method of accounting is used to account for the acquisition of subsidiaries by the Group. The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the income statement.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

*Transactions with non-controlling interests*

Non-controlling interests represent the portion of profit or loss and net assets not held by the Group and are presented separately in the income statement and within equity in the consolidated balance sheet, separately from parent shareholders' equity. Disposals of non-controlling interests result in gains and

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**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

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losses for the Group that are recognised in the income statement. Acquisitions of non-controlling interests are accounted for whereby the difference between the consideration and the book value of the share of the net assets acquired is recognised in goodwill.

The preparation of the financial statements in accordance with IFRS requires management to make estimates and assumptions. The management relied on their own judgment when applying the accounting policy of the Group. The elements of the financial statements whose presentation includes higher degree of judgment or subjectivity and for which the assumptions and judgments have higher influence are separately disclosed in Note 4.

*New and amended standards, adopted by the Group:*

New and amended standards and interpretations mandatory for the first time for the financial year beginning 1 January 2015 are not early adopted by the Group because management of the Group believes that they are not currently relevant to the Group although they may affect accounting for future transactions and events.

New standards, amendments and interpretations issued but not effective for the financial year beginning 1 January 2015 are not early adopted by the Group. They are not relevant to Group although they may affect accounting for future transactions and events.

## **2.2. Foreign currency transactions**

### **2.2.1. Functional and presentation currency**

Items included in the financial statements of the Group are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The functional and presentation currency in these consolidated financial statements is 'Bulgarian lev' or 'BGN'.

### **2.2.2. Transactions and balances**

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of comprehensive income.

## **2.3 Property, plant and equipment**

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

All property, plant and equipment are stated at historical cost less depreciation, less impairment losses, if any. Historical cost includes all expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the assets carrying amount or recognised as a separate asset, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

Depreciation commence from the date the asset is available for use. Land is not depreciated as it is deemed to have an indefinite life. Assets under construction are not depreciated as not yet available for use.

The Group uses straight – line depreciation method. Depreciation rates are based on the useful life of the different types of property, plant and equipment as follows:

|                         |                |
|-------------------------|----------------|
| Buildings               | 100 years      |
| Computers and equipment | 3-6.67 years   |
| Vehicles                | 6.67 years     |
| Fixtures and fittings   | 2 – 6.67 years |

Property, plant and equipment is depreciated from the month, following the acquisition date and for internally generated assets – from the month, following the date of entering into use.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

## 2.4 Intangible assets

Intangible assets acquired by the Group are presented at cost, less accumulated amortisation and impairment.

### *Subsequent expenditures*

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is expensed as incurred.

Amortisation is charged to the income statement on a straight-line basis over the estimated useful lives of intangible assets usually for 4-5 years.

## 2.5. Financial assets

The Group classifies its financial assets in the following categories: at fair value through profit or loss, loans and receivables, held-to-maturity investments, and available-for-sale financial assets. The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition and re-evaluates this designation at every reporting date.

### *Financial assets at fair value through profit or loss*

Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for

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**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

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the purpose of selling in the short term. Assets in this category are classified as current assets.

For the purposes of these financial statements short term means a period within 12 months. During the year, the Group did not hold any investments in this category. The Group does not possess such financial assets as of 31 December 2015.

*Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets. The Group's loans and receivables comprise 'trade and other receivables' and 'cash and cash equivalents' in the balance sheet. Loans and receivables are carried at amortized cost using the effective interest rate.

*Held to maturity*

Held-to-maturity investments are fixed-maturity investments that the Group's management has the positive intention and ability to hold to maturity. These securities are included as non-current assets except for securities, reaching maturity within 12 months from the balance sheet date and which are recognised as current during the reporting period. During the year, the Group did not hold any investments in this category.

*Available for sale financial assets*

Available-for-sale financial assets are non-derivatives that are investments acquired with the purpose to be owned for non-fixed period of time and which can be sold when the Group needs recourse or at change of interest rates. They are included in non-current assets unless management intends to dispose of the investment within 12 months of the balance sheet date or to use them as a source of working capital. In this case the investments are classified within current assets. During the year, the Group did not hold any investments in this category.

