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### RESEARCH ARTICLE

#### EXPERIENCE OF ECONOMICALLY DEVELOPED COUNTRIES REGULATION OF TECHNOLOGY TRANSFER

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#### Abstract

The article deals with the regulation of technology transfer in various countries. The author carried out a comparative and critical analysis of the experience of various countries, as well as the best practices that can be used by developing countries.

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#### Introduction:-

The experience of economically developed countries in regulating international technology transfer is very relevant and necessary for studying the development of national legal framework for technology transfer in developing countries.

At the same time, the developed countries of the world, both themselves and in the regional aspect, pay special attention to innovations, their distribution, international and regional transfer. In particular, the US, UK, EU, China, South Korea, Japan, CIS countries are developing their capabilities and regulation in the field of technology transfer. The experience of such countries is very important for developing countries.

#### Discussions:-

The foreign experience is dominated by the experience of the United States, as the first state to form legislation on technology transfer. Thus, since 1948, the United States has established a system for the transfer of technology from science to industry. This activity intensified in the 1980s when the US Department of Commerce was given broad powers to support technology transfer.<sup>1</sup>

Also in the United States, a model agreement on cooperation in research and development has been created, which is the legal basis for technology transfer. According to this agreement, commercial organizations finance scientific laboratories and universities, providing them with personnel, equipment and premises. Laboratories and universities provide entrepreneurs with their equipment and scientific personnel<sup>2</sup>.

<sup>1</sup>Metelitsa A. Review of legal regulation of international technology transfer. Journal of International Law and International Relations. 2010. No. 2.

<sup>2</sup>On the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations: Recommendation of the Commission of the European Communities of 10 April 2008 N 1329 // Official Journal of the European Union. 2008. V. 51. L 19. P. 19–24.

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An efficient technology transfer system is one of the main factors behind the superiority of the United States over other countries in labor productivity. The European Union, recognizing this superiority, has developed a number of measures to improve the efficiency of technology transfer, including by strengthening links between science and industry and addressing gaps in knowledge and intellectual property management<sup>3</sup>. One such activity is the adoption of a Model Code of Conduct on Knowledge Transfer<sup>4</sup>.

The goal of US technology transfer legislation and policy is to promote the transfer of technologies developed with federal funds to ensure the sustainable growth of the US economy and increase the competitiveness of American industry.

Beginning in 1980, the US Government transferred all its rights to the results of scientific and scientific and technical developments carried out at the expense of budgetary funds to implementing organizations and provided tax and other benefits to firms that use innovations in their production. In addition, special technology transfer offices were established at all federal laboratories with more than 200 employees, in which at least one full-time employee was required to work.<sup>5</sup>

An analysis of the US experience in creating technology transfer centers has shown that, in general, intermediary organizations of the innovation market arise within or with the participation of leading universities and scientific organizations.

One of the first industrialized countries of the world to realize the need for state management of technology transfer was Great Britain, where in 1948 the National Research and Development Corporation (NRDC) was established. The corporation covered all stages of the innovation cycle from research to the formation of venture capital<sup>6</sup>.

In the UK, the system of bodies that select priority areas for scientific and technological development, along with the military departments, the Ministry of Education and Science, the Ministry of Industry (all these bodies have scientific councils), includes interdepartmental bodies - the Committee of the Chief Investigator, the Advisory Council for Applied Research and Development<sup>7</sup>.

The public policy of Great Britain is based mainly on a number of normative and program acts that determine the directions and priorities of state support for science and innovation, the role of science and innovation in the economic development of the country and improving the welfare of the nation.

Let us briefly consider the main points of the most important state documents in this area. One of the main ones is the policy document of the UK Government "Excellence and Opportunity - A Science and Innovation Policy for the 21st Century" (July 2000)<sup>8</sup>. This document formulates the proposals of the Government aimed at building a dynamic knowledge economy in the UK, defines the main directions of state policy to accelerate the pace of creation and implementation of innovations, including: - investing in the development of a first-class scientific base in the UK; - stimulating closer ties between universities and business to turn the excellence of British science and technology into effective innovative products and services in the market; - strengthening the reliance on science in economics.

