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STIMULATING INNOVATION AND ECONOMIC DEVELOPMENT THROUGH THE ESTABLISHMENT OF TECHNOLOGY TRANSFER OFFICE: CASE STUDY MONTENEGRO

Petra Karanikić

PhD, Assistant Professor, University of Rijeka, Department of Biotechnology, Radmile Matejčić 2,
51000 Rijeka, Croatia; e-mail: pkaranikic@biotech.uniri.hr

ABSTRACT

Technology transfer offices have an important role as facilitators in the management of the technology transfer process between academia and industry, and in stimulating innovation and economic development. This paper aims to provide a theoretical overview of the existing technology transfer office organizational forms and relevant factors for technology transfer, to analyze and discuss the relevant factors for successful technology transfer in Montenegro, and to identify the appropriate organizational form for the establishment of the Technology Transfer Office in Montenegro. The results of the conducted analysis indicate the establishment of the National Technology Transfer Office as the most appropriate organizational form in Montenegro. The establishment of the National Technology Transfer Office as an important and currently missing entity in the National Innovation System will have a positive impact on the technology transfer process, stimulating innovation and economic development in Montenegro.

Key words: innovation, economic development, technology transfer, Technology Transfer Office, Montenegro

1. INTRODUCTION

The commercialization of the research results furtherly referred to as technology transfer (TT) is a process of commercial exploitation of the scientific research results created by the research organizations out to the industry where these results are embodied into the new products and services. TT is in the focus of academicians, TT professionals, and governments with the common aim to stimulate the TT process and to improve the national competitiveness (Grimaldi et al., 2011; Muscio, 2010). The importance of the TT process for economic development and growth was pointed out by Mansfield (1975) who argued that TT is one of the fundamental processes that

have a positive impact on the economic performances of nations and firms, and is at a heart of the process of economic growth of both developed and developing countries.

Technology transfer is a complex process that requires significant financial and appropriate human resources and involves high levels of risk (Bradley et al., 2013). The entities that are supporting the overall TT process and are important core components of every TT ecosystem are Technology Transfer Offices (TTOs), science parks, incubators, and university venture funds (Huyghe et al., 2014) since they act as organizational entities that support the overall TT process.

Technology and knowledge transfer from academia into the industry with the aim of commercial exploitation of the research results and public and social benefits requires a formal organizational mechanism – a TTO. TTOs play a significant role in facilitating and managing the successful technology and knowledge transfer process between academia and industry. Today almost all research institutions and universities have established their respective TTOs to manage the technology and knowledge transfer processes more efficiently (Karanikić, Bezic, 2021). Unfortunately, the TTO is still not established in Montenegro.

Many developing countries have already established their TTOs, but they are still inefficient in the implementation and management of the technology and knowledge transfer process. Experiences from developed countries with their established TT systems and policies can serve as a basis for developing countries to put their TT systems in place (Fai et al., 2018). Developing countries in their efforts to achieve a higher level of development are focused on the transformation from a resource-based to a knowledge-based economy through the establishment of the appropriate and country-specific national innovation system (NIS). Etzkowitz and Leydesdorff (2000) define a NIS of a particular country as a system of institutions in both public and private sectors in which these institutions through the implementation of their activities initiate, modify and diffuse new technologies, and universities and research institutions as key stakeholders with a unique role in the system (Ranga, Etzkowitz, 2013; Brescia et al. 2016). For this reason, developing countries need to establish an adequate TT system within the overall national innovation systems.

TTOs received limited attention in the literature concerning their organizational forms and structures. TTOs can have different organizational forms and structures depending on the various contextual factors. There are organizational and structural differences between and within countries since a heterogeneous approach taken by universities related to the interactions between universities and private sector and society is present (Geuna, Muscio 2009).

This paper aims to provide a theoretical overview of the existing TTO organizational forms and structures and identify and analyze the important factors that should be considered when establishing a TTO. The theoretical findings will present a basis for the analysis of the relevant factors for successful TT and the proposal of the most appropriate organizational model for the establishment of the TTO in Montenegro.