The group assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired. Impairment testing of trade and other receivables is described in Note 2.7.

**2.6. Inventory**

Inventories are stated at the lower of cost and net realisable value. Inventories are expensed using the weighted average method. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

**2.7. Trade and other receivables**

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
**NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015**  
**(all amounts in BGN thousand, unless otherwise stated)**

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost (using effective interest method) less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of receivables.

Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments (more than 30 days overdue) are considered indicators that the trade receivable is impaired. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in the income statement within 'selling and marketing costs'. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against 'selling and marketing costs' in the income statement.

**2.8. Cash and cash equivalents**

Cash and cash equivalents includes cash in hand, deposits held at call with banks, and other short-term highly liquid investments with original maturities of three months or less as well as bank overdrafts. Bank overdrafts are shown within current borrowings in current liabilities on the balance sheet.

**2.9. Investment property**

Investment property is property held either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business, use in the production or supply of goods or services or for administrative purposes. Investment property is measured at cost on initial recognition and subsequently at fair value with any change therein recognised in profit or loss.

Cost includes expenditure that is directly attributable to the acquisition of the investment property. The cost of self-constructed investment property includes the cost of materials and direct labour, any other costs directly attributable to bringing the investment property to a working condition for its intended use and capitalised borrowing costs.

When the use of a property changes such that it is reclassified as property, plant and equipment, its fair value at the date of reclassification becomes its cost for subsequent accounting.

**2.10. Borrowings**

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is

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recognised in the income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Borrowing costs are recognised as an expense in the period in which they are incurred.

## **2.11. Deferred tax**

Deferred income tax is provided in full, using the liability method, on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is determined using tax rates that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

## **2.12. Employee benefits on retirement**

In accordance with article 222, para. 3 of the Bulgarian Labour Code, in the event of termination of a labour contract after the employee has reached the lawfully required retirement age, regardless of the reason for the termination, the employee is entitled to a compensation as follows: 2 gross monthly salaries in all cases and 6 gross monthly salaries if the employee has been engaged with the Group for at least 10 years.

As of 31 December the Group has not accounted for those potential obligations.

## **2.13. Revenue recognition**

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the group's activities. Revenue is shown net of value-added tax, returns, rebates and discounts and after eliminating sales within the group.

The group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and when specific criteria have been met for each of the group's activities as described below. The amount of revenue is not considered to be reliably measurable until all contingencies relating to the sale have been resolved. The group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

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*Sales of services*

Revenue from time and material contracts, typically from delivering certain services, is recognised under the percentage of completion method. Revenue is generally recognised at the contractual rates. For time contracts, the stage of completion is measured on the basis of labour hours delivered as a percentage of total hours to be delivered.

Revenue from fixed-price contracts for delivering certain services is also recognised under the percentage-of-completion method. Revenue is generally recognised based on the services performed to date as a percentage of the total services to be performed.

If circumstances arise that may change the original estimates of revenues, costs or extent of progress toward completion, estimates are revised. These revisions may result in increases or decreases in estimated revenues or costs and are reflected in income in the period in which the circumstances that give rise to the revision become known by management.

*Revenue from grants and contributions*

Grants from financing bodies are recognised initially as deferred income when there is reasonable assurance that they will be received and that the Group will comply with the conditions associated with the grant. Grants that compensate the Group for expenses incurred are recognised in profit or loss on a systematic basis in the same periods in which the expenses are recognised. Grants that compensate the Group for the cost of an asset are recognised in profit or loss on a systematic basis over the useful life of the asset.

*Interest income*

Interest income is recognised on a time-proportion basis using the effective interest method. When a receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loans is recognised using the original effective interest rate.

**2.14. Dividend distribution**

The Group does not distribute dividends.

**3. Financial risk management****3.1. Global financial crisis****Impact of the ongoing global financial and economic crisis**

The global financial crisis has had a severe effect on the Bulgarian economy and the financial situation within the Bulgarian financial and corporate sectors has significantly deteriorated since mid-2008. In 2012 and 2013 the Bulgarian economy experienced a moderate recovery in economic growth. The recovery was accompanied by increased export and increased rate of household savings.

