FOREIGN EXPERIENCE OF THE PUBLIC POLICY OF IMPLEMENTATION OF THE INSTITUTION OF “CONSULTING ENGINEER” IN CONSTRUCTION: EXPERIENCE OF ROMANIA, POLAND AND HUNGARY

Abstract. The article is devoted to the research of innovative development of the public policy concerning the implementation of the institution “consulting engineer” in the construction, in the context of Ukraine’s integration into the world economic space. An assessment of the main FIDIC documents used in Romania, Poland, Hungary for the organization and conduction of public procurement has been carried out. The suggestion is made that the best adaptation of international experience to the domestic realities of the consulting engineer can take place under the condition of cooperation between Ukraine and the countries of Eastern and Central Europe, with which it is most closely connected both with historical traditions and with economic aspects.

It is noted that the main problems facing Romania’s employers in the field of construction during the development of projects were as follows: a slow proce-
dure for ensuring proper access to the construction site; errors in the source planning data; errors in the data on the location of the object; a slow procedure for obtaining permits through bureaucracy and legislative difficulties for construction; limitation and delay of payment for the performed work, including the salary of the engineer-consultant. In these circumstances, more and more attention was needed not to questions regarding the progress of construction work, but to fulfill the requirements for their implementation.

It was substantiated that in Polish practice the role of the consultant engineer was limited to performing the functions of the customer representative in accordance with the clear instructions of the latter. The reason for this situation was the conflict between two contracts: the engineer’s contract and the main contract. This led to a burst of court appeals, because instead of a neutral position of risk-manager between the customer and the contractor, the engineer became the defendant on the battlefield.

**Keywords:** public control, consulting engineer, purchase of construction products, mechanisms of public administration, socio-political development, countries of Eastern and Central Europe.

**ЗАРУБІЖНИЙ ДОСВІД ДЕРЖАВНОЇ ПОЛІТИКИ ВПРОВАДЖЕННЯ ІНСТИТУЦІЇ “ІНЖЕНЕР-КОНСУЛЬТАНТ” В БУДІВНИЦТВІ: ДОСВІД РУМУНІЇ, ПОЛЬЩІ ТА УГОРЩИНИ**

**Анотація.** Досліджено інноваційний розвиток державної політики щодо впровадження інституції “інженер-консультант” в будівництві в умовах інтеграції України до світового економічного простору. Здійснено оцінку основних документів FIDIC, що використовуються в Румунії, Польщі, Угорщині для організації та проведення державних закупівель. Обґрунтовано пропозиції щодо того, що найкраще адаптування міжнародного досвіду до вітчизняних реалій діяльності інженера-консультанта може відбуватися за умови співпраці України із країнами Східної та Центральної Європи, з якими вона найбільше пов’язана як історичними традиціями, так і економічними аспектами.

Зазначено, що основними проблемами, з якими стикалися роботодавці Румунії у сфері будівництва при розробленні проектів, були такі: повільна процедура забезпечення належного доступу до місця проведення будівельних робіт; помилки в вихідних даних планування; помилки в даних про розміщення об’єкта; повільна процедура отримання дозволів через бюрократію і законодавчі труднощі для будівництва; обмеження та затримка оплати за виконані роботи, у тому числі і оплати праці інженеру-консультанту. За таких обставин, більшої уваги потребували не питання щодо ходу будівельних робіт, а щодо виконання вимог для їх проведення.

Обгрунтовано, що у польській практиці роль інженера-консультанта була обмежена чіткими інструкціями щодо виконання функцій представника замовника. Причиною виникнення такої ситуації став конфлікт між двома контрактами: контрактом інженера і основним контрактом. Це призвело до
сплеску судових звернень, адже замість нейтральної позиції ризик-менеджера між замовником та підрядником, інженер ставав відповідачом на полі бою.

Ключові слова: державний контроль, інженер-консультант, закупівля будівельної продукції, механізми державного управління, соціально-політичний розвиток, країни Східної та Центральної Європи.

