

Applied Research And Communications Fund 2020 Annual Report

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2020 Highlights

Innovation.bg has been ARC Fund's flagship initiative since 2004. It encompasses the Innovation.bg report, the National Innovation Forum and the Innovative Enterprise of the Year contest.

- The Innovation.bg report provides annual assessments of the Bulgarian economy's innovation performance and of the innovation system's current status and development prospects. The leading theme of Innovation.bg 2020 is the strategic framework of the European Commission for the programming period 2021-2027 with its priorities and measures for a more innovative and green European economy. The report focuses on the policy of the Bulgarian government for supporting competitive businesses in the context of the growing challenges on the global stage.
- The *National Innovation Forum* is a platform for exchange of ideas and cooperation among the government, the business community and research organizations. It enhances the performance of Bulgarian companies and boosts the innovation potential of the economy by promoting the introduction of new products and technologies and by facilitating business contacts with European partners. The National Innovation Forum in 2020 gathered virtually 180 representatives of the policy, research and business communities in order to share their views on Bulgaria's capacity for resilience through innovation during this challenging year, marked by the COVID-19 pandemic.
- The Innovative Enterprise of the Year contest is open to participants from all sectors of the industry nationwide. The award acknowledges innovative enterprises which have developed new or have significantly improved their existing products, services or processes over the last three years. Contest finalists also received ARC Fund's Excellence in Innovation label.

Innovation and business support

During the year, ARC Fund has adapted to the COVID-19 outbreak by delivering its services to Bulgarian companies through digital channels. The key events on the calendar of Enterprise Europe Network – Bulgaria were performed online or in a hybrid format. Nearly 70 Bulgarian companies and clusters took part in 12 B2B virtual events. As a result, local businesses expanded to new markets in Germany, the Netherlands, Turkey, Spain, Greece, Finland, and the USA. More than 100 Bulgarian companies benefited from the expertise of EEN's team in the areas of access to finance and innovation management, resulting in 20 research partnerships under Horizon 2020, the European Innovation Council and the European Regional and Development Fund.

In 2020, ARC Fund also delivered a series of capacity-building and interregional learning events on improving the efficiency of national and European financial instruments for SMEs and innovations, involving the National Innovation Fund, Vision for Sofia, Green Sofia and the Innovation Fund of Sofia Municipality.

ARC Fund continued working in close collaboration with the Bulgarian public administration in developing the strategic framework for the next programming period 2021–2027 and creating a business environment favourable to innovation. A major success in this regard was the establishment of the State Agency for Research and Innovation, a recommendation ARC Fund had made in several of its *Innovation.bg* reports. ARC Fund also supported the

Agency in developing the new Operational Program Research, Innovation and Digitalization for Smart Transformation to be launched in 2021. ARC Fund worked together with the Ministry of Economy on implementing the initiative Efficient and Transparent Smart Specialization Policy of Bulgaria 2021 – 2027.

Science, technology and innovation policy

During 2020, ARC Fund focused on further promoting the principle of responsible research and innovation (RRI), contributed to the understanding and the application of the precautionary principle as well as to enhancing responsible energy consumption and energy efficiency measures in households.

ARC Fund engaged in integrating RRI-based practices at the local and regional level by designing a novel approach to the territorial public decision-making process through facilitating collaborations among territorial R&I actors. In 2020, ARC Fund also prepared a comprehensive case study on the relevance of the precautionary principle to the governance of GMOs, focusing on the evolution of Bulgarian parliamentary debates on the *Law on Genetically Modified Organisms* since its adoption in 2005. In the area of sustainable energy use, ARC Fund continued to encourage efficient and more environmentally conscious energy consumption among households in Europe by developing and promoting an e-learning platform, which helps European consumers learn more about the different aspects of efficient energy consumption.

Safer Internet

In 2020, ARC Fund further expanded its activities for protecting children online. The Internet Hotline for fighting illegal and harmful content and conduct online received and processed over 17,000 reports on abuse of children online. In addition to the direct protection and support of children facing online risks, ARC Fund has developed and has been implementing various educational methodologies for the prevention of cybercrimes and online abuse of children as well as for ameliorating children's online literacy.

Quickly adapting to the unprecedented pandemic situation, ARC Fund held numerous webinars on online safety, engaging teachers, parents and children. Guidelines for remote teaching during the lockdown were specifically developed for teacher use. ARC Fund also conducted a survey among Bulgarian students to assess their attitudes to online education during the lockdown.

In 2020, ARC Fund trained 150 teenagers across the country under its most successful program Cyberscout. Overall, more than 1,500 children, close to 560 teachers, about 430 parents and more than 410 professionals were involved in various trainings and awareness raising events, both face-to-face and online.

PART ONE:

PROGRAM AREAS

Innovation.bg

Innovation.bg is the flagship initiative of ARC Fund.

- The Innovation.bg report provides annual assessments of the Bulgarian economy's innovation performance and of the innovation system's current status and development prospects. Innovation.bg 2020 focuses on the strategic framework of the European Commission for the programming period 2021–2027 with its priorities and measures for a more innovative and greener European economy. The report analyses the policy of the Bulgarian government for supporting competitive businesses in the context of the growing challenges on the global stage.
- The National Innovation Forum is a platform for exchange of ideas and cooperation among the government, the business community and research organizations. It enhances the performance of Bulgarian companies and boosts the innovation potential of the economy by promoting the introduction of new products and technologies and by facilitating business contacts with European partners.
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 have developed new, or have significantly improved their existing products, services
 or processes over the last three years.

Innovation.bg 2020

Innovation.bg is the Applied Research and Communications Fund's major instrument for shaping the national innovation policy agenda. It combines several components which offer expertise, own policy building and impact assessment know-how.

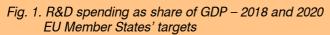


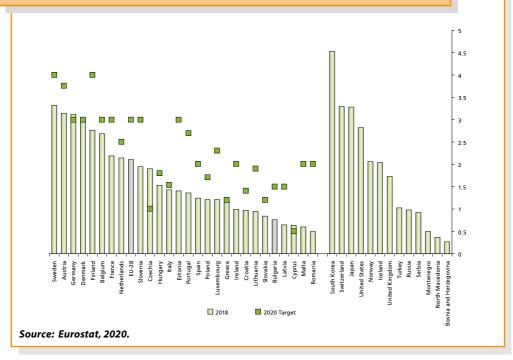
Since 2004, the *Innovation.bg* report has been presenting a comprehensive annual performance assessment, which provides independent analysis of the national innovation system and the innovation performance of the national economy. *Innovation.bg* applies its own original methodology to assess the degree of business innovation by type and the degree of innovativeness of products and processes. The report evaluates Bulgaria's innovation potential in five fields:

- 1) **Gross Innovation Product** reviews the results of the national innovation system, the main innovation targets of the enterprises and the problems they face in their innovation activities.
- 2) Entrepreneurship and innovation networks outlines the characteristics of two major sources of innovation in the Bulgarian economy the setting up of new enterprises and the participation of Bulgarian producers in national and international value chains for the development of new products and services.

- 3) Investment and Financing of Innovation considers the role of foreign direct investment and the import of R&D products and knowledge as well as the available instruments for R&D investment.
- 4) **Human capital for innovation** reviews the available human resources for the adoption of foreign and the creation of local innovation in the economy.
- 5) Information and communication technologies (ICT) analyzes the existing ICT infrastructure as an R&D catalyst.

The leading theme of *Innovation.bg 2020* was the strategic framework of the European Commission for the programming period 2021–2027 with its priorities and measures for a more innovative and greener European economy. The report focused on the policy of the Bulgarian government for supporting competitive businesses in the context of the rising challenges on the global stage.





In the year marked by COVID-19, a number of Bulgarian companies managed to gain from the opportunities a crisis provides. The need to optimize production, ensure a safe working environment and create new products in response to changing demands led companies to implement new business models, improve their product portfolio, and launch innovations in the workplace.

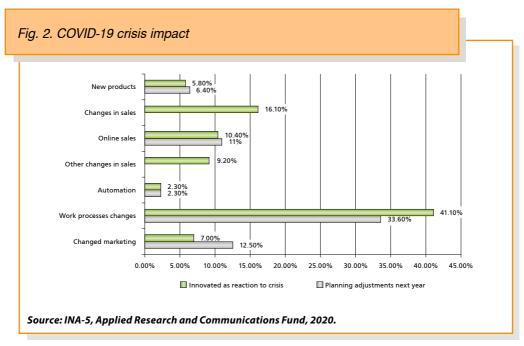
In the past year, about 58% of companies implemented innovations and over 30% of those who had refrained from innovating,

planned to do so in the following year. According to the data from the survey of innovation activity of enterprises in Bulgaria INA-5, which the Applied Research and Communications Fund has been conducting since 2004, if all intentions are realized, 70.4% of enterprises will innovate in 2020–2021, which corresponds with the findings from the post-crisis period in the years after 2008.

Innovative Bulgarian companies have actually benefitted from the crisis at the inter-

national level. This finding has important policy implications. Instead of recognizing such trends and supporting them in order to strengthen their positive effect on the country's economy, though, the Bulgarian government has started to transform funds intended to support innovation under the

Innovation and Competitiveness Operational Program into "support for all". In the medium term, such solutions may hinder the growth of innovative Bulgarian companies by limiting the number of people they could hire and the size of payment they could offer to their staff.



The crisis has affected both the manufacturing and the service sector. The education system in Bulgaria went through a shocking change with the outbreak of the COVID-19 pandemic in March 2020 and the forced transition of all educational institutions to online schooling. This unanticipated development drew public attention to the muchdiscussed lag in the introduction of teaching and learning methods appropriate for the digital age. It seems that the education system now faces the challenge of building upon and stimulating this change to achieve a full-fledged digitalization of the educational process. The latter would require a profound shift in the type of educational content.