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The future economic direction of Bulgaria is largely dependent upon the effectiveness of economic, financial and monetary measures undertaken by the Government, together with tax, legal, regulatory and political developments. Management is unable to predict all developments which could have an impact on the sector and wider economy, and consequently what effect, if any, they could have on the future financial position of the Group.

The Bulgarian economy is also vulnerable to market downturns and economic slowdowns elsewhere in the world. Management is unable to determine reliably the effects on the Group's future financial position of any further changes in the economic environment in which the Group operates.

Management believes it is taking all necessary measures to support the sustainability and development of the Group's business in the current circumstances.

**Impact on customers/ borrowers**

The debtors or borrowers of the Group may also be affected by the lower liquidity situation which could, in turn, impact their ability to repay the amounts owed. The operating conditions for customers may also have an impact on management's cash flow forecasts and assessment of the impairment of financial and non-financial assets. To the extent that information is available, management has properly reflected revised estimates of expected future cash flows in its impairment assessments.

**3.2 Financial risk factors**

The risk exposures of the Group could be determined as follows: market risk (including currency risk, price risk and risk of future cash flow changes as a result of changes in market interest rate), credit risk and liquidity risk. The Group's management focuses on the financial risk and seeks to minimise potential adverse effects on the Group's financial performance.

**3.2.1 Market risk**

*a) Currency risk*

The Group is not exposed to foreign exchange risk as most of its foreign transactions are denominated in EUR. The exchange rate of the BGN is currently pegged to the EUR.

The Group's management does not believe that the peg will change within the next 12 months and therefore no sensitivity analysis has been performed.

*b) Price risk*

The Group's management considers the price risk in the context of the future revenues that are expected to be generated in the operating activity of the Group.

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### 3.2.2 Interest rate risk

As the Group has no significant interest-bearing assets, the Group's income and operating cash flows are substantially independent of changes in market interest rates.

The Group analyses its interest rate exposure on a regular basis and addresses the underlying risk.

### 3.2.3 Credit risk

Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions.

The Group has established and implemented policy, which ensures that the sales of services and revenues from financing are provided to/by clients and organisations with appropriate credit history.

### 3.2.4 Liquidity risk

In the context of its underlying business, the Group is able to maintain flexibility in funding and to use credit lines, overdrafts and other credit facilities, if necessary.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

| <b>As of 31 December<br/>2015</b> | <b>Up to 1<br/>year</b> | <b>Between 1<br/>and 2 years</b> | <b>Between 2<br/>and 5 years</b> | <b>Over 5<br/>years</b> |
|-----------------------------------|-------------------------|----------------------------------|----------------------------------|-------------------------|
| Trade and other payables          | 119                     | -                                | -                                | -                       |
| <b>As of 31 December<br/>2014</b> | <b>Up to 1<br/>year</b> | <b>Between 1<br/>and 2 years</b> | <b>Between 2<br/>and 5 years</b> | <b>Over 5<br/>years</b> |
| Trade and other payables          | 122                     | -                                | -                                | -                       |

## 4. Critical accounting estimates and judgements

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The authenticity of accounting estimates and judgments is monitored regularly.

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The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

*Useful life of property, plant and equipment*

The presentation and valuation of property, plant and equipment requires the Management to estimate their useful life and remaining value. The Management assesses at the end of each accounting period the determined useful life of the property, plant and equipment.

*Impairment of loans and receivables*

Impairment of receivables is determined based on Management's expectations for the collectability of the loans and receivables. As at the date of preparation of the financial statements, the Management reviews and assesses the existing receivables' balances for collectability.