ЗАРУБЕЖНЫЙ ОПЫТ ГОСУДАРСТВЕННОЙ ПОЛИТИКИ ВНЕДРЕНИЯ ИНСТИТУЦИИ “ИНЖЕНЕР-КОНСУЛЬТАНТ” В СТРОИТЕЛЬСТВЕ: ОПЫТ РУМЫНИИ, ПОЛЬШИ И ВЕНГРИИ

Аннотация. Исследовано инновационное развитие государственной политики по внедрению института “инженер-консультант” в строительстве в условиях интеграции Украины в мировое экономическое пространство. Проведена оценка основных документов FIDIC, используемых в Румынии, Польше, Венгрии, для организации и проведения государственных закупок. Обоснованы предложения относительно того, что лучшая адаптация международного опыта к отечественным реалиям деятельности инженера-консультанта может происходить при условии сотрудничества Украины со странами Восточной и Центральной Европы, с которыми она больше связана как историческими традициями, так и экономическими аспектами.

Отмечено, что основными проблемами, с которыми сталкивались работодатели Румынии в сфере строительства при разработке проектов, были такие: медленная процедура обеспечения надлежащего доступа к месту проведения строительных работ; ошибки в исходных данных планирования; ошибки в данных о размещении объекта; медленная процедура получения разрешений через бюрократию и законодательные трудности для строительства; ограничения и задержка оплаты за выполненные работы, в том числе и оплаты труда инженеру-консультанту. При таких обстоятельствах, большего внимания требовал вопрос не о ходе строительных работ, а о выполнении требований для их проведения.

Обосновано, что в польской практике роль инженера-консультанта была ограничена четкими инструкциями для выполнения функций представителя заказчика. Причиной возникновения такой ситуации стал конфликт между двумя контрактами: контракта инженера и основным контрактом. Это привело к всплеску судебных обращений, ведь вместо нейтральной позиции риск-менеджера между заказчиком и подрядчиком, инженер становился ответчиком на поле боя.

Ключевые слова: государственный контроль, инженер-консультант, закупка строительной продукции, механизмы государственного управления, социально-политическое развитие, страны Восточной и Центральной Европы.

Problem statement in general and its connection with important scientific or practical tasks. In mid-nineteenth century, due to the increasing
complexity of construction projects and involvement of increasing number of participants in their implementation a profession of consulting engineer hired by the Client started to stand out as an independent consultant in construction and supply of building materials.

Independent consulting engineers did not get shares in facilities that were built, and were not bound by agreements with entrepreneurs and construction companies. They sold their own experience and know-how to the Client, providing the best choice of contractors, suppliers of building materials and equipment by means of their own independent status which guaranteed that they did not represent the interests of competitors [1].

With the rapid development of the institution of consulting engineers in many countries in the early 20th century, there emerged a need to coordinate their activity. To this end, several countries set up the National Associations of consulting engineers whose primary task was to develop common quality standards of services provided by independent consulting engineers. The Association of consulting engineers in Germany was created in 1903, in 1904 — in Denmark, in 1905 — in the United States, in 1908 — in Great Britain, then in Belgium, the Netherlands, Sweden, and France. The Polish-Russian Association of consulting engineers was created in 1914 [2].

Further development of international ties and the formation of the international investment and construction market have created the need for networking and coordination of activity of consulting engineers in different countries. In 1913, during the international industrial exhibition held in Belgium, at the initiative of the National Associations of Belgium and France the first Congress of consulting engineers took place, which established the International Federation of Consulting Engineers — FIDIC. At present the main efforts of FIDIC are focused on the development and publication of standard forms of contract to regulate relations between participants of the international investment and construction processes [3].