In 2020, the second programming period of Bulgaria's full membership in the EU came to an end. A number of *European Innovation Scoreboard* indicators, though, show that innovation-wise Bulgaria has not made any

progress. The country remains in the group of modest innovators, despite the goal it has set to increase R&D spending as a share of the GDP to the level of 1.5% by 2020 and to move up into the group of moderate innovators.

Patent activity in Bulgaria reached another ten-year peak in 2019 (181 patents were awarded to Bulgarian individuals and entities). The number of foreign patents amounted to 2,624, the majority of which (99.63%) were issued by the European Patent Office (EPO) and are valid in Bulgaria. With a few exceptions, within the surveyed period individual-patent holders remain leaders in the structure of patent activity in Bulgaria. For 2019, their share was 40%, and for the last 20 years – 57%. Despite the growth of patents granted to businesses and the Bulgarian Academy of Sciences (BAS) (the leading public sector institution in this area), individuals continue to play a

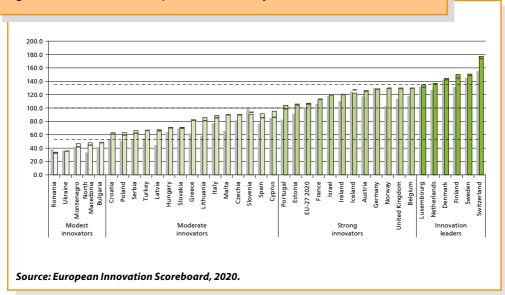


Fig. 3. Performance of European innovation systems

key role, which has grown once again in the last four years.

The COVID pandemic has also influenced entrepreneurial activity. Major changes have taken place in terms of access to finance, the structure of the portfolio of financial instruments and the main guidelines for their spending. The government's financial measures were mainly aimed at overcoming the negative effects of the crisis, including support to companies from the worst affected economic sectors and the laid-off employees, in some cases at the expense of initiatives for the promotion of innovation and entrepreneurship.

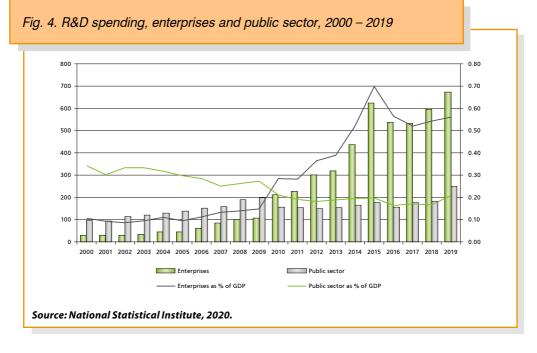
Currently, the need for social entrepreneurship of all kinds is greater than ever before. It is a way to quickly respond to the unprecedented circumstances, provide support to the unemployed or families on the poverty line, and design technological solutions to emerging problems related to the digitalization of business processes and social life.

In 2019, total R&D expenditures amounted to BGN 1,002 million, or 0.84% of the GDP. Investments in the Bulgarian research sector continued to grow steadily both in absolute terms (21% increase on an annual

basis) and as a share of the GDP (11% increase on an annual basis). After the decline in 2016 and 2017, all R&D sectors improved, but Bulgaria is still a long way from its 2020 national target (set in 2014) of 1.5% in terms of R&D expenditure as a share of the GDP.

The largest R&D spending in 2019, as in previous years, was in the business sector (BGN 673 million, or 0.56% of the GDP), which is a 13% increase from the previous year and within the normal change for the sector in recent years. Although the business sector made record R&D investments in 2019, their total volume remained many times as small as the investments of an average global company.

In 2019, Bulgaria was among the fastest growing business hubs in Europe, particularly in high-tech employment where the country ranked higher than the average for the continent. The index *Geography of Europe's Brain Business Jobs 2020* of the European Centre for Entrepreneurship and Policy Reform compares 31 European countries by concentration of high-tech jobs. Compared to the base year 2014, Bulgaria ranked 8th with a 28.6% increase in the number of jobs in knowledge-intensive businesses per 1,000 people of the working



age population. Of the 39,400 new jobs created, 73% were in ICT, 12% in the creative industries, 8% in the technology sector, and 7% in services.

The ICT sector is growing every year by all indicators – number of companies, number of employees, share of exports, share of the GDP. In 2020, of the top 100 employer companies, 21 were in ICT, providing 21% of the jobs in the largest companies. The boundaries between ICT and other sectors

such as finance, insurance, retail, security, entertainment, and education have been rapidly blurring. The digital transformation of the various sectors has led to a significant change in the source of added value and this is increasingly related to the introduction of new digital technologies. Healthcare in Bulgaria, however, continues to lag behind global trends in e-health, which is expected to produce a long-term negative impact.

The Sixteenth National Innovation Forum

For a sixteenth year in a row, the **National Innovation Forum** gathered more than 180 representatives of the policy, research and business communities to share their views on Bulgaria's capacity for resilience through innovation during the past challenging year.

The event was held in an innovative 3D virtual setting, which was custom-designed and animated by MP Studio, the **award winner** for Innovation in the Creative Industries in 2017.

The Forum was supported by the **Enterprise Europe Network - Bulgaria**, the Executive Agency for SMEs at DG GROW of the European Commission, and Konrad Adenauer Foundation's Sofia Office.

Dr. Ognian Shentov, Chairman of ARC Fund, made a brief review of 2020, noting that the crisis served as a catalyst for incorporating innovation in our daily lives. The two major global trends in this respect were the commitment of national governments to new technologies and innovations, and the rapid

























Dr. Ognian Shentov at the 16th National Innovation Forum, 18 December 2020

penetration of new technologies in economic and social life. Bulgaria remains a modest investor in R&D, despite the growth of public funding in this area, with Bulgarian companies investing the most in innovative

projects. Nevertheless, the source of added value is increasingly shifting towards digital solutions both in the manufacturing industry and the social domain, e.g. education and healthcare.























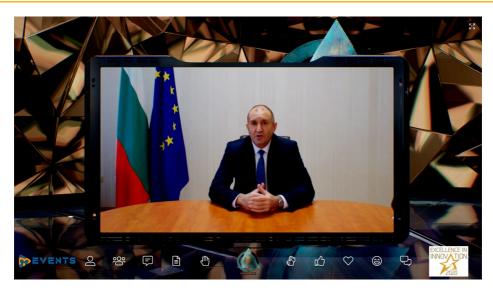




Thorsten Geissler, Director of Konrad Adenauer Foundation's Sofia Office, at the 16th National Innovation Forum

Thorsten Geissler, Director of Konrad Adenauer Foundation's Sofia Office, underlined that the COVID-19 crisis has greatly affected the job market and a number of people are still at risk of unemployment. 2020 has demonstrated that the world is in dire need of economic resilience. Innovations,

therefore, are one of the major factors for long-term growth and improving quality of life through better work processes, working conditions and supply chains. The key lesson learnt from the crisis is that the human factor is essential.



Rumen Radev, President of the Republic of Bulgaria, at the 16th National Innovation Forum

The President of Bulgaria Rumen Radev stated that innovations are a stepping stone towards Bulgaria's full-fledged integration, as they drive forward both the economy and the nation's progress as a whole. In 2020, creativity and the drive to innovate led to inroads into new business niches, moving the country forward in the EU in terms of tech-

nology export as well as know-how in developing digital infrastructure. Nevertheless, the trend for low public investment in R&D in the country was kept, as Bulgaria had allocated 0.5% of the GDP in such operations, way below the 3% of developed economies. Foreign investments remain the main driver of innovation in the country.



16th National Innovation Forum, Sofia, 18 December 2020

The 2020 Innovative Enterprise of the Year National Contest

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

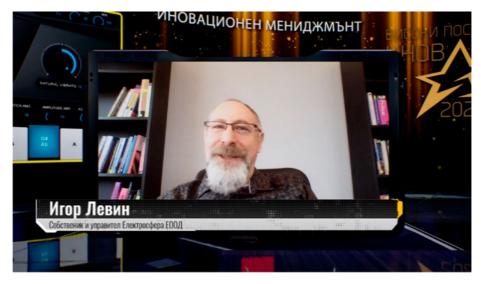
ing their long-term performance. Following a specific methodology, companies are assessed by area of impact of the innovation by an expert group and an external jury.



Digital award ceremony of the Innovative Enterprise of the Year 2020

Sixteen out of 60+ candidate companies from various sectors of the economy reached the final stage of the competition. President Radev granted awards in eight areas of innovation. The winners were selected by a 23-member jury composed of representa-

tives of public authorities, funding organizations, the business, academia and the media. All finalists were also granted the **Excellence in Innovation**® label of the Applied Research and Communications Fund.



Mr. Igor Levin, Elektrosfera Ltd.

With its outstanding innovation management practices in the overall company performance, including in digital innovation, **Elektrosfera Ltd** received the prize in the Innovation Management category. The company has developed a technology for analogue to digital signal transformation and vice versa, which allows for real time

processing and modelling of effects in the music industry. The device is the only one in the world with 64 channels combined in a single tool. With a minimalist interface, it has a multifunctional touchscreen which can be used without necessarily being connected to a computer.

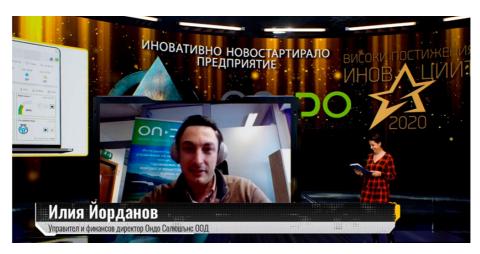


Mr. Hristo Unrumov, Stamh Ltd.

Two special awards were given to the winners in the Market Leadership and Innovative Start-Up categories.

Stamh Ltd, the award winner for Market Leadership, has developed an automated storage system, applicable in the food, furnishing, chemical, automobile and other industries. It places various equipment sets

(racks, pallets, cranes and conveyors) on the storage land and then "closes" them up with walls all around. The warehouse processes are served by the innovate software of Stamh Ltd without any human interaction. Each project is custom-designed to account for the specifics of each client and each particular site. The company has more than 4,500 clients in over 20 countries.



