Innovation in the Republic of Cyprus and the Russian Federation: Comparative Analysis

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Abstract

The current state of legal regulation of the sphere of innovation in Cyprus and Russia and the prospects for improving it become the cornerstone of the countries' economic development. The comparative analysis of two systems resulted in the identification of common points as well as contradictions in the countries' modern regulation of innovation in the economy and the innovation ecosystem as a whole. The number of problems of subordinate regulation of the sphere have been identified. The existing Russian system of regulatory regulation of the innovation sphere appears to be fragmented. Cyprus model seems to be more organised, logical and structured.

Keywords: innovation ecosystem, scientific and technological development, digital economy, normative legal regulation, strategy

Introduction

Russia, the sixth largest country in the world measured by Gross Domestic Product (GDP) and Purchasing Power Parity (PPP),[2] is still heavily dependent on exploiting its natural resources, although global energy price fluctuations pose a threat to its economic stability. Given these circumstances, high-ranking State officials have tasked executive bodies with shifting the economy towards development through innovation, which has had a significant influence in terms

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[2] World Bank, International Comparison Program Database, 'GDP, PPP (Current International $)', available at https://data.worldbank.org/indicator/ny.gdp.mktp.pp.cd.

of national defence, while its social[3] and economic importance cannot be denied.[4] The innovation strategy should be shaped as one of the key elements of long-term effective public policy.[5]

Due to objective circumstances related largely to geographic and demographic features, the Republic of Cyprus shows lower GDP and PPP figures compared to Russia. Nevertheless, other social and economic indicators, including Cyprus' GDP per capita and Human Development Index outpace those of Russia in international ratings. Economic structures of the two countries vary fundamentally. Whereas the Russian economy, as mentioned above, is based on primary production and energy, in Cyprus, tourism accounts for 20% of GDP. However, innovation development is the cornerstone of economic development in any country today, and one of a few that can generate extra profit, which is why innovations have an important place in Cyprus' economy. The principal innovations are considered below.

Cyprus Strategy

The 'Restart 2016-2020' programme[6] is one of the most outstanding and large-scale innovation projects being implemented presently in Cyprus. The vision of the programme provides for the development of fundamental scientific researches, technological progress, and innovations, which the programme identifies as the key factors for Cyprus' economic growth, for addressing social and economic challenges and for the country's sustainable development according to the 'Europe 2020' strategy. The programme is based on the three strategy pillars:

1. Focusing on the smart development of selected priority sectors and supporting the effectiveness of the Research Technology Development and Innovation (RTDI) system in Cyprus, which is associated with the productive base of the

[3] T. Skvortsova, A. Milov, (2017) 'Vectors of Innovative Development of the Russian Economy', *Vestnik of the Siberian Institute of Business and Information Technologies*. Vol. 22, No. 2 [in Russian].

[4] A. Kovalenko, M. Bat'kovskii, and E. Khrustalev, (2005) 'Methodological Foundations of Economic Assessment of the State's Military Potential', *Problems of Forecasting*, No. 3 [in Russian]. D.J. Teece, M. Peteraf, and S. Leih, (2016) 'Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy', *California Management Review*, Vol. 58, No. 4.

[5] S. Tsyganov, E. Rudtskaya, and E. Khrustalev, 'Principles of Constructing a Strategy for the Innovative Development of the Russian Economy', (2013) *Economic Analysis: Theory and Practice*, No. 41. A. Lozhnikova, A. Sazonov, and L. Ogorodova, (2012) 'Scientific and Technological Development of Russia: The Problems of the Formation of an Effective Mechanism or how to Make Important "Especially Important" R & D', *Bulletin of Tomsk State University*, No. 364 [in Russian].

[6] European Commission, Research and Innovation Observatory – Horizon 2020, available at https://rio.jrc.ec.europa.eu/en/library/restart-2016-2020-work-programme.

economy, the enhancement of its openness, and the reinforcement of its links and interoperability between its components.