The paper is organized as follows. The theoretical overview of the existing TT organizational forms and structures are identified and presented in the second chapter. The third chapter provides an analysis of the relevant factors for TT in Montenegro: stakeholders and infrastructure, legislative

framework, and funding possibilities. In the fourth chapter, the most appropriate organizational form for the establishment of TTO in Montenegro is proposed and discussed. In the final chapter, some concluding remarks are made.

2. THEORETICAL OVERVIEW

Technology transfer offices (i.e., knowledge transfer offices - KTOs, industrial liaison offices - ILOs, university technology transfer offices - UTTOs) act as facilitators in the implementation and management of the overall TT process and can have different organizational forms and structures depending on various factors (Brescia et al., 2016).

Most of the studies that have considered the organizational forms of TTOs identified centralized and decentralized organizational forms of TTOs as the most common. However, several studies have discussed that TTOs can have different organizational forms.

Link and Siegel (2005) identified two basic organizational structures of TTOs: a centralized structure where the TT process is managed by a single central unit, and a decentralized structure where the management of the TT process is distributed among several units. Litan and Mitchell (2007) found that after the adoption of the Bayh–Dole Act in 1980 in the United States many US universities have implemented their TT activities through a centralized TTO. Jones-Evans et al. (1999) analyzed ILOs in Sweden and Ireland. They argue that the decentralized structure with one central ILO as a referral point for other TT units was the most common organizational model in Sweden, while in Ireland there was a tendency to have a central responsible unit for management and implementation of the TT activities. Huyghe et al. (2014) analyzed the TTO structure of the Ghent University and identified a hybrid TTO model as a combination of a centralized and decentralized model. Debackere and Veugelers (2005) argue that a decentralized TTO within the university enables a sufficient autonomy level since the responsibility needed for successful TT activities is delegated close to the research groups and individual researchers.

Internal and external forms and structures of TTOs have also been discussed in the existing literature. Fisher and Atkinson-Grosjean (2002) define the internal model of the ILO as a model where the ILO is completely integrated into the university administrative structure while in the external model the ILO operates outside the university as a profit or a non-profit corporation. In their research, Markman et al. (2005) conducted interviews with 128 KTO directors and identified three different KTO structures based on the institutional autonomy level related to TT activities: the traditional KTO (organized as an integral university department) and two additional variations of the external structural model – the non-profit foundation and a profit private venture. Bercovitz et al. (2001) identified four organizational KTOs forms based on the organized models implemented by enterprises: the functional or unitary model (U-form), the multidivisional model (M-Form), the holding company (H-Form), and the Matrix model (MX-form).

Besides the previously elaborated TTO forms and structures, other alternative TTO forms and structures are discussed by the scholars. A network organizational form is another type of possible TTO structure. According to Powel (1990), a network organizational form as an interconnected group or a consortium of KTOs allows better access to relevant know-how and skills which cannot

be held internally by a single KTO. This situation is seen at smaller universities since they are often faced with a lack of financial resources and essential skills to support and implement the TT activities. Certain EU countries, as reported by Geuna and Muscio (2009), have established the national KTO networks that have positive effects in terms of knowledge and technology dissemination and networking. Young (2007) analyzed various organization models of TTOs and proposed alternative models characterized as network models and globally proven. These organizational models are an external organization (non-profit or profit) contracted by the research institution to manage the TT activities, a single TTO that serves the consortium of several public research organizations/universities in a particular region, and a single TTO funded by the national government that serves several public research organizations/universities.