Ondo Solutions, the Innovative Start-Up of 2020, has developed a system for smart automated management of agriculture, allowing precision in irrigation, fertilization, climate control, and monitoring of the crops. The smart solution is equally applicable to small, medium-size and big farms. It con-

sists of hardware installed in the farm, and an integrated specialized software with remote control and easy-to-work-with interface. The company has its systems installed and operational with clients in Bulgaria and North Macedonia and has recently opened an office in South Africa.

Broadening the scene for the Innovative Enterprise of the Year contest participants

National and specialized media made a wide promotion campaign of the 16th edition of the Innovative Enterprise of the Year contest. Media partnerships with the Bulgarian National Radio, the Economy magazine, Economic.bg portal, Computer World Bul-

garia, Kaldata.bg, Nauka.bg magazine, Uspelite.bg, and the IndustryInfo.bg portal led to more than 70 media publications about the challenges and achievements of leading Bulgarian entrepreneurs and innovators.

Excellence in Innovation Award Ceremony



The Innovative Enterprise of the Year 2019 contest finalists were awarded the Excellence in Innovation label at a dedicated ceremony hosted by the President of Bulgaria on 30 January 2020. The companies' cuttingedge innovations were assessed by an independent jury based on a set of indicators such as high quality and forefront novelty of the innovation, impact on national and world markets, environment and society, efficiency of the business model.

The ceremony was attended by diplomats from countries that are European and world leaders in the field of innovations such as Germany, Austria, South Korea, Japan, the UK, Israel, and Poland, as well as entrepreneurs, government officials, representatives of business support organizations, and the academic community. The Excellence in Innovation label is designed to enhance the international visibility of contest finalists and catalyze their entry into new markets through the recognition of the high-standard of their innovations.



Rumen Radev, President of Bulgaria (middle), with the awardees and participants in the Excellence in Innovation ceremony.

Innovation and Business Support Program

In 2020, ARC Fund's work in the area of innovation and business support was focused in the following fields:

- Supporting SMEs to establish international partnerships and enter new markets. 2020 was marked by the COVID-19 outbreak and the new modus operandi for institutions, businesses and societies all over Europe. To cope with the situation, ARC Consulting, as Coordinator of Enterprise Europe Network (EEN) Bulgaria, offered its portfolio of services through digital channels. The key events on the Network's calendar were performed online or in a hybrid format. 70 Bulgarian companies and clusters took part in 12 B2B virtual events. As a result of the integrated support, local businesses expanded to new markets in Germany, the Netherlands, Turkey, Spain, Greece, Finland, and the USA.
- Consulting SMEs. Traditionally, there are three main areas of interest among businesses: Access2Finance, focusing on the Horizon 2020 and ERDF calls; access to new markets; and innovation management. More than 100 Bulgarian companies benefited from the services and expertise of EEN's team in these areas. As a result, 20 research partnerships under H2020, the European Innovation Council and ERDF were enabled or granted a contract or Seal of Excellence. ARC Consulting experts are among the few in Bulgaria licensed by the IMP3rove International Innovation Management Academy. A number of SMEs from Industry 4.0, the green and blue economy, the creative industries and digitalization, benefited from in-depth analysis and consultations, optimizing the management of their innovation processes.
- Efficiency of policy and financial instruments for SMEs and innovation. In 2020, ARC Fund delivered a series of capacity building and interregional learning events on improving the efficiency of national and European financial instruments for SMEs and innovations, involving the National Innovation Fund, Vision for Sofia, Green Sofia and the Innovation Fund of Sofia Municipality. Measures and recommendations were drawn up in Action Plans, based on internationally recognized good practices and knowledge exchange among regions from Austria, Spain, Portugal, Italy, Poland, France, Germany, Greece and Estonia.

Assisting SMEs with International Partnerships and Entering New Markets

Access2Finance

In 2020, approximately 30 SMEs, start-up companies and clusters benefited from the in-depth consultation on Access2Finance (A2F), whose core gateway for SMEs, according to the European Commission, is the Enterprise Europe Network. Taking advantage of EEN's extensive expertise in EU funding programs, including COSME, H2020 and ERDF, clients approached the team via digital channels to be directed to the most appropriate funding instrument. For instance, the start-up Ondo Solutions with its innovative farming technology was introduced to a project consortium for the H2020 Green Deal Call. Another company, Spesima OOD, a long-term EEN client, was selected through a competitive procedure to receive financial, mentoring and IPR support from the European Digital Innovation Hub.

New Markets

While the COVID-19 pandemic created unprecedented problems to businesses, it also opened up new opportunities for them. As brokerage events were held online, it became much easier to set up international partnerships across the entire business community. As a result, over 70 Bulgarian SME and cluster representatives took part in 12 specialized brokerage events and business missions in France, Germany, Greece, Ireland, Italy and Portugal. Among the top European or global events co-organized by the EEN team were DMEA Digital business meetings 2020, Virtual MariMatch 2020, B2B Health Innovation Market 2020, Smart Manufacturing Matchmaking 2020, and H2020 Virtual Brokerage Event on the European Green Deal Call.

As a follow-up, Bulgarian SMEs entered into over 270 negotiations on business and innovation or tech-transfer partnerships in key domains of the European economy such as healthcare, the maritime industry, green and blue growth, the creative industries, smart

manufacturing, mechatronics and Industry 4.0. One such example is EEN's long-standing client and Innovative Enterprise of the Year finalist, the Bulgarian software company Imagga, which set up a research partnership to develop innovative approaches in the diagnosing and monitoring of COVID-19 together with organizations from Austria, Greece, Ireland, Israel, Italy, the Netherlands, Slovenia and Spain.



Another success story is the pitch deck support to the Bulgarian SME InteriorProtect Ltd at the ENRICH in the USA Ecosystem Showcase digital event. Promoted by the European Commission through Horizon 2020, ENRICH in the USA acts as a focal point for EU research and innovation actors seeking to grow and reinforce collaboration across the Atlantic. InteriorProtect Ltd and Vedamo Ltd, both EEN clients, were selected among the top 15 European companies to present showcases to the Tech4Good industries and ENRICH Centers in Boston, San Francisco and Washington, D.C. This virtual half-day industry-focused event consisted of reverse pitches followed by individual meetings with the ecosystems. As a result, Vedamo Ltd has extended its client base in the USA and attracted new investments by the BrightCap Ventures.

Overall, in 2020 more than 100 companies received extensive EEN advisory services in the framework of a sustainable client journey process. 20 research partnerships under H2020, the European Innovation Council, and ERDF were enabled or granted a contract or Seal of Excellence. EEN clients expanded their markets across the EU, and

gained new markets in the US and Turkey.

Success stories on air at the National Radio

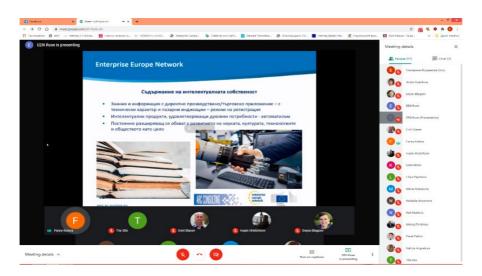
For a fourth year in a row, the EEN team produced a program dedicated to innovation aired by the Bulgarian National radio. In a series of broadcasts, innovators and entrepreneurs spotlighted their challenges and achievements during the COVID-19 crisis. Naicoms, a telemedicine-company, pre-

sented their innovative products, which have become a lifeline in the days of pandemics. Another company featured their newly developed fully automated disinfection cabin that ensures safe entry into hospitals, public buildings and industrial manufacturing sites with high hygiene requirements such as food processing companies. These two examples demonstrated how manufacturing could quickly re-organize to respond to the pressing challenges of the COVID crisis.

Consultancy in the Field of Intellectual Property

Entrusted by the EC to act as EU IP Help-desk Ambassador for Bulgaria, the ARC Fund delivered capacity-building events and promoted intellectual property as an enabler of international commerce, together with trademarks and geographical indications as key tools for business internationalization. An event targeted at the local business community was held on 10 September, and another one was organized on 24-25 September 2020 within the BalkanMed Macroregional Strategy. The thematic charts on In-

ternational Design and Community Design were customized to the specifics of local business by ARC Fund as IP Ambassador and were made available on the helpdesk website. The charts present the subject to IP protection as industrial design, the requirements and approaches of protection to be followed, along with the respective costs and the scope of rights on industrial designs, highlighting the specifics of International or Community Design protection.



Expert at ARC Consulting presents the specifics of intellectual property as a tool of internationalization to an audience of business and science representatives at an online training, 10 September 2020

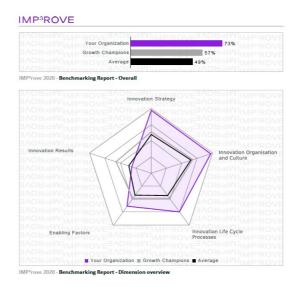
Improving SMEs Innovation Management Competences

In 2020, the ARC Fund consolidated its position in Bulgaria as the main expertise pool with license for providing companies with innovation management assessments and Digital Innovation Quotient under the methodologies of ATKerney IMP³rove Academy of Innovation Management. Further to that, ARC Fund also offers Innovation Health Check assessments.

The portfolio of companies provided with an innovation management assessment and Digital Innovation Quotient is quite diverse, coming from different, both high-tech and traditional, economic sectors, and of vari-

ous age groups and sizes. Most of their results evince their strong market positions at the national and the European level as well as their leading roles in their respective market niches.

Together with advising companies, the ARC Fund took part in the testing of the pilot version of the Stages-of-Excellence model of the IMP³ Academy EWIV, which is fully compliant with the new ISO 56002:2019 standard on the innovation management system. The new instrument will further enrich the portfolio of tools used by ARC Fund as an IMP³ROVE consultant.