Analysis of recent researches and publications which initiated solving this problem, identification of parts of the general problem unresolved before. The issue of the governmental policy regarding implementation of institution of “consulting engineer” in construction, both abroad and in Ukraine, is a subject of scientific research of both domestic and foreign scientists, in particular, it is advisable to distinguish the works of: V. B. Averyanov, O. Y. Amosov, A. H. Akhlohomov, V. D. Bakumenko, V. M. Vakulenko, N. V. Hritsiak, A. O. Dehtiar, V. V. Do rofyenok, O. M. Ivanytska, O. M. N epomnyashchyy, O. S. Povazhnyi, V. M. Oluiko, V. M. Ryzhykh, I. V. Rozputenko, S. M. Seriohin, O. I. Chernysh. Despite a number of existing publications, the new realities of public administration functioning in Ukraine in the context of strengthening European integration trends determine the need for further research and justification of proposals for the solution of organisational and management issues in construction activity, as well as its innovative development.

Formulating the purposes of the article (target setting). The purpose
of this article is to justify theoretical and methodological basis of foreign experience regarding the state regulation of the introduction of the “consulting engineer” institution in construction on the example of Poland, Romania, Hungary and to provide guidelines for its implementation in Ukraine.

**Presentation of the main research material with justification of scientific results.** Today during implementation of projects funded by the international financial organizations, special requirements regarding personnel, including the availability of consulting engineers in engineering companies, can be found. Similar problems are faced by organizations seeking the possibility of entering the European labour market according to the international principles and business practice.

A consulting engineer must have understanding of current construction issues and be legally “fluent” in order to reach success in project management. For a considerable period of time the term “construction” was used to refer to engineering construction support, including industrial, scientific and educational components. Legally, the concept of engineering in the construction industry has been fixed since 2006. The Law of Ukraine № 58-V of 01.08.2006 “On amendments to the Law of Ukraine “On architectural activities” engineering activity in the construction industry (engineering) is defined as the activity of providing services of engineering and technical nature, which include carrying out feasibility studies and research, project expertise, developing construction financing programmes, arranging for manufacturing design documentation, arranging tenders and bidding, signing contracts with contractors, coordinating the activities of all participants in the construction, as well as exercising construction supervision over facilities and advising on economic, financial and other issues [4].

Modifications in the legislation of Ukraine that have been made throughout 2017 in the direction of introducing the institution of “consulting engineer” in the construction sector, determine the focus of the government on the development of the engineering and consulting services market at the European level in Ukraine [5]. We are talking about amendments made to the occupational characteristics of the profession of consulting engineer (construction) in terms of a clear definition of authority and subordination of a consulting engineer (construction) during the execution of his duties.

It should be noted that both the Ukrainian experts in the field of engineering consulting and foreign scientists and methodologists within the framework of the Public Union “Interstate Consultants Engineers Guild” (hereinafter — ICEG) were actively involved in the development of such legislative and regulatory refinements [6]. ICEG is an independent professional association and a FIDIC affiliate member since 2015 and its goal is to harmonize the market model of engineering and consulting services operating in Ukraine in accordance with the recognized international standards.

In addition, Ukraine has become the first post-Soviet country represented in The European Federation of Engineering Consultancy Associations (hereinafter EFCA) in the face of ICEG.
EFCA was founded in 1992 as a non-government organization in the field of engineering consulting and related services, being a FIDIC representative in Europe bringing together 29 FIDIC professional National Associations from the EU countries [6]. There are more than a million professionals employed in the above-mentioned organizations and associations, most of whom are highly qualified in a wide range of construction and architectural disciplines.

FIDIC standard forms were introduced throughout the region of Central and Eastern Europe in the late 1990s, given the considerable international and European financing, on the one hand, and the lack of adequate and objective national standard forms of contract, on the other hand.

According to the Phare, Tacis and ISPA (Instruments for structural policies for preparing the candidate countries for accession to the EU) programmes, the financiers of the European Union (EU) and the European Investment Bank (hereinafter EIB) defined in advance that FIDIC standard forms, as a rule, the so-called Red and Yellow Books, had been used properly. The FIDIC forms are the international benchmarks for the efficient allocation of risk, traditions, respect, fairness and balanced business approach.