Brescia et al. (2016) identified the contextual factors that should be considered in the selection of the appropriate organizational structure of a TTO. They focused on the three different macro-factors: the TTO context, the University context, and the Country context. The TTO context refers to the TTO personnel and its maturity as important aspects of the TTO organization. The University context has an important role in setting the objectives of a TTO, its relationships with the university structures, and funding possibilities. For a particular TTO, it is important to have access to the necessary infrastructure and to define and adopt relevant policies and programs to ensure an efficient TT process. The Country context affects the TTO organizational structures in relation to the relevant aspects of the national innovation system of a particular country, especially related to the IP laws, university autonomy, and the funding possibilities (e.g., national funds and grants for innovation, TT, etc.). Their analysis of the TTO organizational structures of the 200 top-rated universities according to the Times Higher Education's World University Ranking for 2012-2013 has shown that there are three TTO organizational models adopted by universities: Internal, External, and Mix models. In the Internal model, the overall TT process is managed internally by a dedicated office. In the External organizational model, the TT process is managed by an independent company outside the university. The Mix organizational model is a combination of both Internal and External models in which universities implement a customized subdivision of TT activities.

For a successful TT system and implementation and management of the TT process, it is important to have relevant policies and instruments put in place. The need for policymakers to consider both direct and indirect impacts of policies at the meso and micro levels was emphasized by Lehmann and Menter (2017). They argue that it is essential to have the appropriately designed programs, policies, and policy instruments by the policymakers to support the effective long-term TT process.

Several studies have addressed and discussed the establishment and performances of TTOs in developing countries. Some of them demonstrated that many TTOs in developing countries are operating inefficiently (De Falco, 2015; Oliveira, Teixeira, 2010; Tahvanainen, Hermans, 2011). According to Kruss and Visser (2017), most of the TTOs in developing countries have implemented a reactive approach to the TT on a case-by-case basis, and only when the TT opportunities arise. They argue that TTOs in developing countries need to implement a well-defined and proactive approach to TT. Turkey et al. (2016) identified the main challenges faced by the early-stage TTOs in developing countries: institutional obstacles to IP protection (especially patenting), to the licensing

and the foundation of spin-off companies, very low IPR awareness among relevant stakeholders, and the legislation issues related to the IPR.

During the emergent phase of the TTO development, the understanding of the purpose and intention of a TTO is important and at the same time a complex task, especially in developing countries (Fitzgerald, Cunningham, 2016). According to Fai et al. (2018), a definition of a single dominant objective with the corresponding alignment of the TTO structure and activities would be the best option for TTOs in developing countries to avoid the potential difficulties during their early stage of development. The clear TTO mission statement and organizational structure that supports the TT activities are the prerequisites for the establishment of a successful TTO.

The contextual, as well as time-specific factors, will have a strong impact on the TTO structure and development. Developing a TTO requires several important aspects to be considered: a transparent mission statement of a TTO, relevant policies and procedures defined and put in place, sources of financing of TTO activities, and the engagement of the relevant TTO staff.

3. ANALYSIS OF THE RELEVANT FACTORS FOR SUCCESSFUL TECHNOLOGY TRANSFER IN MONTENEGRO

The analysis of the relevant factors for successful TT in Montenegro was conducted through the desk research of sources that were publicly available or provided by the Ministry of Economic Development (former Ministry of Economy of Montenegro) and the Ministry of Education, Science, Culture and Sports (former Ministry of Science of Montenegro).

As stated before, the successful TT process requires strong collaboration between all relevant stakeholders, the existence of adequate infrastructure, policy and legislative framework, and adequate funding. For the purpose of this research the relevant stakeholders and the existing infrastructure, legislative framework, and funding possibilities TT in Montenegro are analysed and discussed.

3.1 Analysis of the relevant stakeholders and infrastructure for the technology transfer process in Montenegro

For the creation of a successful and sustainable TT system, sound communication between all relevant stakeholders within the national innovation system is crucial. The most important stakeholders related to the TT system in Montenegro are the Ministry of Economic Development and the Ministry of Education, Science, Culture and Sports. Other stakeholders are presented in Table 1.