Resource Efficiency and Urban Farming as a Business Model

The COVID-19 pandemic has changed the world and the way we live in multiple ways. One positive outcome triggered by this crisis is the growing relevance of regional agriculture and local markets and the rise of innovative business models connected with urban farming. The partial collapse of global supply chains and the restrictions to stay at home raised the desire for self-sufficiency and healthy food even among the people

who were previously less inclined to practice environmentally conscious behavior. The ARC Fund launched and coordinates the CityZen initiative, which aims at enhancing scalable innovations and new business models, based on urban farming.

Urban farming can take a large variety of forms depending on the local needs as well as available opportunities and spaces. What various urban gardens (community gardens, gardens in private houses, on balconies, rooftop or vertical gardens, etc.) have in common is that they are usually private initiatives, receiving little or no support from local governments. Urban farming has only recently attracted the attention of policy-makers, due to its potential to become a viable component of the transition towards a resource-efficient future. Still, local authorities and policy-makers need to do much more to support urban farmers throughout the entire process by providing access to appropriate spaces, and setting up the necessary financial and legislative frameworks for urban farming.



To this end, the ARC Fund uses CityZen as an opportunity for active engagement of stakeholders in order to promote the advantages of urban farming and its potential as an innovative business model among policy-makers, businesses and civil society organizations.

Meetings with regional stakeholders highlighted one of the main problems that urban farming practitioners face in most cities, namely access to appropriate land for development of community gardens, because many municipalities still prioritize construction and infrastructure development. To tackle this issue, CityZen identified and proposed innovative ways to transcend this competitive relationship and elicit collaborative possibilities for partnership between construction companies and urban farmers. On-site outdoor and indoor gardens, green roofs and green walls not only improve the quality of life, but are a promising business niche that can benefit all parties involved.



As part of its endeavors to promote the development of urban farming as a successful business model in Sofia, ARC Fund contributed to the writing of an Urban Agriculture Handbook for Practitioners, municipalities and companies, and to the evaluation and mapping of areas in Sofia that could be suitable for urban farming. These activities contributed to the formation of a critical mass of citizens involved or interested in urban farming and helped placing this topic on the agenda of municipal authorities. The ARC Fund popularized the business aspects of urban farming during the international e-conference Urban Agriculture as a Strategy for Improving the Quality of Life of Urban Communities and the round table Perspectives for Urban Farming in Sofia.

InnoBridge – the Interplay of Institutions and Actors for Robust Entrepreneurial Ecosystems in European regions

After 4 years of active exchange, insightful and collaborative design of new policy measures, 2020 marked the last mile of the InnoBridge initiative dedicated to the implementation and monitoring of the measures devised in the 8 partner regions. Increasing

SMEs' competitiveness was at the core of the InnoBridge activities by improving the Innovation Bridge and related policy instruments for SMEs. ARC Fund was entrusted to act as InnoBridge process driver and methodology consultant on the Action Plans design for the entire partnership. In the local context it contributed to the new concepts of the Sofia Innovation Fund for mid- and long-term measures to leverage the support on R&D initiatives in creative, digital and cultural industries into market success. Additional outcome was the broadened thematic scope of the Fund and the integration of digitalization, digital skills and social innovations in the context of the COVID-19 new

realities. The key new measures to support innovations featured: a specialized guarantee scheme of Sofia Municipal Guarantee Fund for SMEs, Start-up Accelerator Sofia, working with schools and teachers on entrepreneurial and digital skills and the new stabilization and recovery financial scheme entitled "The Crisis as an Opportunity" that was actively promoted by ARC Fund to its contact network of SMEs

Policy consultancy

In 2020, ARC Fund continued working in close collaboration with the Bulgarian public administration in developing the strategic framework for the next programming period 2021–2027 and creating a business environment favorable to innovation.

The main objective of the Innovation.bg report is to provide recommendations to public authorities on how to elaborate a transparent and evidence-based policy framework and measures which better address market and system failures. With a decision of the government of the Republic of Bulgaria, a new State Agency for Research and Innovation was established, thus putting into practice one of ARC Fund's recommendations. The new actor within the national innovation system will play a significant role in coordinating the implementation of the science, technology and innovation policy, and will enhance the linkages between research organizations and universities, on the one hand, and businesses, on the other, in transferring new technologies into innovation products and processes.

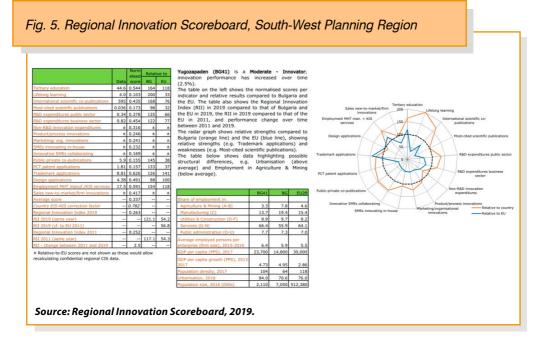
ARC Fund's team supported the **Council of Ministers** in developing the administrative capacity of the new Agency. A series of analyses were conducted to better understand the needs of different stakeholder groups as a basis for defining the mission and main objectives of the Agency in the field of research, innovation, and technology transfer. In addition, ARC Fund sup-

ported the Agency in developing the new *Operational Programme for Research, Innovation and Digitalization for Smart Transformation* to be launched in 2021 and to support research organizations and businesses in their collaborative projects and internationalization during the next programming period. ARC Fund was engaged in developing the main objectives and rationale of the new OP, setting up the priorities, activities and measures, and defining the outputs and outcomes, as well as the OP's long-term impact on the national economy and the innovation system.

In implementing the initiative Efficient and Transparent Smart Specialization Policy of Bulgaria 2021 - 2027 ARC Fund worked in collaboration with the Ministry of Economy. In 2020, ARC Fund organized six online focus groups with representatives of the six planning regions of the country - public authorities, research organizations, universities, businesses, NGOs, researchers. The aim was to identify existing attitudes regarding the technological and economic profiling of the country and the results of the smart specialization policy to date. Participants in the focus groups shared ideas and made suggestions for the smart specialization policy design for the next programming period. The following topics were discussed:

 the extent to which the priority areas for smart specialization are clearly defined; the development of any new priority areas which have been

- identified during the last years; the existing business and research potential in these priority areas; observations on whether there are any interactions between businesses and science in these areas; examples of national good practices;
- existing interactions in the field of research and innovation; examples of partnerships and benefits achieved; success factors and barriers; measures to promote synergies between science and businesses in terms
- of R&D and innovation; science—business relations and the process of commercialization of publicly funded research results; business investments in R&D and innovation:
- the effect of the COVID-19 pandemic on the work of participants' organizations and the ways the pandemic affected innovative and non-innovative enterprises, as well as examples of implemented workplace innovations in this regard.



The results from the focus groups were complemented with a nationally representative survey of the innovation activity of the Bulgarian businesses. It was the seventh survey of innovation activity (INA-5) conducted by ARC Fund among companies from different economic sectors and sizes.

The results of both stakeholders' consultations (focus groups and survey) were provided to the Ministry of Economy and other institutions in order to support their work on developing the Innovation Strategy for Smart Specialization and the related policy documents for the 2021–2027 programming period.

The phenomenon of "hidden innovation" – one that cannot be captured by traditional indicators – has always been in the focus of ARC Fund's research. In 2020, ARC Fund was actively engaged in investigating the reasons for non-reporting data on research and innovation activities by SMEs.



Fig. 6. Regional Innovation Scoreboard, South-West Planning Region

The data from the European Innovation Scoreboard 2020 shows that Bulgaria remains in the group of modest innovators, lagging significantly behind the European average in terms of innovation activity of small and medium-sized enterprises (13.8%), including small and medium enterprises with product/process and marketing/organizational innovations (surpassing only Poland and Romania). Against this background, the problem of non-reporting the research activity of enterprises remains unresolved. This information is generated by Eurostat at the European level and is the basis for the negative comparative results for Bulgaria.

The findings of the desk research of the European and national legislation, the survey among companies, and the analysis of good practices were summarized in a report which also delivered recommendations on statistical, accounting and tax practices. They were provided to the Council of Ministers, the National Statistical Institute, the Ministry of Economy, the Ministry of Finance, the National Revenue Agency, the Institute of Certified Public Accountants, and the Institute of Professional Accountants in

Bulgaria. The recommendations provide a good basis for further public consultations on creating a better business environment with significant tax relief, financial and non-financial measures for motivating businesses to provide timely and accurate data on their research and innovation activity.

In 2020, after a number of consultancy projects implemented in Romania, Croatia, Kosovo and Serbia, ARC Fund/ARC Consulting, in collaboration with the Joint Research Centre (JRC) of the European Commission, started a new initiative to support two regions in Ukraine - Kharkiv and Khmelnytsk - in their efforts to develop smart specialization strategies and to lay the foundations of Entrepreneurial Discovery Process. The two regions will benefit from expert consultations and recommendations based on the region's advancement in developing smart specialization priorities. The general purpose of the expert support is to improve the quality of the smart specialization component to be embedded in regional development programs aligning it with JRC's Smart Specialization Framework for Enlargement and Neighbourhood Countries.

Science, Technology and Innovation Policy Program

ARC Fund's work in the area of Science, Technology and Innovation Policy (STIP) facilitates public, multi-actor deliberative processes on societal challenges stemming from research and innovation. It mobilizes actors from civil society, business, university and research organizations, as well as policy and decision-makers, towards a shared understanding of forthcoming transformations and challenges in technological developments and innovations, and steers them towards a shared vision for the integration of responsible research and innovation principles into science and policy-making. Despite significant disruptions due to COVID-19, in 2020 the ARC Fund managed to:

- conduct an exploratory analysis of how the precautionary principle has influenced
 the development of the regulatory framework of GMOs in Bulgaria, with a particular focus on the Parliamentary debates on the Law on Genetically Modified Organisms.
- further integrate principles of Responsible Research and Innovation (RRI) on an organizational level, as well as on territorial policy level, by enabling territorial actors to develop decision systems based on responsibility, anticipation and inclusivity.
- contribute to the development of a Code of Ethics with a repository of good practices in Research and Innovation.
- enhance significantly its participation in the Horizon 2020 Program, strengthening
 its national standing as the most productive non-profit research organization in
 the EU's largest R&I funding program, and expand its network of partnerships
 across Europe.