This policy document created a legal framework in which the UK Government plays the role of the main investor in the field of science and technology, a stimulator of scientific and innovative development and the main regulatory

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<sup>3</sup>Creating a conducive environment for higher competitiveness and effective national innovation systems. Lessons learned from the experiences of UNECE countries. New York; Geneva: United Nations, 2007. P.24.

<sup>4</sup>On the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations: Recommendation of the Commission of the European Communities of 10 April 2008 N 1329 // Official Journal of the European Union. 2008. V. 51. L 19. P. 19–24.

<sup>5</sup>Viltovsky D. M., Mashonskaya E. P., Uspensky A. A. "Policy and legislation in the field of technology transfer: foreign and national experience", textbook. Minsk "Ark", 2010. -p.60.

<sup>6</sup>I. "Technology transfer in developed countries. <https://studopedia.info/3-39764.html>

<sup>7</sup>Margolina N. Management of the formation of the organizational system of technology transfer. Diss. cand. economy Sciences. M., 2007.

<sup>8</sup>Excellence and opportunity : a science and innovation policy for the 21st century. Great Britain. Department of Trade and Industry. London: Stationery Office, 2000.

link in this area, responsible for strengthening public conviction in the need to develop science and innovation, as the main locomotive of public development.

The principles of UK science and technology policy, its formation and implementation are also set out in the Guidelines 2000 (Guidelines 2000) and the Code of Practice for Scientific Advisory Committees.<sup>9</sup> based on the key points formulated by Lord Philips in his BSE Inquiry Report and the Government's response to the BSE Inquiry Report. Guidelines 2000<sup>10</sup> determines for all ministries the obligation to plan their activities and early identification of issues requiring consultations of external scientific bodies; obtaining a broad plan of consultations from the best sources; and the publication of recommendations received and all related materials. The Chief Science Adviser prepares reports on the implementation of the Policy Directions<sup>11</sup>.

The Code of Practice for Scientific Advisory Committees formulates the principles for the activities of committees, their boards, members and secretariats and creates the legal environment for the activities of scientific advisory committees.

In the UK, special attention is paid to the process of technology transfer and its commercialization. The government of the country is the main investor in the field of science and technology, a stimulator of scientific and innovative development and the main regulatory link in this area. Each stage of the innovation process, from the development of technology to its commercial use, is clearly systematized. An important role in this was played by the Policy Documents and laws adopted by the Government of the country, aimed at building a dynamic knowledge economy in the UK.

It is also relevant to consider the experience of Switzerland, which is a leading country in terms of innovative capabilities and results among the EU countries.

Switzerland is making great efforts to commercialize its scientific and technological potential. The State Commission for Technology and Innovation (KTI) puts into practice the slogan: "Science into market circulation". Acting as the agency for innovation and development at the state level, KTI supports applied R&D, promotes young companies and promotes entrepreneurship in general.

The issues of commercialization of innovative developments in Switzerland are not supported by direct public investment. The private sector plays an important role in financing scientific and technological developments in the country. The transfer of innovative technologies to industry occurs within the framework of existing forms of support for firms, mainly in technology parks. Due to the lack of direct state support for innovation in the business sector, innovation policy instruments are mainly focused on the supply of applied scientific research.<sup>12</sup>

The Swiss Association for Technology Transfer "swiTT" was founded in 2003. In its activities, it exchanges scientific and technological information between national research institutions and the private sector. Special centers for the commercialization of the results of scientific and technical activities operate at Swiss universities<sup>13</sup>.