Although today there is no official translation of the FIDIC standard forms of contract in Ukraine and the procedure and the conditions for their application have not been defined, but, however, there has already been some experience in adapting these documents to current legislation. On the way of introducing the institution of “consulting engineer” in Ukraine we consider it appropriate to use both negative and positive experience of our foreign partners in all areas of construction. In our opinion, the best adaptation of such experience may occur as long as there is cooperation with the countries of Central and Eastern Europe, since Ukraine is related to them most of all both historically and economically: Poland and Romania.

THE EXPERIENCE OF ROMANIA

Today, the FIDIC documents are used in Romania for public procurement (mostly for road and bridge projects, by the Ministry of transport, or RNCMNR), but the FIDIC standard forms are also suitable for domestic use, mainly in those areas where there are no traditional standard forms of contract, or where the strong international competition is expected. From 2000 to 2010, the Romanian government worked on improving the Romanian legislation regarding the quality level of construction design and its financial support.

The main problems faced by the Romanian employers in the field of construction during the project development were the following: the slow process of ensuring proper access to the site; errors in the source planning data; site location data errors; the slow process of obtaining permits because of bureaucracy and legal challenges for construction; limitations and delays in payment for the work performed, including remuneration to the consulting engineer. Under these circumstances, they were not the questions regarding construction progress which demanded increasing attention, but the fulfilment of the requirements for their conduct.
In this regard, to provide a unified approach for construction purposes, the government of Romania introduced FIDIC contract conditions in 2012 as the national law to be applied by both national and local authorities in relation to large infrastructure projects. Recent legislative changes in Romania has taken place in early 2018, when the Romanian government adopted the Decision № GD № 1/2018, which approved the new General and Special conditions of contract for execution of works funded by the state. Thus, the new Decision substitutes the previous one. In particular, the new regulation abolishes Directive of December 28, 2010 (which adopted the application of the FIDIC conditions of contract) by means of which, in fact, the Romanian Government has officially rejected the mandatory use of the FIDIC standard forms of contract in business practices of the country. However, according to the Romanian specialists, the new model contracts feature FIDIC Red and Yellow Book adapted to the Romanian legislation but without reference to FIDIC [6].

Such legislative implementation in Romania is not typical for the countries of Central and Eastern Europe [7].

It should be noted that all of the mentioned reforms undertaken by the government of Romania have been held within one of the EU financial instruments that is used to help the enlargement countries of Central and Eastern Europe before their accession to the EU. We are talking about the Phare program (Poland and Hungary: Aid for Restructuring of the Economies), which was established in 1989, first only for Poland and Hungary, and is now working in ten countries in Central and Eastern Europe.

First of all, the enlargement countries receive support in adaptation and adoption of the so-called “legal heritage” of the EU and preparation for management of structural funds, that is, in the areas of capacity building and investment financing.

THE EXPERIENCE OF POLAND

FIDIC forms of contract are widely used in Poland regarding projects funded by public investment together with the EU. The Act on public procurement is a special law of the Civil Code of Poland: if not specified otherwise in the law on public procurement, the provisions and regulations of civil law shall be subject to application. Meanwhile it is sometimes impossible to verify the reliability of the contractor within the procurement procedure. During the construction project implementation this could cause serious difficulties.

Between 2007–2013 the Polish government was negotiating with the EU on the distribution of grants. The result of the fruitful work of the government has become the new legislation in the field of public procurement: Building code and so on. At present the government has been implementing new models of procurement (design-build) that were hardly ever used in Poland. Reducing of eligibility criteria and state assistance creates conditions for entry into the Polish construction market by foreign companies (e.g. from China).

Gradually amendments are made not only to construction contracts, but also to contracts on rendering the consulting engineering services. These years are marked with the bankruptcy of a
number of Polish and foreign construction companies due to: abnormally low prices (construction contracts do not include any adjustments or indexation of the contract cost) and inefficient risk allocation, in case of a contractor consortium.