Leadership in Responsible Research and Innovation

ARC Fund has been working actively to promote and integrate Responsible Research and Innovation (RRI) and establish it as a guiding principle of Bulgarian R&I and funding organizations.

Striving to become an RRI champion in Bulgaria and the EU, in 2020 ARC Fund joined the ETHNA System - an international initiative involving universities and research institutes from eight European countries (Austria, Bulgaria, Denmark, Estonia, Germany, Portugal, Spain and Norway). Its main aim is to develop and implement an ethics governance system for grounding good RRI practices in higher education institutions, research and innovation funding bodies, and research centers. A special organizational structure named ETHNA Office will be set up and tested by the ARC Fund. The four main instruments of the ETHNA Office are the Code of Ethics with a repository of good practices in research and innovation, the

Ethics Committee of Research and Innovation, the Ethical Hotline, and indicators for monitoring the progress in the RRI institutionalization. These instruments will support the RRI uptake by providing guidelines and offering tools for management of RRI policies and actions in the organization.

Throughout 2020, ARC Fund also contributed to promoting RRI-based practices on a local and regional level. It continued partnering with the Municipality of Gabrovo in the design of a novel approach to territorial public decision-making process by facilitating cross-actor collaborations among territorial R&I actors. It provided methodological support in the design and preparation of a guided process of reiterative consultation of local actors, including citizens, thus strengthening the exchanges among citizens, researchers, local businesses and policy-makers.

The precautionary principle – reconciling science, public concerns and policy-making through stakeholder consultation and mobilization

The precautionary principle allows regulatory oversight over scientific and technological developments, whose practical applications are frequently the source of public concern or are believed to cause harm to human health or the environment. Decision-makers invoke this principle with respect to identified hazards without a certain proven cause coupled with high stakes.

Throughout 2020, ARC Fund worked on a comprehensive **case study** on the relevance of the precautionary principle to the governance of GMOs. The research focused on the evolution in the Bulgarian parliamentary debates on the *Law on Genetically Modified*

Organisms since its initial adoption in 2005, reviewing a range of opinions and motives expressed by MPs, government officials and experts in plenary, as well as in relevant Committee meetings. The case followed the debates during major amendments to the law and provided an example of how strong precautionary thinking (i.e. assuming the highest threat and damage probability) can shape regulatory oversight. It further highlighted the complexities in creating and enforcing any regulation marked by scientific uncertainty, technological complexity and public distrust, as well as the challenges in the dialogue between scientists, policy-makers and the general public.

Transforming Energy Consumption Patterns in Households

In 2020, ARC Fund continued to encourage efficient and more environmentally

conscious energy consumption among households in Europe. Built as an open ac-

cess e-learning platform, ACT4ECO helps European consumers learn more about the different aspects of efficient energy consumption. Specific themes include how to produce one's own energy, how to better manage one's energy consumption, how to improve the energy efficiency of one's home, how to be a smart energy consumer and how to sustain efficient energy use in the long-term. The platform was pilot-tested in mid-2020 and was made fully operational in October 2020.

ARC Fund became part of three international initiatives, contributing to increasing its visibility as an advocate in the field of responsible energy consumption and energy efficiency. Together with eight other partner organizations that participated in

the development of the ACT4ECO platform, ARC Fund marked the EU Sustainable Energy Week (June 2020), the World Ozone Day (September 2020) and the EU Regions Week/Green Europe (October 2020). Two of the events - EU Sustainable Energy Week and EU Regions Week/Green Europe were used as an opportunity to raise households' awareness about the importance of sustainable energy consumption by promoting the diverse actions and measures accessible on the platform. To honor World Ozone Day, ARC Fund and its partner organizations held a webinar to discuss with a representative of the United Nations Environment Program (UNEP) the relation between the ozone layer and climate change, as well as the importance of user awareness and action for ozone layer restoration.



The Act4Eco platform presented during the World Ozone Day, 16 September 2020

To contribute to building an informed community of users with a sustained interest in the topic of energy efficiency, ARC Fund created and has been managing a dedicated group on Facebook, where articles on the topic of sustainable energy consumption are posted regularly, engaging users in open dialogues and shared learning. ARC

Fund organized a number of successful promotional campaigns, such as ACT4ECO Ambassadors and #ISaveEnergyBecause, aiming to inspire group members to actively support the transitioning to more sustainable energy consumption patterns in European households.

Safer Internet Program

sefenet.bg ARC Fund has been working in this area for 16 years as coordinator of the national Safer Internet Centre (SIC).

The organization operates a Hotline for reporting online content that is illegal and harmful to children and supervizes a Helpline operated by its partner Parents Association.

The Centre is a member of the International Association of Internet Hotlines (INHOPE) and of the European Network of Safer Internet Centres (Insafe), now integrated as the Better Internet for Kids network and is Bulgaria's representative in the EU Kids Online and Global Kids Online research networks.

SIC is also a member of the European Crime Prevention Network (ECPN) and the Radicalisation Awareness Network (RAN). Since late 2018, a member of the the Safer Internet Center's Youth Panel has represented Bulgaria in the Childen's Council of the Eurochild international network.

The Bulgarian SIC was granted a Quality Certificate by the International Association of Internet Hotlines INHOPE in 2018 and is Trusted Partner of Facebook and Trusted Flagger of Google.

In 2020, the Safer Internet Centre performed a wide range of activities in the field of protection of children online despite the unprecedented situation. The COVID-19 pandemic and the package of prevention measures introduced by the Ministry of Health led to two nationwide lockdowns – in March through May and in December 2020. The organization operates a Hotline for reporting online content that is illegal and harmful to children in cooperation with the other INHOPE

member hotlines, the national Law Enforcement Authorities (LEA) and Interpol, and supervises a Helpline operated by its partner Parents Association. The Hotline reports regarding online sexual exploitation of children are verified and transferred for further legal action to the national Cybercrime Unit. Via the Helpline, trained psychologists consult children, parents and teachers about problems and incidents with children on the Internet.



Any internet user can file a report – anonymously or not – about online content which is illegal or harmful to children via the website of the Safer Internet Centre

In 2020, the Hotline received and took action on 17,855 reports, 17,081 of them being reports on child sexual abuse materials, 16 – on erotic or nude content involving children, and 19 – on child grooming. 680 of the reports were directed to the Law Enforcement Authorities (the Cybercrime Unit of the General Directorate for Combating Organized Crime), 17,026 were sent to other Hotlines (members of INHOPE), 3 were directed to other Bulgarian institutions, and in 2 cases the Centre asked for the removal of the online content.

During the year, the Helpline provided 459 consultations on various issues ranging from cyberbullying through security settings to the use of the Internet and digital devices

by minors. Of those consultations, 19 concerned online content potentially harmful to children, 45 concerned privacy settings, 11 were related to personal data, 18 – to online reputation issues, 26 – to various aspects of digital and media literacy, 25 reported cases of cyber bulling, 16 concerned sexual harassment, 4 were on sexting, 11 – on sextortion, 3 – on sexual grooming and 2 were on e-crimes.

In addition to the direct protection and support of children facing online risks as well as the involvement in a number of research projects in the field of online safety and victimization of children and young people, the ARC Fund has developed and has been implementing various educational methodolo-

gies for the prevention of cybercrimes and online abuse of children. ARC Fund coordinates a working group of primary school teachers, university professors and representatives of the Ministry of Education and Science, which has been set up within the Safer Internet Program.

Being recognized as a center of excellence in the field of child protection on the internet, the ARC Fund participates in various national and international activities and working groups for developing strategies and proposals for necessary legislative measures, social service procedures and practices. It conducts regular trainings of children, teachers, parents, care givers, and social workers and is involved in various awareness raising activities. ARC Fund experts were included in an international working group formed by the European Crime Prevention Network to prepare a more structured and evidencebased strategy for the prevention of crimes against children. The ARC Fund regularly participates in working and training meetings of the Radicalization Awareness Network, presenting its expertise and sharing knowledge and practices with other organizations, ARC Fund also became a Trusted Partner of Facebook and Trusted Flagger of Google. Intervention and support in cases of incidents and risks for children online are important priorities, but the Safer Internet Centre places a major focus on prevention, too.

In 2020, ARC Fund's experts developed a methodology for training young people for peer trainers on topics related to the prevention of sexual exploitation of children online. At the end of the year, 20 young people from the Bulgarian SIC's Youth Panel and three schools in Sofia where trained online in peer training their peers next year. Teachers from the three schools were also trained to support the young peer trainers and to use the methodology for training other children in the future.

ARC Fund has also participated in the development of three tools which address Media

and Information Literacy (MIL) competences described in the UNESCO Global framework for assessment of MIL – an online game for young people, peer-to-peer methodology and storytelling guide. The tools will help young people develop their critical thinking and express their opinion and ideas for solving social problems.

A teaching methodology on the development of critical thinking and fostering tolerance through the improvement of digital and media skills in high schools was drafted in 2020 by ARC Fund experts incorporating the feedback of professional teachers. It consists of 10 lessons on the various types of digital and media skills (communication skills, information assessment skills, etc.) also related to emotional intelligence and critical thinking as prevention mechanisms to far-right messages online and far-right radicalization among youth.