Table 1. Other stakeholders for sustainable technology transfer system in Montenegro

Stakeholder	Description
Other ministries (i.e., Ministry of Agriculture, Ministry of Capital Investments, Ministry of Public Administration, Ministry of Ecology, Ministry of Health)	Provide a significant contribution to the improvement of the TT process within the scope of their jurisdiction.
Directorate for Intellectual property (within the Ministry of Economic Development)	Performs activities in the field of IPR protection and is engaged in supporting professional and legislative activities related to IPR.
Scientific research institutions, centres of excellence, higher education institutions, centres for TT, science and technology parks, centres for innovation and entrepreneurship, business incubators, and R&D companies or parts of companies.	Innovative organizations that support the implementation of the TT process
Science and Technology Park Montenegro	Provides support in developing and commercialization of innovative ideas and projects.
Innovation and Entrepreneurship Centre "Tehnopolis"	Its focus is on the promotion and development of entrepreneurship and innovative business, and it offers pre-incubation, incubation, and post-incubation services.
Universities (1 public and 3 private) and 3 operational institutes. The University of Montenegro is the public and the largest university in Montenegro and the 3 private universities are University Donja Gorica, University Mediteran, and University Adriatik.	Higher education and scientific research institutions performing teaching and R&D activities.
The Institutes within the University of Montenegro: the Marine Biology Institute, the History Institute, and Institute-Centre of Excellence for Research and Innovation	Institutes performing R&D activities in their specific area.
Centre of Excellence in Bioinformatics (BIO-ICT), Centre of excellence for digitalization of food safety risk assessment (FoodHub), Centre of Excellence for Biomedical Researches (CEBIMER)	Entities that concentrate their expertise and resources and are performing R&D activities with the highest standards maintained within their specific scientific area.
Innovation Fund of Montenegro Ltd.	Implements the innovation policy by providing and directing financial resources from national, international, and other sources towards the development of innovative entrepreneurship and encouraging cooperation between the scientific and private sectors.

Source: Strategy on Innovation Activity (2016-2020), University of Montenegro; adapted by Author

The research infrastructure plays an important role in the scientific research and innovation system and is one of the basic requirements for the improvement of the knowledge base in all science disciplines. For this purpose, the Ministry of Education, Science, Culture and Sports introduced the *Register of Innovative Organizations* and the *Register of Licensed Scientific Research Institutions* in 2018. Currently, there are 25 innovative organizations and 42 scientific research institutions registered. Since there are two main preconditions for the efficient TT system: infrastructural and

regulative (Karanikic et al., 2019), the introduction of these two Registries presents an important prerequisite for the successful TT process.

The overall analysis of the stakeholders and infrastructure relevant for the development of the efficient TT system within the national innovation system shows that the national innovation system of Montenegro is well structured. However, as stated above, the TTO is still not established in Montenegro at the national level, but the necessity of its establishment is defined and is a part of almost all relevant policy documents.

3. 2 Analysis of the legislative framework related to the technology transfer process in Montenegro

Montenegro has made significant progress in the field of innovation through the adoption of its strategic and legislative framework, important for establishing the relevant institutional framework for innovation and the TT system within the national innovation system, and strengthening the national innovation potential. The most important strategic document is the *Smart Specialization Strategy of Montenegro – S3 (2019–2024)* which defines the priority areas with the greatest potential for economic development. Other important documents in this area are:

The *Strategy on Innovation Activity (2016–2020) with the Action Plan (2016)* had the main objective to create a sustainable and efficient national framework and to enable the implementation of the scientific research and development activities directed at innovation and application of the new technologies.

The *Law on Innovation Activities (2020)* regulates the organization, conditions, financing possibilities, and stimulation of the innovation activities to improve the national innovation system through the development of innovation capacities and infrastructure for the needs of the economic development of Montenegro. This Law foresees the existence of the Technology Transfer Centre as an important entity either within a university or a science and technology park. In addition, by this Law, the foundation of the Innovation Fund of Montenegro is defined as a limited liability company with the task of efficient implementation of innovation policy and providing funding to support innovation activities.

The *Law on Incentives for Research and Innovation Development (2020)* defines the incentives for research and innovation development as measures that will support the scientific research and innovation activities, as well as investments in these activities. These incentives aim to encourage economic and technological development, support innovation and entrepreneurship and create a more favorable environment for innovation.

