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

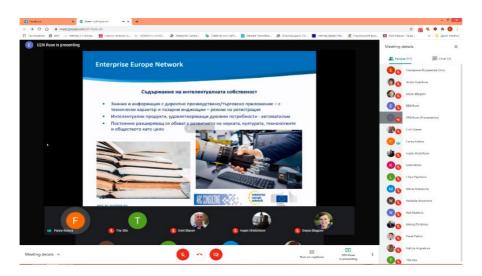
For a fourth year in a row, the EEN team produced a program dedicated to innovation aired by the Bulgarian National radio. In a series of broadcasts, innovators and entrepreneurs spotlighted their challenges and achievements during the COVID-19 crisis. Naicoms, a telemedicine-company, pre-

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

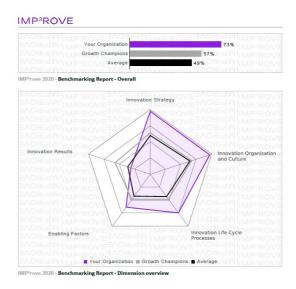
Improving SMEs Innovation Management Competences

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 de-



velopment 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.

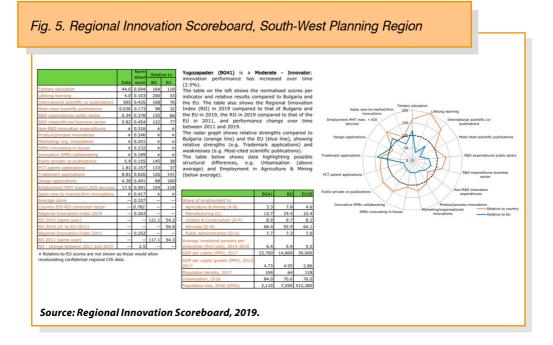
ARC Fund's team supported the **Council of Ministers** in developing the administrative capacity of the new Agency. A series of analyses were conducted to better understand the needs of different stakeholder groups as a basis for defining the mission and main objectives of the Agency in the field of 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. 5. 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.