In late 2020, ARC Fund experts developed three additional methodological guidebooks for countering anti-Roma manipulation and disinformation:

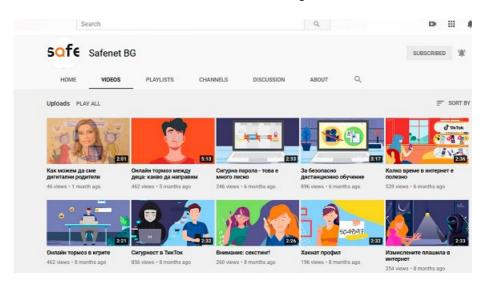
- a basic methodology guidebook on how to detect and tackle fake news, disinformation and manipulation, addressing general societal issues and in particular anti-Roma manipulation;
- a practical guidebook for capacity building of Roma leaders, activists, mediators, Roma and pro-Roma, which will equip the target Roma multipliers with the needed specific methods and tools to detect, monitor and counteract fake news and anti-Roma disinformation that accelerate anti-gypsyism;
- a practical guidebook for school teachers on the ways young people can identify and counter hostile narratives, disinformation, manipulation and fake news generating racists stereotypes and inciting hostility against Roma people.

In 2020, SIC's holistic model for improving the digital and media literacy of students of all age groups through the existing curriculum was applied at 90th High School in Sofia. The model included modules on systematic work with parents as well as the creation of a school community. Teachers from the school attended a series of trainings on the updated holistic model and developed their own teaching plans. ARC Fund experts supervised the lessons, the majority of which were conducted online because of the lockdown, and provided feedback.

More than 1,500 children, close to 560 teachers, about 430 parents and more than 410 professionals (educational experts, teachers and school psychologists, social workers, members of local commissions for combating trafficking of human beings, among others) were involved in trainings and awareness raising events, both in person and online.

In the last 6 years, ARC Fund has been running the Cyberscout training program, which

was ranked 9th in the 2017 competition for the annual European Crime Prevention Award. The Cyberscout program for children aged 11-12 has become highly popular in schools. The results of the training are acknowledged by teachers and pupils alike. In 2020, before the first and the second nationwide lockdowns, ARC Fund and its partners managed to train 150 teenagers from 8 schools in 5 cities and towns across the country. ARC Fund continued to communicate online with the trained students, who have been receiving various Cyberscout missions for raising awareness about online safety among their peers. These trained children were also invited to participate in a national Cyberscout competition involving various activities and initiatives for transferring the newly acquired knowledge and skills to their peers. The Cyberscouts, supported by teachers, have managed to reach out to nearly 500 other children. In August 2020, ARC Fund also conducted a training, during which 20 professionals from various non-profit organizations acquired Cyberscout trainer skills and knowledge.



The Centre produced 20 awareness videos on the main Internet risks for teens, teachers and parents

Since 2010, the Bulgarian Safer Internet Centre has been working actively on youth participation through maintaining its Youth Panel – a voluntary structure of young people aged 14–18. The Youth Panel planned and hosted the main event for the Safer Internet Day in Bulgaria in February 2020. The event engaged children and professionals who participated in order to provide recommendations on online safety for parents. The members of the Youth Panel also planned and hosted numerous other events of the Bulgarian SIC and its partners, such as the Voice It Youth Forum, which, in 2020, was dedicated to countering discrimination. The forum was organized by the National Network for Children and the role of the Youth Panel was to create a special video for the event. Two of the panel members were involved in the planning and hosted an event with a small number of participants which was livestreamed to reach a wider audience in the pandemic situation.

Since 2019, two members of the Youth Panel are also part of the Megaphone Youth Network maintained by the National Network for Children, as well as the network's Reporters initiative. One of them was also elected with the majority of the votes of the young people involved in this initiative to represent Bulgaria in the Eurochild Children's Council. The elected girl participated in a number of international online forums. She was also given a key speaker role at the annual event of the European Parliament on the Universal Children's Day which was an opportunity to discuss important topics concerning children with high-level European politicians. In 2020, the girl was also selected by The Washington Post as one of 12 global kids whose activities

have made their communities and the world a better place. Her international recognition was widely covered in Bulgarian media.

In February 2020, the Coalition for Media Literacy at School founded by ARC Fund, among others, which already has 17 member organizations, conducted the third Media Literacy Days campaign on the Safer Internet Day. During the campaign, SIC distributed a package of school aids containing lesson plans for various age groups of students, guidelines for teachers, plans for meetings with parents, etc.

Quickly adapting to the unprecedented pandemic situation, the ARC Fund held numerous webinars on online safety issues engaging audiences of teachers, parents and children. ARC Fund experts developed online safety quizzes for the popular Kahoot game and guidelines for safe Internet use, which were disseminated through the channels of the Bulgarian Red Cross during the first lockdown. A number of educational videos on online safety topics were also created, some which have proven useful in teacher practice. Guidelines for remote teaching during the lockdown were also specifically developed for teacher use. Along with its partners from the Coalition for Media Literacy at School, ARC Fund also conducted a survey among Bulgarian students to assess their attitudes to online education during the lockdown.

PART TWO:

MANAGEMENT

Institutional Development 2020

ARC Fund is a not-for-profit organization acting for the public benefit. Up to 2017, ARC Fund was registered at the Sofia City Court and the Central Register of Not-for-Profit Legal Entities at the Bulgarian Ministry of Justice. In 2018, following amendments to the national legislation, ARC Fund was re-registered in the public Commercial Register and Register of Not-for-Profit Legal Entities at the Registry Agency under the Minister of Justice.

Not-for-profit legal entities acting for the public benefit are obliged by the Bulgarian law to conform to a number of additional rules, inter alia, to draw up and submit annually an activity report and financial statements for entry in the public Register.

In 2006, ARC Fund established ARC Consulting EOOD – a wholly-owned 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 for research, technology development and demonstration projects, as well as under the Cohesion and Structural Funds. ARC Fund and ARC Consulting form the ARC Fund Group.

In 2020, the ARC Fund Group employed full-time staff of twenty-three and a number of part-time consultants and advisors. The ARC Fund Group team is a blend of young, well-educated and highly motivated people and experienced experts renowned for their professionalism and high quality work.

In 2020, the ARC Fund Group worked on the implementation of 22 projects and 6 service

contracts supported by the Executive Agency for Small and Medium-sized Enterprises (EASME) of the European Commission, the National Innovation Fund, DG Justice and Consumers of the European Commission, the Research Executive Agency of the European Commission, the Interreg Europe program, the Norway National Agency (ER-ASMUS +), EEA and Norwegian Financial Mechanisms for 2014-2021, OAK Foundation, the Innovation and Networks Executive Agency of the European Commission, Telenor Bulgaria EAD, DG Migration and Home Affairs of the European Commission, the National Operational Programme for Good Governance, the Active Citizens Fund, the Konrad Adenauer Foundation, JRC of the European Commission, the Council of Ministers of Bulgaria, the Ministry of Regional Development and Public Works, and the Belgian research company Applica.

ARC Fund is managed in accordance with the principles of good governance, accountability and transparency. These principles are applied through:

- execution of annual audits since 1992;
- individual project audits;
- publication of Annual Reports in Bulgarian and in 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.

List of Staff

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PART THREE:

FINANCIAL REPORT



Applied Research And Communications Fund (The Group)

Consolidated Annual Financial Statements

31 December 2020



Applied Research And Communications Fund (the Group)

Consolidated Annual Financial Statements

31 December 2020

Independent Auditors' Report

To the Board of Trustees of the APPLIED RESEARCH AND COMMUNICATIONS FUND

Report on the Consolidated Financial Statements

We have audited the consolidated financial statements of the Applied Research and Communications Fund and its consulting arm ARC Consulting EOOD (together referred to as "the Group"). These comprise the consolidated statement of the Group's financial position as of 31 December 2020 and the consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended, as well as a summary of significant accounting policies and other explanatory notes.

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 2020, its financial performance and its cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU).

Basis for expression of opinion

We have performed our audit in accordance with the International Standards on Auditing (ISA). Our responsibilities as per these standards are further described in the Auditor's Responsibility section of our report. We are independent from the Group in accordance with the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (the IESBA Code) along with the ethical requirements of the Law on the Independent Financial Audit (LIFA), applicable to our audit of consolidated financial statements in Bulgaria. We have also complied with our other ethical responsibilities as per the requirements of LIFA and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other information, different from the consolidated financial statements and the auditor's report

The Group's management is responsible for other information. Other information comprises the report on the activity prepared by the management in accordance with Chapter Seven of the Law on Accountancy of the Republic of Bulgaria, but excludes the consolidated financial statements and our auditor's report.

Our opinion regarding the consolidated financial statements does not comprise this other information and we do not express any form of conclusion about its reliability, unless it is explicitly stated in our report and to the extent to which it is stated.

In auditing consolidated financial statements, our responsibility is to read the other information and thus to assess whether this other information is substantially inconsistent

with the consolidated financial statements or with our knowledge obtained during the audit, or in another way appears to contain material misstatement. If, based on the work we have performed, we conclude there is material misstatement in this other information, we are required to report this fact.

We have nothing to report in this respect.

Supplementary reporting requirements laid down in the Law on Accountancy of the Republic of Bulgaria

In addition to our responsibilities and reporting in compliance with ISA, in reference to the report on the activity we have followed the procedures supplementing ISA requirements as per the Instructions of the professional organisation of certified public accountants and registered auditors in Bulgaria – Institute of Certified Public Accountants (ICPA) – issued on 29 November 2016 and endorsed by its Managing Board on 29 November 2016. These are procedures on verification whether such other information is present and on examination of its form and content, designed to assist us in forming an opinion on whether this other information contains the disclosures and reports laid down in Chapter Seven of the Law on Accountancy.