2. Ensuring the sustainability and dynamics of the RTDI system and reinforcing its future perspectives, focusing on excellence and supporting human resources, especially for the younger generation.
3. Supporting the operational framework of the RTDI system and production of added value resulting from research and innovation activities, by developing supportive instruments and pilot measures, encouraging the dissemination and exploitation of research results, and cultivating and promoting appropriate culture.

The programme is based on several key principles. They are:

- Open participation (basically for research organisations, higher education institutions, business entities, public benefit organisations, scientific centres etc.);
- Competitive procedures. Projects are selected on a competitive basis. There are three main criteria of selection: (i) excellence, (ii) added value and benefit, (iii) implementation;
- Confidentiality (to ensure personal data protection);
- Equal treatment and objectivity;
- Transparency;
- Simplification and efficiency;
- Compliance with the legislation and ethical issues;
- Broad dissemination of knowledge and exploitation of results. The exploitation of results seems to be the key benefit for the economy and fundamental priority of the programme as well.
- Co-funding (by the Research Promotion Foundation and the participating organisations);
- Monitoring.

The objectives of the programme are indicated clearly as well. They are:

- To effectively utilise and to further develop the human resource potential in Cyprus, especially the younger generation of researchers.

- To enhance the cooperation between the production system and the RTDI system, as this is considered to be the key for development, and to maximise the return on public investment in the field of RTDI.
- To enhance and develop open, international collaborations that will benefit Cyprus in fulfilling its strategic objectives.

It should be mentioned that, in the broad sense, the Cyprus programme treats innovation as an integral part of economic growth, giving competitive advantages to enterprises in building capacity and achieving social goals, all of which is undoubtedly true for any state. Finally, one important feature of the programme is a specifically defined project budget, which is allocated in stages according to the priority of investment.

Innovations Centre in Nicosia

Cyprus intends to become a regional centre of innovation and applied research, which will be located in the historical part of Nicosia. The new Research Centre on Interactive Media, Smart Systems, and Emerging Technologies (RISE.org.cy) has been recently opened. The University of Cyprus, the Cyprus University of Technology and the Open University of Cyprus, along with international partners such as the Max Planck Institute for Informatics (Germany) and the University College London (UK), participated in the creation of the centre.

'Innovation visas' for Start-ups

For the purposes of promoting science and innovation research, creating new jobs, and attracting more investments, Cyprus introduced 'innovation visas'. This is a new type of visa, or 'start-up visa', which has special conditions for specialists in the sphere of innovation technologies. This type of visa is divided into two sub-types: individual and collective (with the maximum number of founders not exceeding five). Such visas will allow young researchers to start and develop innovative projects, carry out economic activities, and reside in Cyprus. A project successfully implemented may become an advantage in obtaining a permanent residence permit in Cyprus.

Application of Innovation Technologies in Education

The higher education institutions of Cyprus are also interested in applications of innovation technologies. Christoforos Hadjikyprianou, the CEO and President of the Council of European University Cyprus, states that his university attaches

great importance to research and encourages staff involved in studies in various university departments and excellence centres, which are intended to contribute to developing the innovations sector, for example, Centre of Excellence in Risk and Decision Sciences. European University Cyprus has set a goal to make a shift to a new administrative system on the basis of e-governance, to transform the university campus into a smart campus and to, in the near future, develop innovation programmes in the spheres of biomedicine and artificial intelligence. .

Moreover, it is worth mentioning than the University of Nicosia runs several other innovation initiatives. They are:

- N-Lab Research and Innovation Centre of Nicosia,[7] that is a non-profit entity aiming to become a leader of innovation services in Cyprus targeting support from European schemes such as Horizon-2020 and other regional or national research intensive initiatives.
- The Research & Innovation Office[8] (the R&IO), which was established to support researchers in achieving their goals, as well as to keep the University's Research Community informed and to be informed by them on research initiatives at the national, European and international level.
- University of Nicosia Research Foundation,[9] a non-profit, independent organisation, which seeks to inspire and promote knowledge, innovation and development among researchers in Cyprus and its neighbouring countries.
- Plenty of specialised centres.[10]

Microsoft Innovation Centre (MIC)

European University Cyprus has been selected as a Microsoft partner institution for the establishment of the only Microsoft Innovation Centre (MIC) in Cyprus. MIC offers state of the art technology facilities for collaboration to develop capacity in terms of innovative research, technology and software, bringing together government, academic and industry participants. Today there are more than 100 MICs in the world. In cooperation with its strategic partners, Microsoft operates the MICs,

7 N-Lab Research and Innovation Centre of Nicosia, available at https://www.unic.ac.cy/el/ereynitika-kentra/syndedemena-akadimaika-idrymata/n-lab-research-and-innovation-centre-of-nicosia/.