**5. Property, plant and equipment**

| <b>Cost</b>        | <b>As of 1 January 2015</b> | <b>Additions</b> | <b>Disposals</b> | <b>As of 31 December 2015</b> |
|--------------------|-----------------------------|------------------|------------------|-------------------------------|
| Computers          | 75                          | 13               | (14)             | 74                            |
| Vehicles           | 147                         | -                | (3)              | 144                           |
| Fixtures& Fittings | 24                          | -                | (2)              | 22                            |
| <b>Total</b>       | <b>246</b>                  | <b>13</b>        | <b>(19)</b>      | <b>240</b>                    |

| <b>Depreciation</b> | <b>As of 1 January 2015</b> | <b>Additions</b> | <b>Disposals</b> | <b>As of 31 December 2015</b> |
|---------------------|-----------------------------|------------------|------------------|-------------------------------|
| Computers           | 68                          | 8                | (15)             | 61                            |
| Vehicles            | 147                         | -                | (3)              | 144                           |
| Fixtures& Fittings  | 21                          | -                | -                | 21                            |
| <b>Total</b>        | <b>236</b>                  | <b>8</b>         | <b>(18)</b>      | <b>226</b>                    |

| <b>Carrying amount</b> |           |           |
|------------------------|-----------|-----------|
| Computers              | 7         | 13        |
| Vehicles               | -         | -         |
| Fixtures& Fittings     | 3         | 1         |
| <b>Total</b>           | <b>10</b> | <b>14</b> |

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**6. Investment property**

|   | <b>As of 31 December</b> |             |
|---|--------------------------|-------------|
|   | <b>2015</b>              | <b>2014</b> |
| <b>As of 1 January</b>                          |                          |             |
| Carrying amount at the beginning of the period  | 131                      | 132         |
| Others (reclassification)                       |                          |             |
|   | <b>131</b>               | <b>132</b>  |
| Depreciation charge                             | (1)                      | (1)         |
| <b>Carrying amount at the end of the period</b> | <b>130</b>               | <b>131</b>  |
| <b>As of 31 December</b>                        |                          |             |
| Cost  | 174                      | 174         |
| Accumulated depreciation                        | (44)                     | (43)        |
| <b>Carrying amount</b>                          | <b>130</b>               | <b>131</b>  |

Investment properties held by the Group represent apartments and office space owned by ARC Consulting EOOD. Investment properties are carried at cost, less accumulated depreciation and impairment.

**7. Trade and other receivables**

|  | <b>As of 31 December</b> |              |
|--|--------------------------|--------------|
|  | <b>2015</b>              | <b>2014</b>  |
| Trade receivables                            | 796                      | 1 271        |
| Less: Impairment provision of trade payables | (39)                     | (26)         |
| <b>Trade receivables, net</b>                | <b>757</b>               | <b>1 245</b> |
| Prepaid corporate tax                        | -                        | 1            |
| Other  | 12                       | 17           |
|  | <b>769</b>               | <b>1 263</b> |

The carrying amount of the trade and other receivables approximate their fair value.

**8. Cash and cash equivalents**

|                               | <b>As of 31 December</b> |              |
|-------------------------------|--------------------------|--------------|
|                               | <b>2015</b>              | <b>2014</b>  |
| Cash at hand                  | 24                       | 37           |
| Cash in bank current accounts | 1 697                    | 1 407        |
| <b>Total cash</b>             | <b>1 721</b>             | <b>1 444</b> |

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**9. Trade and other payables**

|   | <b>As of 31</b> |             |
|---|-----------------|-------------|
|   | <b>December</b> |             |
|   | <b>2015</b>     | <b>2014</b> |
| Payables to partners and suppliers      | 2               | 21          |
| Salaries and social securities payables | 47              | 7           |
| Tax                                     | 13              | 1           |
| Other                                   | 20              | 93          |
|   | <b>82</b>       | <b>122</b>  |

**10. Deferred financing**

|   | <b>As at 31</b> |             |
|---|-----------------|-------------|
|   | <b>December</b> |             |
|   | <b>2015</b>     | <b>2014</b> |
| EC - European Transport Network Alliance  |                 | 9           |
| EC - Engaging Society in <i>Horizon 2020</i>  | 5               | 13          |
| EC - European Design Innovation Platform - Design for Europe  |                 | 23          |
| Government of Norway - Teachers, Parents and Children against Hate Speech and Discrimination          | 19              | 28          |
| EC - Safeguarding Teenage Intimate Relationships: Online and Offline                                  |                 | 52          |
| EC - Social Innovation: Driving Force of Social Change  | 20              | 62          |
| OAK Foundation – Children in Virtual and Real Violence - Prevention by Discourse and Education        |                 | 86          |
| EC - Enterprise Europe Network (EEN)  |                 | 95          |
| EC – Citizen Visions for the Future of Science Technology and Innovation                              |                 | 494         |
| EC – Citizen and Multi-Actor Consultation on <i>Horizon 2020</i>                                      | 65              |             |
| EC – Enhanced bi-regional STI Cooperation between the EU and the Black Sea Region – Black Sea Horizon | 34              |             |

