

# LEGAL REGULATION OF PUBLIC PROCUREMENT IN EU: CHALLENGES AND PROSPECTS

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## ABSTRACT

*This study examines the effectiveness of the legal regulation of public procurement in the EU, focusing on the challenges posed by the digital transformation of the economy. The research highlights key legal issues, including non-compliance with competitive procedures, insufficient cross-border market integration, and inadequate transparency in procurement processes. Particular attention is given to the implementation of the Directives 2014/24/EU and 2014/25/EU within the Member States' national legislation. The study identifies critical legal shortcomings, such as significant reliance on non-competitive procurement, low levels of cross-border contracting, and widespread gaps in reporting essential procurement data. These issues undermine the principles of transparency, competition, and equal access enshrined in EU law. The legal and institutional barriers to achieving sustainability goals, such as the EU's green procurement target of 75% by 2030, are also addressed. To resolve these challenges, the research proposes a legal framework for the digital transformation of public procurement. This includes adopting unified standards for electronic*

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*documentation and creating integrated cross-border procurement platforms to ensure compliance with EU principles and foster market integration. The findings and proposed measures offer valuable insights for improving procurement systems both within the EU and in other jurisdictions undergoing economic integration.*

**Key words:** *public procurement, tender procedures, monitoring, electronic systems, legal barriers, legal regulation, EU.*

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## 1. INTRODUCTION

The legal regulation of public procurement in the EU is particularly relevant in the context of current challenges related to the need to ensure the efficient use of public funds and achieve strategic goals of sustainable development. The public procurement sector is a powerful tool for influencing economic development, innovation and social policy, through which a significant part of EU budget expenditures is implemented. In the context of economic instability and environmental challenges, the transformation of the public procurement legal framework to ensure a balance between economic efficiency, environmental sustainability and social justice is of particular importance. The growing role of public procurement as a strategic tool for achieving the goals of the European Green Deal and the Sustainable Products Initiative requires a rethinking of existing legal mechanisms and the search for new approaches to their regulation.

The legal regulation of public procurement in the EU is characterised by a complex multi-level structure, including primary, and secondary legislation and case law. Telles<sup>1</sup> revealed the fundamental principles of this system, such as equal treatment, non-discrimination, transparency and proportionality. The researcher paid special attention to the controversial issues of recognising competition and sustainability as general principles in EU public procurement, as well as the problem of the lack of definition of the concept of “certain cross-border interest” in the case law of the EU Court of Justice. In the context of these challenges, Caranta<sup>2</sup> justified the need to change the paradigm of legal regulation from the traditional focus on the lowest price to a balanced consideration of various public goals. Based on the analysis of the best practices of Italy and other Member States in the context of the European Green Deal, the researcher proposed to rethink the theory and practice of public procure-

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<sup>1</sup> Telles, P.: General principles of European Union public procurement law, *Forthcoming in Elgar Encyclopedia of European Law*, 2024.

<sup>2</sup> Caranta, R., Fričová, V.: EU Procurement and Concessions Law, in Scholten M. (ed.): *Research Handbook on the Enforcement of EU Law*, Cheltenham: Edward Elgar Publishing, 2023, pp. 415-430.

ment law. The author also highlighted the importance of using public funds to support social justice and the fight against climate change, which requires a significant update of the existing EU legal framework in this area.

An important contribution to the understanding of electronic public procurement was made by Sandiuk et al.,<sup>3</sup> who analysed in detail the key EU directives 2014/24/EU, 2014/25/EU and 2014/55/EU, and explored the practical aspects of adapting national legislation to European standards on the example of the implementation of the ProZorro system in Ukraine. In the context of innovation development, Bleda and Chicot<sup>4</sup> proposed an evolutionary approach to understanding the role of procurement in stimulating innovation. Considering markets as dynamic systems of knowledge creation and coordination, they analysed in detail the mechanisms of public procurement's influence on the formation of markets for new products and technologies and identified specific tools for different phases of the procurement cycle.

Empirical evidence of the effectiveness of innovative procurement was presented by Czarnitzki et al.<sup>5</sup> in the example of Germany, where the 2009 reform of procurement legislation allowed for the inclusion of innovative aspects as selection criteria in tender proposals. Based on an analysis of a sample of 3410 German companies, they prove the positive impact of these changes on business innovation. The specifics of procurement in the healthcare sector were studied by García-Altés et al.,<sup>6</sup> who analysed the procurement processes for pharmaceuticals, medical technologies and electronic healthcare systems, offering specific recommendations for improving procurement and identifying promising areas for enhanced cooperation at the EU level.