8 Research & Innovation Office, available at https://www.unic.ac.cy/support/research-innovation-office/.

9 University of Nicosia Research Foundation, available at https://www.unrf.ac.cy/.

10 More information is available at https://www.unrf.ac.cy/centres/.

which are centres open to students, professional software developers, IT professionals, entrepreneurs, start-ups, and academic researchers. MICs provide content and services designed to accelerate technology advances and stimulate local software economies through skills and professional training, industry partnerships, and innovation. MICs can play a catalytic role in fostering innovation and growing sustainable local software economies by generating powerful new ideas through investment into training, leadership, and technical skills.

Cooperation between Cyprus and the Russian Federation

Cooperation between the Republic of Cyprus and the Russian Federation in the sphere of innovation development should be specifically emphasised. In March 2018, representatives from the investment development agency, Invest Cyprus, visited Moscow to negotiate and establish links, as well as to determine the prospects of cooperation, with the management of Skolkovo Innovation Centre. The Cypriot delegation, headed by Georgia Christofidou of the Cyprus Ministry of Finance, including representatives from the Cyprus Chamber of Commerce and Industry, the Cyprus Telecommunications Authority, the Cyprus academic and research community, and representatives of other public and private companies, visited Moscow to discuss the creation of a joint innovations platform between Russia and Cyprus. The Working Group Meeting of the Russia-Cyprus Intergovernmental Commission on Commercial and Economic Cooperation was attended by officials of the Russian Ministry of Economic Development and the Russian Ministry of Industry and Commerce, and by representatives of private and public companies, such as 'NOVATEK', Internet Initiatives Development Fund, RITE (Russian Information Technology Export) etc.

The parties discussed the prospects of bilateral cooperation in detail and determined the closest spheres of collaboration, such as medicine, nanotechnologies, and digital innovation technologies.

Following the meeting, a memorandum of cooperation was signed by Kyriacos Kokkinos, a member of Invest Cyprus Board of Directors, and Oleg Dubnov, Vice-President and Executive Director of Energy Efficiency Cluster of Skolkovo Fund. According to the participants, the meeting was productive and, in the near future, it will provide cooperation outcomes in the fields of information and communication technologies, biomedical and industrial technologies among others.

The next step was the signing of a memorandum between the Institute of Science and Technology ('Skoltech') and the Cyprus Institute (CyI) in May 2018. The process of implementing the agreement included not only a student exchange programme, but also developing and realising joint projects in the sphere of computer technologies, energy, and biology.

Thus, firstly, the Republic of Cyprus recognises the crucial importance of innovation development to achieve its social and economic policy goals. Secondly, the Republic has an elaborate and comprehensive programme of innovation development that includes various aspects from Restart 2016-2020's pillars, objectives, and administration – in particular mechanisms which must deliver the planned outcomes. Thirdly, in Cyprus, special attention is paid to education as an aspect of innovation development and to attracting foreign agents that participate in the process of new technologies development – from the largest corporations, such as Microsoft, to start-ups through 'innovation visas'.

Russian Regulations

The Russian mechanisms of innovation development differ, to some extent, from the Cypriot ones. The State plays a key role in not only establishing innovation infrastructure and a regulatory environment, but also in participating in innovation ecosystem building. The Russian system is analysed in detail below.

Between 2010 and 2017, the Russian Government passed several legal acts regarding its conceptual strategy of developing the innovation sector of the Russian economy. Five of these acts can be emphasised:

1. The Strategy for Russia's Innovative Development 2020;[11]
2. The Strategy of Information Society Development in Russia for the Years 2017-2030;[12]
3. The Programme Digital Economy of the Russian Federation;[13]

[11] The Russian Government Resolution No. 2227-r of 8 December 2011, On Approval of The Strategy for Russia's Innovative Development 2020, Legislative Bulletin of the RF 02.01.2012, No. 16, art. 216 [in Russian].