Opinion in reference to Art. 37, Para. 6 of the Law on Accountancy of the Republic of Bulgaria

On the grounds of the procedures implemented, our opinion is that:

- the information included in the report on the activity for the financial year for which consolidated financial statements were prepared corresponds to the consolidated financial statements;
- the report on the activity was prepared in compliance with the requirements of Chapter Seven of the Law on Accountancy;
- the report on payment to governments for the financial year for which consolidated financial statements were prepared, was presented and prepared in compliance with the requirements of Chapter Seven of the Law on Accountancy.

Management's responsibility for the Consolidated Financial Statements

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

During the preparation of consolidated financial statements, the management is responsible for evaluating the ability of the Group to continue its operation as a going concern, disclosing, when applicable, issues related to the assumption about a going concern and using the accounting basis on the grounds of the assumption about a going concern, unless the management has the intention to liquidate the Group or to suspend its activity, or has no other alternative but to take such action.

Auditor's responsibility

We aim to obtain reasonable assurance that the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report containing our auditor's opinion. Reasonable assurance is a high degree of assurance, but is not a guarantee that an audit performed in accordance with ISA shall in all cases reveal material misstatement if such misstatement is present. Misstatements may arise

as a result of fraud or error and are considered material if it would be reasonable to expect that, independently or in aggregate, they could impact the economic decisions of consumers taken on the basis of these financial statements.

As part of the audit complying with IAS, we use professional judgment and keep professional skepticism throughout the audit. We also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error; we design and perform audit procedures in response to these risks, and we obtain sufficient and appropriate audit evidence, so as to provide basis for our opinion. The risk of not revealing material misstatement which is due to fraud, is higher than the risk of not revealing material misstatement which is due to error, as fraud could vary from secret arrangement, through forgery, intentional omissions, and statements aiming to deceive the auditor, to internal control neglect or circumvention;
- consider internal control relevant to the audit 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 Group's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and the related statements made by management;
- make a conclusion about the appropriateness of the accounting basis used by the management on the grounds of the assumption for a going concern and the audit evidence obtained about whether material uncertainty is present concerning events or circumstances which could cause significant doubts about the ability of the Group to continue operation as a going concern. In case of finding such material uncertainty, we are obliged to draw attention in our auditor's report to the disclosures in the consolidated financial statements relevant to that uncertainty, or, in case these disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, due to future events or circumstances the Group could suspend its operation as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including disclosures, and whether the consolidated financial statements present the fundamental transactions and events in a reliable manner.

Stoyan Donev

Registered Auditor

Стоян

27 July 2021

(all amounts in BGN thousand)	Note	For the year ending:		
		31 December 2020 31 December 2		
Assets				
Property, plant and equipment	5	34	14	
Intangible assets	6	19	2	
Investment property	7	37	38	
Total non-current assets		90	54	
Trade and other receivables	8	350	572	
Cash and cash equivalents	9	5,138	1,858	
Total current assets		5,488	2,430	
Total assets		5,578	2,484	
Equity		1,938	2,013	
Liabilities				
Payables to partners and suppliers	10	2,760	50	
Deferred financing	11	880	421	
Total current liabilities		3,640	471	
Total liabilities		3,640	471	
Total equity and liabilties		5,578	2,484	

These consolidated financial statements were approved by the Board of Trustees on 26 July 2021. They were signed on behalf of the Board of Trustees by:

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ARC

FUND

Nikolay Badinski Executive Director 26 July 2021

Initialled for identification purposes in reference to the audit report:

0509

Стоян Донев

Регистриран одитор

Stoyan Donev Registered Auditor 27 July 2021

1

(all amounts in BGN thousand)	Note	For the year ending:		
		31 December 2020	31 December 2019	
Revenues from grants financing	12	1,034	1,300	
Cost of sales	15	(946)	1,173	
Gross profit		88	127	
Other operating income		354	706	
Administrative expenses	15	(493)	(752)	
Impairment losses		(20)	<u>-</u> _	
Revenue from operating activities		(71)	81	
Financial income		2	3	
Financial expenses		(4)	(7)	
Net financing costs	13	(2)	(4)	
Profit before income tax		73	77	
Income tax expense	14	(1)	(7)	
Net profit for the period		74	70	
Other comprehensive income		-	-	
Total comprehensive income		74	70	

These consolidated financial statements were approved by the Board of Trustees on 26 July 2021. They were signed on behalf of the Board of Trustees by:

Nikolay Badinski **Executive Director** 26 July 2021

Initialled for identification purposes in reference to the audit report:

0509

Стоян Донев

Регистриран одитор

FUND

Stoyan Donev Registered Auditor

27 July 2021

(all amounts in BGN thousand)	Note	Retained earnings
Balance as of 1 January 2019 Net profit for the year		1,945 70
Other changes		(2)
Balance as of 31 December 2019		2,013
Balance as of 1 January 2020		2,013
Net profit for the year		(74)
Other changes Balance as of 31 December 2020		(1) 1,938

These consolidated financial statements were approved by the Board of Trustees on 26 July 2021. They were signed on behalf of the Board of Trustees by:

FUND

Стоян Донев

Регистриран одитор

Nikolay Badinski Executive Director

26 July 2021

Initialled for identification purposes in reference to the audit report:

Stoyan Donev

Registered Auditor

27 July 2021

(all amounts in BGN thousand)	Note	For the year	•
Cash generated from operations Profit before income tax		73	77
Adjustments for:			
Depreciation		7	7
Changes in working capital:			
(Increase)/decrease of trade and other receivables		282	329
(Increase)/decrease of trade and other payables		2,754	(856)
(Increase)/decrease of deferred financing		242	20
Net cash from operating activities		3,212	(423)
Income tax paid			
Net cash generated from operating activities	6	3,212	(423)
Cash flows from investing activities			
Payments for acquisition of property, plant and equipment		(25)	(6)
Cash flows from financing activities			
Interest and commissions paid		93	(7)
Net cash used in financing activities		93	(7)
Net increase/(decrease) in cash and cash equivalents		3,280	(436)
Cash and cash equivalents at the beginning of the year		1,858	2,294
Cash and cash equivalents at the end of the year	9	5,138	1,858

These consolidated financial statements were approved by the Board of Trustees on 26 July 2021. They were signed on behalf of the Board of Trustees by:

ARC FUND

Nikolay Badinski Executive Director 26 July 2021

Initialled for identification purposes in reference to the audit report:

Stoyan Donev Registered Auditor 27 July 2021 0509 Стоян Донев Регистриран одитор

1. Background and activities

The **Applied Research and Communications Fund** (ARC Fund), is a European think-and-action tank in the area of innovation, business support and technology transfer, established in 1991. ARC Fund provides:

- advice and advocacy on science- and evidence-based national, regional and local level innovation **policies and strategies**;
- research and analyses of development trends and policy options for supporting entrepreneurship and innovation for smart specialisation and industrial transformation;
- innovative educational methodologies for building digital and media literacy in young people and for creating a safer internet environment;
- public-private partnership and foresight know-how for addressing specific issues of innovation-based competitiveness, digitalisation and green transformation.

The consolidated financial statements of ARC Fund for the year ended 31 December 2020 comprise the ARC Fund and its consulting arm ARC Consulting EOOD (together referred to as "the Group").

ARC Fund owns 100% of the share capital of its consulting arm ARC Consulting EOOD. The company offers consulting services in the fields of innovation and information and communication technologies, as well as advisory services in the design and implementation of international projects. ARC Consulting EOOD is a limited liability company established in the Republic of Bulgaria and registered by Sofia City Court under file No 9428/2006 on 28 August 2006.

As of 31 December 2020 the Group has 28 employees.

These consolidated financial statements were approved by the ARC Fund's Board of Trustees on 26 July 2021.

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

The consolidated financial statements comprise the financial statements of the ARC Fund and its consulting arm as of 31 December each year. The financial statements of the consulting arm are prepared for the same reporting period as those of the parent Group, using consistent accounting policies. For consolidation purposes, 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 unrealised gains resulting from intra-group transactions are eliminated in full. Unrealised losses are also eliminated, but considered an impairment indicator of the asset transferred. The consulting arm is 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. The accounting policies of the consulting arm have been changed where necessary to ensure consistency with the policies adopted by the Group.

Consulting arms 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 entities 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.

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 entity 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 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 the 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 2020 are not early adopted by the Group because the 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 2020 are not early adopted by the Group. They are not relevant to the 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

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 commences 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 25 years
Computers and equipment 2 years
Vehicles 4 years
Fixtures and fittings 2 - 6.67 years

Property, plant and equipment is depreciated from the day following the acquisition date and for internally generated assets – from the day 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. The 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 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 2020.

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 amortised 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 a non-fixed period of time and which can be sold when the Group needs resourses or at change of interest rates. They are included in non-current assets, unless the 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

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 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, when 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.

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 the 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. Impact of the general economic environment

Impact of the ongoing global crisis

In 2020, the global economy was severely hit by the COVID-19 pandemic. As a result of constraints on the free movement of people and goods and the rise of unemployment, all EU member states, including Bulgaria, went into a deep recession. The shock of anti-epidemic measures was mitigated by a considerable slackening of cash and budgetary restriction both globally and in the EU. The Bulgarian government was no exception, although the measures it took were narrower in scope. The COVID crisis is expected to dominate global economic activity as the major factor for the next couple of years. Bulgaria's economic growth prospects, both short and mid-term, remain uncertain. They are exacerbated by the political crisis in the country caused by failed attempts to form a regular government.

In May 2020, the EU proposed a Recovery and Resilience Plan to tackle the economic and social damages incurred by the COVID-19 pandemic. The plan was partially covered by re-allocations in the European Commission's budget. Thus, some of the EU funds to which the Group was beneficiary have also been restructured and resources redirected to overcoming the health crisis and the consequences of the pandemic. This could reduce the Group's opportunities to apply for funding of the topics at the core of its analytical work. This type of risk will also be heightened for the period 2021 – 2022 by the EU's transition to a new programming period and the ensuing delay of announcing new funding opportunities. On the other hand, the Group is implementing over 10 actions under the Horizon 2020 program (whose total budged equals EUR 80 billion), while the budget of its successor in the next 7-year programming period – Horizon Europe – amounts to the record EUR 95.5 billion. This fact is likely to have a positive effect on the Group's activities.