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|  |            |            |
|--|------------|------------|
| EC - Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation | 215        |            |
| OAK Foundation – Empowering Children in the Digital Age through Early Digital Literacy Development                 | 152        |            |
| Other  |            | 2          |
|  | <b>510</b> | <b>864</b> |
| Deferred financing   | 206        | 49         |
| Deferred financing for acquisition of fixed assets   |            | 4          |
| Total deferred financing   | <b>716</b> | <b>917</b> |

## 11. Revenue

|  | As of 31 December |             |
|--|-------------------|-------------|
|  | 31 Dec 2015       | 31 Dec 2014 |
| City Municipality Varna - Responsible Internet Use and Prevention of Human Trafficking                         | 5                 | 4           |
| EC - Better Internet for Kids  |                   | 64          |
| EC - Boosting European Games Industry  |                   | 110         |
| EC - Bulgarian Safer Internet Centre: Developing into an Education, Support and Knowledge Centre of Excellence |                   | 172         |
| EC - Complex Challenges, Innovative Cities   |                   | 80          |
| EC - Energy Vision 2020 for South East European Cities   |                   | 183         |
| EC - Engaging Society in <i>Horizon 2020</i>   | 85                | 57          |
| EC - Enhancing Regional Competences in Strategic Management of Innovation Policies                             |                   | 84          |
| EC - Enterprise Europe Network   |                   | 78          |
| EC - European Design Innovation Platform - Design for Europe   | 53                | 8           |
| EC - European Transport Network Alliance   | 52                | 25          |
| EC - Fostering Evaluation Competencies in Research, Technology and Innovation in the SEE Region                | 2                 | 68          |
| EC – Men Care Campaign in Bulgaria   | 17                | 11          |
| EC - Network for the Market Uptake of ICT for Ageing Well  | 2                 | 15          |
| EC - Parliaments and Civil Society in Technology Assessment  | 42                | 144         |

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### APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP) NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015 (all amounts in BGN thousand, unless otherwise stated)

|  |              |              |
|--|--------------|--------------|
| EC - Public Participation in Developing a Common Framework for Assessment and Management of Sustainable Innovation | 278          | 91           |
| EC - Social Innovation: Driving Force of Social Change   | 75           | 9            |
| Government of Norway – Greening BG Innovative SMEs   | 125          | 80           |
| Government of Norway - Teachers, Parents and Children against Hate   | 48           | 28           |
| OAK Foundation - Empowering Fathers, Empowering Children   | 81           | 62           |
| EC – Establishing Services Enhancing the Innovation Management Capacity of SMEs in Bulgaria                        | 3            | -            |
| EC – SafenetBG: Safeguarding and Empowering Children and Youth Online  | 172          | -            |
| EC – Enhanced bi-regional STI Cooperation between the EU and the Black Sea Region                                  | 36           | -            |
| Telenor – sponsorship contract   | 41           | -            |
| EC - Citizen and Multi-actor Consultation on <i>Horizon2020</i>  | 31           | -            |
| EC - EENvolve – Towards EENcreased Visibility  | 5            | -            |
| EC - Safeguarding Teenage Intimate Relationships: Online and Offline   | 58           | -            |
| Other projects   | 30           | 17           |
| <b>Revenue from projects financing</b>   | <b>1,241</b> | <b>1,390</b> |
| Donations  | 80           |              |
| Revenue from services  | 326          | 508          |
| Other revenue  | 10           | 20           |
| <b>Total revenue</b>   | <b>1,657</b> | <b>1,918</b> |