[12] The Russian President Order No. 203 of 9 May 2017, On the Strategy of Information Society Development in Russia for the Years 2017-2030, Legislative Bulletin of the RF 15.05.2017, No. 20, art. 2901 [in Russian].

[13] The Russian Government Resolution No.1632-r of 28 July 2017, On Approval of the Program Digital Economy of the Russian Federation, Legislative Bulletin of the RF 07.08.2017, No. 32, art. 5138 [in Russian].

4. Strategy for the Scientific and Technological Development of the Russian Federation;[14]
5. The National Technology Initiative.[15]

The analysis of the legislation supporting innovations suggests that the attitudes of the representatives of high executive bodies have evolved to prioritise the objectives of Russia's innovation development. These documents are complementary to each other. Thus, the legal acts adopted between 2016 and 2017 supplement the previous acts aiming at regulating spheres that had not been subjected to legal regulation.[16] At the same time, there is a certain methodological dissociation among the strategies at issue, which, in our opinion, may hinder the achievement of maximum effectiveness of public policy in the sphere of innovation support in the long run.

The variety of legal acts regulating the innovation inevitably raises the issue of the correlation of these acts, identifying which one is fundamental and analysing similarities and differences. Based on the titles of the acts, it is possible to conclude that the most essential is the Strategy for Russia's Innovative Development 2020. It logically builds upon the concept of long-term social and economic development of the Russian Federation. It is intended to deal with challenges faced by Russia, as well as threats in the sphere of innovation development, to determine objectives, priorities and instruments of public innovation policy, to set long-term development targets for the participants of innovation activities, to secure financing for the sector of pure and applied sciences, and to support research and development (R&D) commercialisation.[17]

The most important component of the strategy is its part four, which describes objectives, tasks, and options of innovation development in Russia. Despite the

[14] The Order of the President of the Russian Federation of 1 December 2016 No. 642, On Strategy for the Scientific and Technological Development of the Russian Federation, Legislative Bulletin of the RF 05.12.2016, No. 49, art. 6887 [in Russian].

[15] The Russian Government Resolution No. 317 of 18 April 2016, On Implementation of the National Technology Initiative, Legislative Bulletin of the RF 25.04.2016, No. 17, art. 2413 [in Russian].

[16] M. Kostenko and V. Yarovaya, (2015) 'Legal Basis for Supporting innovation in the Russian Federation', *Issues of Modern Jurisprudence: Sat. Art. by mater. LI-LII Intern. scientific-practical. Conf.,* Vol. 48, No. 7-8 [in Russian]. E. Salitskaya, (2016) 'Legal Regulation of State Support of Scientific and Innovative Activities in the Regions of the Russian Federation', *Information Society*, No. 1 [in Russian].

[17] The Federal Law of 28.06.2014 No. 172-FZ (as amended on 31 December 2017), On the Strategic planning in the Russian Federation, Legislative Bulletin of the RF, No. 26 (Part I) (30 June 2014), art. 3378 [in Russian].

general wording of the strategic goal –the shift of the Russian economy towards innovative development by 2020– the authors specify in the document those indicators which reflect the success of such a shift in the Russian economy, and are obtained according to the conditions of SMART goal-setting methodology, based on the principles of specific (S), measurable (M), attainable (A), relevant (R) and time-bound (T) goals. These indicators reflect qualitative and quantitative dynamics of innovative industrial production, exports of domestic innovative technologies, budgets allocated to innovation R&D, scientific and educational activity, and patent protection of new developments. These goals may be considered a strength of this strategy.

The strategy provides for complex interaction of society, business, R&D expertise with the support of the State to create a national innovation ecosystem in Russia, the product of which could be competitive in the global arena. The important conditions of enhancing innovations in the country include creating necessary cultural prerequisites as well as implementing an active information and educational policy through the joint effort of the State, business, and non-governmental organisations.[18] A set of reforms in the system of basic and additional education, aimed at supporting young people's innovation activities is proposed. The measures should result in the development of innovation entrepreneurship.