The *Strategy of Scientific Research Activity (2017–2021)* defines the measures and instruments directed toward the higher quality of the research, access to modern technologies, and the promotion of a more competitive knowledge-based economy through the partnership between scientific research institutions and the private sector. One of the goals of the Strategy is to strengthen the collaboration between academia and industry through the following measures: improvement of the TT mechanisms, creation of a more favorable environment for innovative

entrepreneurship, and provision of financial support to research and innovation (R&I) activities and entrepreneurship.

The *Industrial Policy of Montenegro (2019–2023)* defined stimulating innovation, TT, and the development of entrepreneurship as its strategic goals. It identifies the need for the establishment of the TTO to support the research and commercial projects and innovation activities in Montenegro.

The *Roadmap for Research Infrastructure (2014–2020)* and the *Revised Roadmap for Research Infrastructure of Montenegro (2019-2020)* provides a detailed overview of the research infrastructure in Montenegro and define the directions for further development.

As countries increasingly turn to innovation to drive their economic development in a globalized world, the integration of the intellectual property system in innovation policymaking becomes even more critical. A lack of IP framework is present in Montenegro on both national and institutional levels and presents an obstacle for the successful collaboration between academia and industry. There is a need in Montenegro for the preparation of the IP Policy both on the national and institutional levels. The institutional level IP policy should be in line with the national IP policy.

3. 3 Analysis of the funding possibilities related to the technology transfer process in Montenegro

Many programs were developed and implemented in the area of R&I by the relevant stakeholders in Montenegro (i.e., Ministry of Economic Development and the Ministry of Education, Science, Culture and Sports). Some of these programs relevant for TT are:

The *Grants for Innovative Projects* were the instrument of the former Ministry of Science and currently of the Ministry of Economic Development, started in 2018 and implemented in line with the Programme of Grants for Innovative Projects for the period 2018–2020 and Collaborative Innovation Programme 2019–2024. These programs aim to strengthen the competitiveness of companies in Montenegro through the co-financing of innovative market-oriented technologies (products and services), supporting the transfer of innovative ideas through the collaboration between academia and the private sector, and establishment of spin-off/start-up companies.

The *Grants for the Scientific Research Projects* are a specific instrument designed to support scientific and research groups and scientific research institutions in Montenegro. The aim of this financial instrument is the capacity building of research teams in Montenegro to strengthen the quality and sustainable partnerships and encourage excellence, which would contribute to the development of a knowledge-based society and competitiveness at the international level.

The *Innovation Fund of Montenegro Ltd.* (established in 2021) will implement the innovation policy through the provision of direct funding from national, international, and other sources to foster the collaboration between academia and industry and to implement programs and projects in the framework of the S3 of Montenegro. The Fund was founded as a limited liability company and is owned by the Government of Montenegro. The overall goal of the Fund is to foster Montenegro's

economic development and competitiveness by increasing the level of innovativeness of its economy. The Fund aims to provide an added value to the existing financial framework for innovation and TT activities within the National Innovation System.

Several programs relevant for TT were proposed by the Innovation Fund of Montenegro: the Programme for developing innovative enterprises, the Proof of concept program, the Programme for fostering innovation, the Programme for developing venture capital funds, and the Programme for developing projects conducive to S3 (Ministry of Economic Development, 2021). The Proof-of-concept (PoC) program is a very important financial instrument related to the TT but is still not present in Montenegro. Its introduction and implementation will significantly contribute to the successful TT activities and further development of the TT system in Montenegro. Within the Programme for fostering innovation, a grant for TT is foreseen in addition to the PoC program and will be used for TT activities such as IP valuation and protection, IP commercialization strategy, market analysis, business planning, licensing, etc.

The analysis of the relevant factors for TT identified certain opportunities and challenges for the enhancement of the TT landscape in Montenegro. The overview of the opportunities and challenges is presented in Table 2.