It should be noted that these methods of building the technology commercialization process are successfully used not only in Switzerland, but also in most other European countries, which proves their effectiveness and the possibility of adaptation in Uzbekistan. This concerns, first of all, the involvement of the private sector in the

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<sup>9</sup>The Code of practice for scientific advisory committees (CoPSAC). <https://www.gov.uk/government/publications/scientific-advisory-committees-code-of-practice/code-of-practice-for-scientific-advisory-committees-and-councils-copsac-2021>

<sup>10</sup><https://api.parliament.uk/historic-hansard/commons/2000/oct/26/bse-inquiry-report>

<sup>11</sup>O. Gutnikov, Comparative Analysis and Evaluation of Legislative Models for Regulation of Innovation Activity. // Legislation and economics. 2006. -№10. <http://www.center-bereg.ru/l3163.html>

<sup>12</sup>Ilyin P.V. Foreign experience of technology transfer - into Russian practice. Economic and social changes: facts, trends, forecast. 2013. No. 1 (25).

<sup>13</sup>Solovieva Yu.V. Formation and development of a technology transfer system in Russia and abroad. <https://institutiones.com/innovations/2565-formirovanie-razvitie-sistemy-transfera-texnologij-rossii-za-rubezhom.html>; Official information portal of Switzerland. - Access mode: [http://www.swissworld.org/ru/nauka/nauka\\_i\\_gosudarstvo/transfer\\_tehnologii/](http://www.swissworld.org/ru/nauka/nauka_i_gosudarstvo/transfer_tehnologii/)

process of financing technology transfer. And the state is required to provide state economic support for such processes by providing benefits and preferences to research institutes of the Academy of Sciences of the Republic of Uzbekistan.

Thus, we can observe that technology transfer in the Republic of Uzbekistan, the USA, Great Britain and Switzerland differs due to differences in the innovation culture of universities, business representatives of these countries, as well as motivation and the way technology transfer relations are regulated.

An analysis of the legislation of foreign countries on the regulation of technology transfer allows us to distinguish the following three groups of countries.<sup>14</sup>

The first group includes Korea, China, the Russian Federation - the successor of the USSR, Greece, France, Mexico, Argentina, Brazil, Poland and others that have most fully applied the provisions of the International Code of Conduct in the field of technology transfer by introducing special legislation to regulate the import of technologies with a permissive procedure for concluding contracts. .

For example, in China, according to the Rules for the Management of Technology Import Contracts of 1985, it is possible to import technologies if one of the following conditions is met: the creation of new products, the improvement of the quality of goods, the reduction of production costs, the consumption of energy and raw materials, the use of local resources. The contract should not include unreasonable restrictions, including requirements for the purchase of equipment, services that are not related to technology; limitations in technology improvement; claims for payments for patents that are not used or invalid; ban on the use of technology after the end of the contract, etc. The supplier is obliged to train the purchaser's personnel. Royalties are usually limited to 2-5 percent. The term of the contract should not exceed 10 years.

The contract comes into force after its consideration and approval by the competent authority within 60 days. Similar control is exercised in China regarding foreign investment, along with the application of a system of tax and other incentives to attract technology-oriented investment.

The Republic of Korea, in addition to regulating technology imports, it is known for its prudent policy regarding foreign investment. So, by the mid-60s. In the 20th century, the former agricultural colony of Japan was closed to foreign investors. Since 1966, the implementation of the program of import substitution and industrialization began. After the liberalization of the economy in the early 70s. it was allowed to create joint ventures with a share of foreign capital up to 50%.

In the countries of the second group, the first place is not the technological side of the contract, but the control of the contract's foreign exchange payback, the amount of license fees, and the mandatory registration of the contract. This procedure was adopted in Australia, Chile, Switzerland, Sweden, South Africa, Austria. In these countries, the transfer of license fees could only be carried out on permits, which were granted after the study of the effectiveness of the contract.

In the countries of the third group - the leading developed countries with a positive currency balance - the USA, Japan, Germany, other EU countries - such regulation was not of great importance. Technology transfer is influenced by cartel legislation. As a rule, it is not allowed to grant one of the parties the exclusive right to sell products, it is forbidden to oblige the buyer of technology to purchase raw materials, equipment, additional technologies only from a certain seller, and also to prohibit the purchase and use of competing technologies, it is not allowed to limit the volume of production of products, prices.