The Strategy for Russia's Innovative Development became a landmark document for the rise of the national innovation system. The law 'On the Strategic planning in the Russian Federation' played an important role in that regard.[19] Its main idea is to create legal and methodological frameworks for the development, establishment, and functioning of a strategic planning system in various spheres, including innovation.

Currently, the Strategy of Information Society Development in Russia for the Years 2017-2030 and the Strategy for the Scientific and Technological Development of the Russian Federation as approved by the order of the Russian President are the most significant documents regarding strategic planning. The Strategy of Information Society Development in Russia for the years 2017-2030 focuses on the importance of information, the citizens' right to access, collect, accumulate,

[18] J.L. Furman, M.E. Porter, and S. Stern, (2002) 'The Drivers of National Innovative Capacity', *Research Policy*, No. 31(6).

[19] The Federal Law of 28.06.2014 No. 172-FZ.

and disseminate information[20]. The strategy defines the public as a society whose access to and use of information have profound effects on economic, social, and cultural conditions of citizens' lives. According to the strategy, the formation of the knowledge society in Russia has to enhance security, human capacity building, effectiveness of national economy and public management, and has to strengthen the position of the country in the global arena. The document describes the priority scenario for the development of the information society, the list of indicators of the strategy's implementation, as well as management and finance issues. The Strategy of Information Society Development provides for the interpretation of such concepts as the Internet of Things (IoT), cloud and fog computing, Big Data, and digital economy. In general, the document sets the direction of the necessary actions with respect to drafting specific legal acts.

The Strategy for the Scientific and Technological Development is methodologically based on the concept of 'big challenges' – which reasonably requires a response from the government regarding the combination of problems, threats and opportunities, which, due to their complexity and scale, may not be solved, eliminated or realised through increased inputs.[21] Unlike the challenges of the Strategy for Russia's Innovative Development (acceleration of technological development in the global economy; enhancement of global competition for highly qualified workforce; investment that bring new expertise, technology and skills to projects; climate change; aging population[22]; problems of healthcare systems and food safety[23]), the 'big challenges' concept means exhausting the possibilities for resources-driven growth, demographic and ecological problems, issues of food safety, qualitative change in global/local energy systems, and threats to national defence.

Based on the concept of big challenges, the Strategy for the Scientific and Technological Development intends to ensure competitiveness and independence of the country, including through identifying talent among young people and building

[20] M. Kostenko and V. Yarovaya, (2015) 'Legal Basis for Supporting Innovation in the Russian Federation', *Issues of modern jurisprudence: Sat. Art. by mater. LI-LII International Scientific-Practical Conference*, Vol. 48, No. 7-8 [in Russian].

[21] A. Kurilova, (2017) 'Factors Affecting Industrial Clusters in Conditions of Large Calls', *Azimuth of scientific research: economics and management*, Vol 6, No. 1 (18) [in Russian].

[22] A. Pavlyuk and S. Kabakova, (2017) 'Administrative and Legal Regulation of External Labor Migration Flows in the Russian Federation', *Socio-political sciences*, No. 5 [in Russian].

[23] V. Bogdan, M. Urda, and A. Pavlyuk, (2017) 'On the Issue of Migration Legislation in Russia', *Socio-political sciences*, No. 5 [in Russian].

their successful careers in science, technology, and innovation, creating conditions for R&D, introducing an effective management and a finance system into the sphere of innovation, establishing communication networks to promote innovation, stimulating high-tech and knowledge-intensive business, and promoting cooperation between intergovernmental scientific and technological bodies.