Table 2. The overview of opportunities and challenges related to the technology transfer landscape in Montenegro

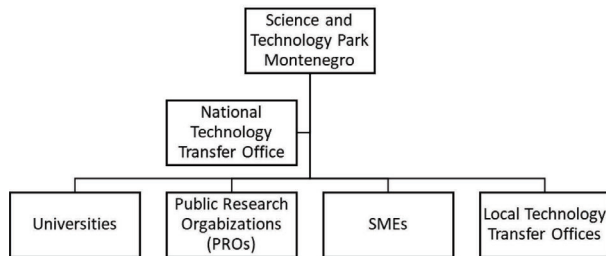
Opportunities	Challenges
Well educated human resources	Low national investment in R&D
Newly established Science and Technology Park Montenegro and Centers of Excellence	Low R&D activities in the private sector
Candidate country for the EU membership	A relatively small number of researchers
Existence of several strategy documents and policies relevant for the development of the TT system	Lack of academic entrepreneurship
National support for the development of micro and SMEs in Montenegro	Lack of educational programs/training on IPR protection and management
New legislation related to the innovation activities and incentives for R&I development	Lack of internal institutional management policies for IPR management in all scientific institutions
Existence of the national Roadmap for Research Infrastructure	Lack of integration of the IPR system into the national innovation system
Establishment of the Innovation Fund of Montenegro	Non-existence of the TTOs (limited TT activities are supported by the Technology Transfer and Professional Services Centre at the University of Montenegro)
	Limited availability of the start-up/seed capital
	Small internal market

Source: Author

4. DISCUSSION

Based on the existing TTO models elaborated and described in the theoretical overview and the conducted analysis of all relevant aspects and factors for TT needed for the effective TT system in Montenegro, the author concludes that the most appropriate model of establishing a TTO in Montenegro should be the central TTO organizational model – the *National Technology Transfer Office (National TTO)*, presented in Figure 1.

Figure 1. Proposed National TTO within the Montenegrin TT system



Source: Author

The setting up of the central National TTO does not exclude the possibility for scientific and research institutions or other relevant entities to set up their TTOs (with their resources), but these TTOs should serve as affiliates of the National TTO and/or as technology scouts. Scientific institutions also can appoint a person at their institution – a Technology Manager that will serve as a link and coordinator between their institution and the National TTO. Local TTOs or TT units established within the main scientific and research institutions should provide basic TT activities and facilitate the communication between these institutions and the National TTO. However, the implementation of all relevant programs and initiatives related to TT must be centralized and implemented through the National TTO.

The National TTO should be set up as an organizational unit of the STP Montenegro, situated, and managed by the STP Montenegro the National TTO should be located at the source of relevant information and activities. The mission and vision of the National TTO should be in line with the Government goals, mission, and vision of the STP Montenegro and the Innovation Fund of Montenegro. The overall role of the National TTO should be to (not limited) screen, evaluate, protect and, in collaboration with STP Montenegro, commercialize IP generated at universities and PROs.

The National TTO should receive strong support from the Ministry of Economic Development and the Ministry of Education, Science, Culture, and Sports since both Ministries play an important role within the National Innovation System of Montenegro and implement and monitor all relevant regulative documents important for the effective TT system.

The role of the National TTO should be to support, besides universities, PROs, SMEs, and local TTOs (if any), and this role can be extended to the organizations listed in the Register of Innovative Organizations.

The establishment of the National TTO in Montenegro should provide various benefits such as achieving a critical mass of knowledge outputs and high-level technologies; building up sustainable skills and expertise, and supporting tools; promoting collaboration and networking between the academia and industry and other, stakeholders within the TT system; minimizing the investments and time needed for a TTO to become operational; assuring utilization of existing expertise, know-how and supporting tools; and assuring linkages with the existing and ongoing innovation activities between all relevant stakeholders within the TT system.

Concerning the financial support, the National TTO should implement the programs relevant for TT defined and funded through the Innovation Fund (e.g. PoC, etc.) or other potential sources of funding.