A role of the consulting engineer in the Polish practice was limited to performing the functions of a Client’s representative in accordance with clear instructions from the latter. The cause of such a situation was the conflict between the two contracts: the Engineer’s contract and the main contract. This has led to a surge of lawsuits, as instead of taking up the neutral position of a risk manager between the Client and the Contractor, the Engineer became a defendant on the battlefield.

As a result of numerous complaints and warnings from different parties, for example, the European Construction Industry Federation, European International contractors, the Irish member of the European Parliament, the ambassadors of Austria, France, Germany, Ireland, the Netherlands and Portugal sent a letter to the Vice-Prime Minister of Poland in June 2013, with some highlights of the problems in the suppression of the Polish contractors. The letter expressed concern about the number and amounts of claims pending by the Polish courts, which, according to them, point to the fundamental and systematic problems associated with the implementation of major infrastructure projects in Poland.

In January 2014, FIDIC, EFCA and SIDIR issued a joint press release titled “Consulting engineers related to public procurement in Poland”, stating that the regulations of the construction contract provisions introduced in Poland shall not affect the balance of risk elimination and distribution of responsibility. In early 2014 Poland was stirred up by a scandal between the consortium and the General Directorate of roads and highways, resulting in three large highway and road projects were simultaneously terminated as a result of the contract termination. In February 2014 there was a change of management in the transport infrastructure funded by a new EU budget, in the period from 2014 to 2020. The period from 2007 to 2013 is remembered in Poland as the period of the bankruptcies of many construction companies [10].

Researchers see improvement of the current situation in a return to the use of fair and balanced standard forms of contract.

In this context, it should be noted that the EU has adopted a Requirement 1316/2013 that founded the Connecting Europe Facility (hereinafter — CEF) that formulates the basic principle obligatory for application for any national or international contract: terms of contract must be drafted in such a way to fairly distribute risks associated with the contract.

THE EXPERIENCE OF HUNGARY

Given the increasing activity of FIDIC and international financing of individual major investments as well as the support provided by global financial institutions (World Bank, EBRD, etc.), FIDIC conditions of contract are increasingly used in the countries of continental European law. In Hungary, as well, issues about how you can use them are subject of discussions from time to time because the Republic
of Hungary has been the EU member since 2004.

It should be noted that the FIDIC contractual provisions in Hungary cannot be applied directly, they must be brought into compliance with the provisions of the existing Hungarian law on construction. Basic normative documents regulating construction works carried out in the territory of the Republic of Hungary are the law “On construction and environmental protection” LXXVIII of 1997 and the Government resolution “On the construction activity” 191/2009 (IX. 15.).

In Hungary, construction contracts with well-coordinated legal provisions, including the FIDIC provisions, are of special importance in many ways. On the one hand, one of the important pillars of the control procedures of construction authorities are contracts fundamental for the construction activity, and on the other hand, in the case of proceedings a judicial body settles disputes under the contracts or their possible illegal provisions in the light of the main provisions of the Act [11].

The new Civil code entered into force on March 15, 2014, providing for significant changes in the rules governing the responsibility of senior officials of economic entities. Under the new law, the responsibility of senior officials for the damage caused by them in connection with their position to other actors, the so-called third parties will be — in contrast to the previous legal interpretation — in solidarity with their business society [12].

Thus, the new regulation significantly increases the responsibility of senior officials for their actions and decisions. In our opinion, this approach gives grounds for a more accurate prescription of the contract terms within the sphere of responsibility of a specific expert, such as consulting engineer in the construction industry is.

Conclusion. The profession of consulting engineer is marketable in the majority of advanced countries of the world and recently inducted into the national occupational classification in Ukraine. Consulting engineers carry out independent monitoring of the quality and deadlines of construction works: from preparation of design documentation to the final stages of the project.

Despite the fact that the institution of the consulting engineer are not sufficiently developed in Ukraine, publications that would cover the place and role of this participant in construction in the Ukrainian reality, are almost absent. Integration of the construction market of Ukraine into the European space of technical regulation requires new approaches to the development of consulting and engineering services in construction.

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