The conclusive part of the Strategy for the Scientific and Technological Development emphasises the main stages of implementation, management, monitoring and results. The approval of the Strategy of Information Society Development in Russia for the Years 2017-2030 and the Strategy for the Scientific and Technological Development of the Russian Federation leaves scope for further development of the provisions of these strategies in other regulations. The digital economy regulatory environment is established exactly this way.[24] Thus, the Russian President Order No. 203 of 9 May 2017, On the Strategy of Information Society Development in Russia for the Years 2017-2030, defines the digital economy[25] as business activity where the key production factor is data in the digital form. The large-scale processing and analysis of data, compared to traditional forms of business activities, allow a significant increase in the effectiveness of various types of production, technology, equipment, storage, sale, delivery of goods and services. The Russian Government Resolution No.1632-r of 28 July 2017, On Approval of the Digital Economy of the Russian Federation Programme, serves as a specific document on implementing the goals set in the above strategies and other legal acts regulating innovations. The Digital Economy of the Russian Federation Programme integrates the following ideas contained in these documents:

1. *Goals*. Establishment of a new digital data ecosystem in Russia for unrestricted and effective creation of data and use of such data by all actors of social and economic activities. Development and promotion of infrastructure for high-tech and knowledge-intensive business that *a priori* assumes both direct measures, like government incentives to such businesses, and indirect measures, such as improving the education system and supporting young scientists. The result should be the strengthening of Russia's position on the global markets.[26]

[24] N. Deryabin, (2017) 'Russia's Strategic Governance in the Information Society of the 21st Century', *Russia: Trends and Development Prospects Yearbook*, No. 12 [in Russian].

[25] K. Yakushenko, (2017) 'Digital Transformation of Information Support for Economic Management of the Member States of the EAEC', *News of science and technology*, No. 2 (41) [in Russian].

[26] A. Kulik, D. Koryakov and A. Rozhanskaya, (2017) 'Digital Economy as a New Generation Econ-

2. *Key players of innovation activity*. In accordance with the Digital Economy of the Russian Federation Programme, success of innovation processes depends on the coordinated and effective interaction of the public sector, business, science and education. The document sets the goal of such interaction, the achievement of which, according to the drafters, must ensure the development of the digital economy, establish ten or more national high-tech enterprises promoting cutting-edge technologies and manage digital platforms that operate on the global market and form a system of new think tanks around them.
3. *Technology*. Digital economy provides for active use of the most advanced systems, resources, and trends, such as big data, the Internet of Things, virtual and augmented reality, artificial intelligence, and cloud computing.
4. *Main directions*. They include sufficient staffing in the innovation sphere, which can be attained through developing the education system, which is the next direction of development; establishing a modern regulatory environment through legal regulation; forming technical advances and managing of research competencies; activating safe information infrastructure for all actors in the sphere

The competitive advantage of the Digital Economy of the Russian Federation Programme is measurable indicators as well as a detailed implementation plan or roadmap consisting of three periods – 2018, 2020 and 2024. With respect to each of the directions of the programme –legal regulation, staffing and education, formation of research competencies and technological advances, information infrastructure, information security– the tasks that contribute to the programme's goals are stipulated, each of which has its own landmarks with a clear deadline and target indicators. The project approach to implementation, with clear goals, is not typical for the public sector, but it is innovative from the managerial point of view, bringing optimism when assessing the potential success of the programme.[27]

The very idea of roadmaps, as well as the detailed rules of their creation, is set forth in the Russian Government Resolution No. 317 of April 18, 2016, On Implementation of the National Technology Initiative. The *National Technology Initiative* (NTI) is a programme of measures to form entirely new markets and to create

omy', *Collected papers on the results of the International Scientific and Practical Conference,* UFA 'Agency for International Studies'.

[27] E. Rudtskaya, E. Khrustalev, and S. Tsyganov, (2009) 'Methods of Accumulating Scientific Knowledge for the Innovative Development of the Russian Economy (the RFBR Experience)', *Problems of Forecasting*, No. 3 [in Russian].

conditions for Russia's global technological leadership by 2035. From among all documents at issue, the NTI has the longest planning period, although the Russian President announced the priority of the government policy back in 2014. The NTI, relying on global trends and the best world practices, determined the range of so-called markets on which it will be implemented: energy, healthcare, food, security, logistics system, and neuro-technology. Essentially, all these markets are spheres where innovations are the most relevant.