Human resources for the National TTO should be provided by the Science and Technology Park Montenegro and potentially financed through the Innovation Fund of Montenegro. Since the well-trained staff at the TTOs are essential for the efficient TT process, their training can be realized in different ways: through the various specialized training and workshops (such as World Intellectual Property Office training on IPR protection and management, various webinars organized by IPR Helpdesk, etc.), Erasmus mobility Program, and most importantly through the “learning-by-doing” model. With the clearly defined roles, activities and responsibilities, the National TTO staff should be able to manage the TT activities efficiently.

5. CONCLUSION

TTOs are very important in the innovation and TT system and play a significant role in the facilitation and management of the TT process. The decision to establish the TTO and a choice of its organizational form and structure should be based on the analysis of the contextual factors of a particular country, the willingness and the long-term commitment of the relevant institutions and stakeholders to support and enhance the TT system, and on the availability of the adequate financial and human resources.

The conducted analysis of the relevant factors for TT in Montenegro demonstrated the presence of the relevant TT infrastructure, the well-structured national innovation system with defined roles and responsibilities of all stakeholders, the existence of the strategic and legislative framework related to the innovation and TT mechanisms, and adequate funding possibilities. The introduction of the currently missing TTO in a proposed form of a National TTO within the existing Science and Technology Park Montenegro will enhance the TT process within the National Innovation System of Montenegro.

The lack of internal institutional management policies for IPR management in all scientific institutions and the lack of integration of the IPR system into the national innovation system are among the identified challenges related to the TT landscape in Montenegro. Since adequate IPRs

protection and management are very important factors for the successful implementation of the TT process the particular focus should be on the introduction and adoption of the relevant policies related to this issue by relevant stakeholders in Montenegro.

An important aspect that should be considered when establishing a National TTO in Montenegro is the willingness of the Government and relevant Ministries to ensure a long-term commitment and support to the TT activities. The National TTO will be faced with certain challenges for example the inadequate governance model of the National TTO, the profit-sharing issues, the potential incompatibility with the national and institutional legislation related to the public university and research institutions, and the necessity to align with national legislation relevant for innovation and TT activities.

The establishment of the National TTO with its contribution to the National Innovation System will have a positive effect on innovation activities stimulation and therefore on the economic development of Montenegro.

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POTICANJE INOVACIJA I EKONOMSKOG RAZVOJA KROZ OSNIVANJE UREDA ZA TRANSFER TEHNOLOGIJE: STUDIJA SLUČAJA CRNA GORA

Petra Karanikić

Dr. sc., docentica, Sveučilište u Rijeci, Odjel za biotehnologiju, Radmile Matejčić 2, 51 000 Rijeka, Hrvatska;
e-mail: pkaranikic@biotech.uniri.hr

SAŽETAK

Uredi za transfer tehnologije imaju važnu ulogu u upravljanju procesom transfera tehnologije između akademske zajednice i privatnog sektora, te u poticanju inovacija i gospodarskog razvoja. Cilj ovog rada je dati teorijski pregled postojećih organizacijskih oblika ureda za transfer tehnologije i relevantnih čimbenika za transfer tehnologije, analizirati i razmotriti relevantne čimbenike za uspješan transfer tehnologije u Crnoj gori te identificirati i predložiti odgovarajući organizacijski oblik za osnivanje ureda za transfer tehnologije u Crnoj Gori. Rezultati provedene analize ukazuju na osnivanje Nacionalnog ureda za transfer tehnologije kao najprikladnijeg organizacijskog oblika u Crnoj Gori. Osnivanje Nacionalnog ureda za transfer tehnologije kao trenutno nedostajućeg, ali važnog subjekta unutar nacionalnog inovacijskog sustava imat će pozitivan utjecaj na unapređenje procesa transfera tehnologije i poticanje inovacija i gospodarskog razvoja Crne Gore.

Ključne riječi: inovacije, gospodarski razvoj, transfer tehnologije, ured za transfer tehnologije, Crna Gora