The future economic direction of Bulgaria is largely dependent upon the effectiveness of economic, financial and monetary measures undertaken by the Government of Bulgaria, together with tax, legal, regulatory and political developments. Internal political instability stayed high in 2020. Bulgaria has continued with its Eurozone and Schengen bid, and these processes are expected to continue facing difficulties and deviations from plan.

In 2020, as a next step to adopting the Euro, Bulgaria joined ERM II – the EU's exchange rate mechanism – in order to advance its economy's accession to the Eurozone. The Euro is currently the second ranking global reserve currency after the US dollar. The country will most likely adopt the Euro in 2024, which is expected to enhance foreign investments and possibly affect organisations such as the Group in a positive way. Over 50% of the funds of the Group are in its Euro bank accounts. Since 1 October 2020, the European Central Bank has been exercising direct supervision over the key credit institution in Bulgaria. The Group's bank accounts are in institutions present on this supervision list, which is an additional source of security.

The management is unable to predict all developments which could have an impact on the sector and the wider economy, and consequently what effect, if any, they could have on the future financial position of the Group. However, the management's analysis shows that for the short to mid-term the risks are balanced and the general environment is likely to remain largely favourable for the development of the Group. The management will continue to monitor these risks on a regular basis and take 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 the management's cash flow forecasts and assessment

of the impairment of financial and non-financial assets. To the extent that information is available, the 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

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.

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.

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 a 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.

As of 31 December 2019	Up to 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	50	_	_	-
As of 31 December 2020	Up to 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	2,760	_	_	_

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.

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 the 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

Vehicles

Total

Fixtures & fittings
Other assets

Cost	As of 31 December 2019	Additions	Disposals	As of 31 December 2020
Computers	84	25	_	109
Vehicles	144	-	-	144
Fixtures & fittings	18	-	-	18
Other assets	3	-	-	3
Total	249	25	14	274
Depreciation	As of 31 December 2019	Additions	Disposals	As of 31 December 2020
Computers	70	6	1	75
Vehicles	144	-	-	144
Fixtures & fittings	19	_	-	18
Other assets	3	_	-	3
Total	235	6	1	240
Carrying amount	As of 31 December 2019	Additions	Disposals	As of 31 December 2020
Computers	14	19	(1)	34

19

(1)

34

9

6. Intangible assets

Cost	As of 1 December 2019	Additions	Disposals	As of 31 December 2020
Software	-	18	_	18
Intellectual property	2	-	-	2
Total	2	18	-	20
Depreciation	As of 1 December 2019	Additions	Disposals	As of 31 December 2020
Software	-	-	_	-
Intellectual property	-	1	-	1
Total	-	1	-	1
Carrying amount	As of 1 December 2019	Additions	Disposals	As of 31 December 2020
Software	-	18	_	18
Intellectual property	2	(1)		1
Total	2	17	_	19

7. Investment property

For the year ending:

	31 December 2020	31 December 2019
As of 1 January		
Carrying amount at the beginning of the period	38	39
Depreciation charge	(1)	(1)
Carrying amount at the end of the period	37	38
As of 31 December		
Cost	54	54
Accumulated depreciation	(17)	(16)
Carrying amount	37	38

Investment properties are carried at cost, less accumulated depreciation and impairment.

8. Trade and other receivables

For the year ending:

	31 December 2020	31 December 2019
Trade receivables	470	576
Less: impairment provision of trade payables	(111)	(91)
Trade receivables, net	339	485
VAT refund	2	-
Other	9	87
Total	350	572

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

9. Cash and cash equivalents

For the year ending:

	31 December 2020	31 December 2019
Cash at hand	12	9
Cash in bank accounts	5,126	1,849
Total	5,138	1,858

10. Trade and other payables

Short-term liabilities For the year ending:

	31 December 2020	31 December 2019
Salaries and social securities payables	22	22
Tax	-	1
Corporate tax payables	1	2
Payables to partners	2,365	-
Letter of credit	389	-
Other		25
Total	2,760	50

11. Deferred financing

Deferred financing related to projects:	projects: For the year ending	
	31 December 2020	31 December 2019
European Commission (EC) - Energy Conscious Consumers (ECO2)	-	122
EC - REconciling sCience, Innovation and Precaution through the Engagement of Stakeholders (RECIPES)	2	59
EC - Child Protection and Education for Safety and Success in the Digital Age (Safer Internet 7)	-	59
EC - Territorial Responsible Research and Innovation Through the Involvement of local R&I Actors (TeRRitoria)	12	69
OAK Foundation - Holistic Model for Safer School and Community by Building Digital Era Competences (OAK - 2020 - 3)	-	35
EC - Media Information Literacy "Village" to Empower Young People for Active Participation (MILagers)	13	25
EC - Resilient Youth against Far-Right Extremist Messaging Online (YouthRightOn)	11	48
EC - Ethics Governance System for RRI in Higher Education, Funding and Research Centres (ETHNA System)	144	-
EC - Challenging Anti-Gypsyism by Roma Empowerment for Countering Disinformation and Fake News in Bulgaria (Care for Truth)	12	-
EC - Leveraging Leadership for Responsible Research and Innovation in Territories (RRI - Leaders)	568	-
Other	4	_
Total deferred financing related to projects	766	417
Deferred financing for acquisition of fixed assets	114	4
Total deferred financing	880	421

12. Revenues

	For the year ending:			
Revenues from grants financing and other project for respective periods are as follows:	31 December 2020	31 December 2019		
OAK Foundation - Men Care Campaign in Bulgaria (Phase II)	15	12		
EC - Energy Conscious Consumers (ECO2)	169	71		
EC – Creating a Better Internet for Kids by Protection, Aweraness Raising and Education (Safer Internet 6)	-	30		
EC/Ministry of Regional Development and Public Works – Bridging the Innovation Gap through Converting R&D Results into Commercial Success in a More Effective and Efficient way (InnoBridge)	12	34		
EC/Ministry of Regional Development and Public Works – Efficient Support Services Portfolio for SMEs (ESSPO)	-	47		
EC - Responsible Research and Innovation in Practice (RRI Practice)	1	157		
EC - European Network for Research, Good practice and Innovation for sustainable Energy (Energise)	-	72		
EC/Ministry of Regional Development and Public Works – Facilitating Macro-Regional Scope and Link up to Socio-Economic Actors of Research Infrastructure in the Danube Region (ResInfra)	-	60		
EC/Ministry of Regional Development and Public Works - Excellence in Research, Social and Technological Innovation Project Management (ReSti)	-	144		
EC - Child Protection and Education for Safety and Success in the Digital Age (Safer Internet 7)	189	206		
OAK Foundation - Holistic Model for Safer School and Community by Building Digital Era Competences (OAK - 2019 - 3)	100	15		
EC - Territorial Responsible Research and Innovation Through the involvement of local R&I Actors (TeRRitoria)	97	92		
EC - REconciling sCience, Innovation and Precaution through the Engagement of Stakeholders (RECIPES)	57	47		
Google - Trusted Flagger Operational Grant	-	34		
EC/Ministry of Regional Development and Public Works - Enhancing Scalable Innovations and New Business Models Based on Urban Farming Ecosystem Values (CityZen)	145	82		
EC - Resilient Youth against Far-Right Extremist Messaging Online (YouthRightOn)	23	13		
EC - Media Information Literacy "Village" to Empower Young People for Active Participation (MILagers)	12	5		
EC – Ethics Governance System for RRI in Higher Education, Funding and Research Centres (ETHNA System)	28	-		
EC - Challenging Anti-Gypsyism by Roma Empowerment for Countering Disinformation and Fake News in Bulgaria (Care for Truth)	12	-		
Other projects	172	170		
Total revenues from grants financing	1,032	1,293		
Revenues from unconditional donations	-	2		
Other	2	5		
Total revenues	1,034	1,300		

13. Finance costs, net

Finance costs, net	For the year ending:		
_	31 December 2020	31 December 2019	
Interest income	2	2	
Interest, net	2	2	
Foreign exchange income	-	1	
Foreign exchange expense	(3)	(4)	
Foreign exchange, net	(3)	(3)	
Other financial expenses	(1)	(3)	
Other financial, net	(1)	(3)	
Finance costs, net	(2)	(4)	

14. Income tax expense

The major components of income tax expense for the year ended 31 December 2019 and the period ended 31 December 2020 are:

	2020	2019
Current tax	(1)	(7)
Deferred tax		-
Income tax expense	(1)	(7)

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. Expenses

Cost of sales for the Group includes:	For the year ending:		
	31 December 2020	31 December 2019	
Cost of sales for projects	946	1,173	
Administrative expenses	493	752	
Total expenses	1,439	1,925	

Cost of sales, administrative and other	For the year ending:			
expenses include:	31 December 2020	31 December 2019		
Expenses for materials	1	4		
Hired services	564	738		
Depreciation and amortisation	7	7		
Salaries and wages	735	867		
Social securities	107	98		
Other expenses	25	210		
Total expenses	1,439	1,925		

16. Related parties

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

During the period the following transactions and balances have occurred:

Related party	Transactions during the year	January - December		•		31 Dec	ember	31 Dec	ember
		2020	2019	2020	2019	2020	2019		
		Transa	ctions	Receiv	/ables	Paya	bles		
Project 1 EOOD	Rental agreement	(100)	(78)	_	-	-	_		
Vitosha Research EOOD	Consulting services		7	_	-	-	_		
		(100)	(71)	_	_	_	_		

Transactions with directors and other members of the management

The Group is a related party with its Executive Directors and Board of Trustees. The total amount of the paid remunerations, honoraria and social securities, included in salaries and benefits and expenses for hired services is as follows:

	2020	2019
Board of Trustees and Executive Directors	154	265

17. 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.