### **Conclusion:-**

Foreign experience in technology transfer and commercialization of innovations may not always be acceptable in national conditions. However, it contains valuable rational grains that can bring a good harvest on domestic soil.

Obviously, in order to solve the above problem, along with attracting significant direct investments in the modernization of industrial enterprises, it will be necessary to create a special innovation infrastructure: specialized

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<sup>14</sup>Kapitsa Yu.M. Export - import of technologies: legal regulation. -K.: Intergid.-2000.- 104 p.

research centers and innovative firms that would ensure the transformation of new promising scientific ideas into product and technological innovations; a new legal framework that encourages innovative entrepreneurship and the financial risks associated with it, guaranteeing the protection of intellectual property rights; scientific (innovation) parks, business incubators and other elements of innovation infrastructure that have not yet received sufficient development in our country, but have proven themselves in practice in other industrialized countries.

### References:-

1. Метелица А. Обзор правового регулирования международной передачи технологий. Журнал международного права и международных отношений. 2010. № 2.
2. On the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations: Recommendation of the Commission of the European Communities of 10 April 2008 N 1329 // Official Journal of the European Union. 2008. V. 51. L 19. P. 19–24.
3. Creating a conducive environment for higher competitiveness and effective national innovation systems. Lessons learned from the experiences of UNECE countries. New York; Geneva: United Nations, 2007. P.24.
4. On the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organizations: Recommendation of the Commission of the European Communities of 10 April 2008 N 1329 // Official Journal of the European Union. 2008. V. 51. L 19. P. 19–24.
5. Вильтовский Д. М., Машонская Е. П., Успенский А. А. «Политика и законодательство в сфере трансфера технологий: зарубежный и национальный опыт», учебное пособие. Минск «Ковчег», 2010. –С.60.
6. ТРАНСФЕР ТЕХНОЛОГИЙ В РАЗВИТЫХ СТРАНАХ. [HTTPS://STUDOPEDIA.INFO/3-39764.HTML](https://studopedia.info/3-39764.html)
7. Марголина Н. Управление формированием организационной системы трансфера технологий. Дисс. канд. экон. наук. М., 2007.
8. Excellence and opportunity : a science and innovation policy for the 21st century. Great Britain. Department of Trade and Industry. London : Stationery Office, 2000.
9. The Code of practice for scientific advisory committees (CoPSAC). <https://www.gov.uk/government/publications/scientific-advisory-committees-code-of-practice/code-of-practice-for-scientific-advisory-committees-and-councils-copsac-2021>
10. <https://api.parliament.uk/historic-hansard/commons/2000/oct/26/bse-inquiry-report>
11. Гутников О. В. «Сопоставительный анализ и оценка законодательных моделей регулирования инновационной деятельности». // Законодательство и экономика. 2006. –№10. <http://www.centerbereg.ru/l3163.html>
12. Ильин П.В. Зарубежный опыт трансфера технологий — в российскую практику. Экономические и социальные перемены: факты, тенденции, прогноз. 2013. №1(25).
13. Соловьева Ю.В. Формирование и развитие системы трансфера технологий в России и за рубежом. <https://institutions.com/innovations/2565-formirovanie-razvitie-sistemy-transfera-tehnologij-rossii-zarubezhom.html>; Официальный информационный портал Швейцарии. – Режим доступа: [http :// www.swissworld.org/ru/nauka/nauka\\_i\\_gosudarstvo/transfer\\_tekhnologii/](http://www.swissworld.org/ru/nauka/nauka_i_gosudarstvo/transfer_tekhnologii/)
14. Капица Ю.М. Экспорт - импорт технологий: правовое регулирование. -К.: Интергид, 2000 г.- 104 с.