For the purposes of accomplishing the goals, the NTI will form creative project teams to study the global trends and to produce their own product. The key stakeholders of the NTI include leading universities, relevant business organisations, expert and scientific communities, development institutions and, obviously, the State, represented by the relevant executive agencies. The NTI places its bet on the education sphere, which is partially attributed to its durable nature. In particular, the initiative proposes to establish a university in 2035 that will produce specialists for the digital economy era in order to implement projects provided by the NTI.

Therefore, today Russia has five basic legal acts that regulate the sphere of innovation. All of them are enacted by laws having various legal effects –orders of the Russian President, resolutions, and decrees of the Russian Government– and thus they differ by their legal force and details. Due to this fact, the two documents approved by the orders of the president, i.e. the Strategy of Information Society Development in Russia for the Years 2017-2030 and the Strategy for the Scientific and Technological Development of the Russian Federation, have the most general nature. They determine the direction for goal-setting, fundamental principles of managing and monitoring innovation and define key concepts, such as big challenge, digital economy, cloud and fog computing, and processing of big data.

The other three documents this article considers were approved by the acts of the Russian Government and, as a result, develop and specify the provisions of the president's orders. They assume that successfully developing innovations and accomplishing the main goal – Russia becoming one of the world leaders in the sphere in the medium term – require a symbiosis of science, education and business, along with the government support. At the same time, the National Technology Initiative has the longest planning period (until 2035) and a large number of spheres to develop, ranging from transport to neuro-technology. Its durability justifies the reliance on education as a part of the initiative. The critical feature of the NTI is the system of development and application of roadmaps – detailed plans for innovation projects implementation.

The Strategy of Information Society Development in Russia for the years 2017-2030 and the Digital Economy of the Russian Federation Programme are the most thorough and complex concepts in the modern innovation sector of the Russian economy. These documents embody the ideas stipulated in the NTI and the other two strategies. However, their key positive distinctive feature is clear quantitative indicators, which are to be reached within fixed periods. This scheme is provided by the roadmaps. Such an approach to implementing tasks, together with the provisions of the NTI on forming creative teams for that purpose, is a project approach that is *per se* a managerial innovation for the State. This is the commencement of the process of innovation in Russia of the 21st century, initiated by the adoption of the bylaws examined herein regarding the elaborate government policy on planning and setting performance indicators for innovation development.

Despite the advantages of modern legal regulation of the innovation sphere in Russia, the aspects requiring further research should be mentioned. First, all documents considered herein are comparable according to the subject of regulation, goals, methods and even according to the terms and definitions used. Moreover, each of these documents is posed as an exhaustive document, autonomous at its own level, which is a benefit on the face of it, but a more profound research reveals the opposite. The autonomous nature of the conceptual documents entails disintegration of legal acts regulating innovation, and the acts have weak links. Only the first part of the Digital Economy of the Russian Federation Programme directly refers to the Russian President Order No. 203 of 9 May 2017. On the Strategy of Information Society Development in Russia for the years 2017-2030, the remaining documents contradict each other only at some points. Such a situation proves the lack of balance and the need for synergy among the acts governing innovation in the Russian economy[28] that, as a result, may adversely influence the effectiveness of accomplishing goals set out in these acts. In this respect, establishing large scientific and integrated production structures that focus resources on 'disruptive innovations' in science and technology, and being oriented towards large high-tech production output which is competitive on both domestic and foreign markets is the first priority of the modern Russian economy of innovation,[29] and it definitely requires coordinated legal regulation. In addition, the documents at issue do not address innovation financing. Implementing

[28] A. Lozhnikova, A. Sazonov, and L. Ogorodova, Scientific and Technological Development of Russia.

[29] N. Lukyanchikova, (2005) 'Post-Industrial Economy - The Economy of Innovation', *News of the Irkutsk State Economic Academy*, No. 1 (42) [in Russian].

the roadmaps is not possible without investment from both the public and private sectors. In this regard, significant attention must be paid to the issues of innovation project financing in order to implement goals and find ways to reach synergy of approaches outlined in the five programme documents.