## 12. Cost of sales

Cost of sales for the Group include:

|  | As of 31 December |              |
|--|-------------------|--------------|
|  | 2015              | 2014         |
| Expenses for materials and consumables | 10                | 6            |
| External services expenses             | 648               | 888          |
| Depreciation and amortization          | 7                 | 5            |
| Salaries and social securities         | 801               | 833          |
| Other expenses                         | 186               | 155          |
|  | <b>1 652</b>      | <b>1 887</b> |

## 13. Finance costs, net

**APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP)**  
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|                              | As of 31 December |            |
|------------------------------|-------------------|------------|
|                              | 2015              | 2014       |
| Interest income              | 10                | 32         |
| Interest expense             | -                 | -          |
| <b>Interest, net</b>         | <b>10</b>         | <b>32</b>  |
| Foreign exchange income      | -                 | 1          |
| Foreign exchange expense     | (2)               | (4)        |
| <b>Foreign exchange, net</b> | <b>(2)</b>        | <b>(3)</b> |
| Other financial income       | 2                 | -          |
| Other financial expenses     | (2)               | (6)        |
| <b>Other financial, net</b>  | <b>-</b>          | <b>(6)</b> |
| <b>Finance costs, net</b>    | <b>8</b>          | <b>23</b>  |

#### 14. Income tax expense

The major components of income tax expense for the year ended 31 December 2015 and the period ended 31 December 2014 are:

|                           | 2015       | 2014       |
|---------------------------|------------|------------|
| Current tax               | (1)        | (1)        |
| Deferred tax              | -          | -          |
| <b>Income tax expense</b> | <b>(1)</b> | <b>(1)</b> |

The tax authorities may at any time inspect the books and records within 5 years subsequent to the reported tax year, and may impose additional taxes and penalties. The Group's management is not aware of any circumstances which may give rise to a potential material liability in this respect. There are no tax checks performed in the recent years.

#### 15. Related parties

The Group is related to the Center for the Study of Democracy, and thus is also related with its subsidiaries.

During the period the following transactions and balances have occurred:

| Related party | Transactions during the year | January-December |      | 31 December |      | 31 December |      |
|---------------|------------------------------|------------------|------|-------------|------|-------------|------|
|               |                              | 2015             | 2014 | 2015        | 2014 | 2015        | 2014 |

## Consolidated Financial Statements

### APPLIED RESEARCH AND COMMUNICATIONS FUND (the GROUP) NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS 31 DECEMBER 2015 (all amounts in BGN thousand, unless otherwise stated)

|            |                                     | <i>Transactions</i> |    | <i>Receivables</i> |     | <i>Payables</i> |
|------------|-------------------------------------|---------------------|----|--------------------|-----|-----------------|
| Project 1  | Rental agreement                    | 56                  | 45 |                    |     |                 |
|            | Consulting services                 | 76                  | 10 | 226                | 150 |                 |
| ARC        | Loan agreement                      | -                   | -  |                    | 60  |                 |
| Consulting | Consultancy services on EEN project | 21                  | 40 |                    |     | 51              |
|            |                                     | <hr/>               |    | <hr/>              |     | <hr/>           |
|            |                                     | 153                 | 95 | 226                | 210 | 51              |

#### *Transactions with directors and other members of the management*

The Group is a related party with its executive directors and management board. The total amount of the paid remunerations, honoraria and social securities, included in salaries and benefits and expenses for hired services is as follows:

|   | <b>2015</b> | <b>2014</b> |
|---|-------------|-------------|
| Board of Trustees and Executive Directors | 335         | 293         |

#### 16. Events after the balance sheet date

There are no events after the balance sheet date of the Group that would require additional disclosures in the financial statements.

## **INDEPENDENT AUDITOR'S REPORT**

To the Board of Trustees of ARC Fund

### **Report on the Consolidated Financial Statements**

We have audited the accompanying consolidated financial statements of Applied Research and Communications Fund and its subsidiaries (the "Group") which comprise the consolidated statement of financial position as of 31 December 2015 and the consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended and a summary of significant accounting policies and other explanatory notes.

### **Management's Responsibility for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Group as of 31 December 2015, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

Stoyan Donev  
Registered Auditor  
Sofia

1 November 2016