Conclusion

The analysis of innovation development of Cyprus and Russia allows one to conclude that approaches to the creation of innovative ecosystems vary in the two countries' economies, which rely on different industries (tourism and production, respectively). Russia has several supplementary documents that regulate such sphere. Innovation centres are created based on these documents, for example, techno parks and technopoles. Mechanisms for the private sector to support innovation, such as innovation lift – a special governmental innovations support system for start-ups and other structures – are rudimentary. Nevertheless, it is clear that innovation development in the Russian Federation is mostly initiated from the top. One of the main reasons is the investment factor, since certain instability in the country's economy and its foreign policy discourages long-term investments. The regulatory base considered above does not address the problem of active involvement of the private sector in this process, despite the detailed regulation of the stages of the public innovations project.

The Cypriot concept, as presented in its Restart 2016-2020 programme, not only regulates innovation development in the country by outlining aspects, from the pillars to particular stages of investment allocation, but correlates with the European common strategy of sustainable development. This fact makes the regulatory approach of Cyprus more effective. In addition to regulation, Cyprus takes into account individual, applied projects on innovation development, including education projects. At this moment, it is premature to assess the effectiveness of these projects, but they definitely have potential.

In conclusion, it should be mentioned that despite differences in policy of the countries in this sphere, both States acknowledge one indisputable fact – innovation is key to a strong and stable economy. An innovation ecosystem must become the basis of social and economic development of a prosperous State. Implementation of this concept requires the symbiosis of the state regulation and the private sector initiatives.

References

Bogdan, V., Urda, M. and Pavlyuk, A. (2017). 'On the issue of migration legislation in Russia', *Socio-political sciences*, No. 5, pp. 60-63.

Deryabin, N. (2017). 'Russia's Strategic Governance in the Information Society of the 21st Century', *Russia: Trends and Development Prospects. Yearbook.* Issue. 12. *INION RAS.* Part 1. pp. 25-32. *[in Russian]*

Furman, J. L., Porter, M.E., and Stern, S. (2002). 'The drivers of national innovative capacity', *Research Policy*, No. 31 (6), pp. 899-933.

Kostenko, M. and Yarovaya, V. (2015). 'Legal basis for supporting innovation in the Russian Federation', *Issues of modern jurisprudence: Sat. Art. by mater. LI-LII International Scientific-Practical Conference,* No. 7-8 (48), Novosibirsk: SibAK.

Kovalenko, A., Bat'kovskii, M. and Khrustalev, E. (2005). 'Methodological foundations of economic assessment of the state's military potential', *Problems of forecasting*, No. 3, pp. 134-148.

Kulik, A., Koryakov, D. and Rozhanskaya, A. (2017). 'Digital economy as a new generation economy', *Collected papers on the results of the International Scientific and Practical Conference. – Ufa*: Limited Liability Company 'Agency for International Studies', pp. 61-64.

Kurilova, A. (2017). 'Factors affecting industrial clusters in conditions of large calls', *Azimuth of scientific research: economics and management*. T. 6, No. 1 (18). pp. 105-108.

Lozhnikova, A., Sazonov, A. and Ogorodova, L. (2012). 'Scientific and technological development of Russia: the problems of the formation of an effective mechanism or how to make important "especially important" R & D', *Bulletin of Tomsk State University*, No. 364, pp. 113-119.

Lukyanchikova, N. (2005). 'Post-industrial economy - the economy of innovation', *News of the Irkutsk State Economic Academy*, No. 1 (42), pp. 5-6.

Pavlyuk, A. and Kabakova, S. (2017) 'Administrative and legal regulation of external labor migration flows in the Russian Federation', *Socio-political sciences*, No. 5, pp. 135-143.

Rudtskaya, E., Khrustalev, E. and Tsyganov, S. (2009). 'Methods of accumulating scientific knowledge for the innovative development of the Russian economy (the RFBR experience)', *Problems of forecasting*, No. 3, pp. 134-139.

Salitskaya, E. (2016). 'Legal regulation of state support of scientific and innovative activities in the regions of the Russian Federation', *Information Society*, No. 1, pp. 55-68.

Skvortsova, T. and Milov, A. (2017). 'Vectors of innovative development of the Russian economy', *Vestnik of the Siberian Institute of Business and Information Technologies*. No. 2 (22). pp. 58-64.