The environmental aspects of public procurement have been thoroughly studied by Mélon,<sup>7</sup> who identified legal and actual obstacles to the implementation of green procurement and proposed to introduce mandatory requirements for considering environmental aspects in procurement activities. Developing this

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<sup>3</sup> Sandiuk, H. et al.: Special procedures for electronic public procurement, *Journal of Legal, Ethical and Regulatory Issues*, 22(2) 2019, pp. 1-7.

<sup>4</sup> Bleda, M., Chicot, J.: The role of public procurement in the formation of markets for innovation, *Journal of Business Research*, 107(February) 2020, pp. 186-196.

<sup>5</sup> Czarnitzki, D., Hünermund, P., Moshgbar, N.: Public procurement of innovation: Evidence from a German legislative reform, *International Journal of Industrial Organization*, 71(July) 2020, pp. 102620.

<sup>6</sup> García-Altés, A. et al.: Understanding public procurement within the health sector: A priority in a post-COVID-19 world, *Health Economics, Policy and Law*, 18(2) 2023, pp. 172-185.

<sup>7</sup> Mélon, L.: More than a nudge? Arguments and tools for mandating green public procurement in the EU, *Sustainability*, 12(3) 2020, pp. 988.

theme, Andhov et al.<sup>8</sup> proposed a comprehensive approach to improving EU legislation in the field of sustainable procurement, including the professionalisation of procurers and the strengthening of supply chain monitoring. A systematic view of the development of research was presented by Rejeb et al.,<sup>9</sup> who, through bibliometric analysis, identified five main areas of scientific thought and highlighted the problem of limited international cooperation in this area.

The institutional aspects of legal regulation were studied by Pircher,<sup>10</sup> who found a paradoxical impact of the economic crisis on the increased harmonisation of procurement legislation despite the tendency towards national protectionism. Janssen<sup>11</sup> complemented this understanding by analysing the legal mechanisms for implementing sustainable development goals through the public procurement system, and Jakab<sup>12</sup> studied in detail the specifics of the legal regulation of joint procurement, proposing specific solutions to overcome the identified legal conflicts. All these studies form a comprehensive understanding of the current state and prospects for the development of legal regulation of public procurement in the EU, emphasising the need for further harmonisation of legislation and strengthening its role in achieving the strategic goals of sustainable development.

The study aimed to reveal the essence and peculiarities of the system of legal regulation of public procurement in the EU, identify the main problems of its functioning and determine the prospective directions of development, considering the best practices of the EU member states. The objectives of the study were as follows:

1. To study the theoretical and legal foundations and peculiarities of public procurement regulation in the EU, to analyse the current state of implementation of EU directives into the national legislation of the Member States and to identify the main problems of harmonisation of legislation in the field of public procurement.

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<sup>8</sup> Andhov, M. et al.: Sustainability through public procurement: The way forward – Reform proposals, *University of Oslo Faculty of Law Research Paper*, (2020-09) 2020.

<sup>9</sup> Rejeb, A. et al.: The landscape of public procurement research: A bibliometric analysis and topic modelling based on Scopus, *Journal of Public Procurement*, 23(2) 2023, pp. 145-178.

<sup>10</sup> Pircher, B.: EU public procurement policy: the economic crisis as trigger for enhanced harmonisation, *Journal of European Integration*, 42(4) 2019, pp. 509-525.

<sup>11</sup> Janssen, W.A.: Public procurement law in the European Union, in Grandia J., Volker L. (eds.): *Public Procurement: Theory, Practices and Tools*, Cham: Palgrave Macmillan, 2023, pp. 39-56.

<sup>12</sup> Jakab, R.: Joint public procurement in European Union Law, *Prawo Budżetowe Państwa i Samorządu*, 10(4) 2023, pp. 55-74.

2. To identify and systematise the key problems of legal regulation of public procurement in the EU, to analyse the mechanisms for their solution at the level of supranational and national legislation of individual Member States, accounting for statistical performance indicators.
3. To identify promising areas for improving the system of legal regulation of public procurement in the EU and the possibility of applying positive European experience to the development of public procurement systems in other integration associations, including the Eurasian Economic Union.

## **2. MATERIALS AND METHODS**

The theoretical and methodological basis of the study is a comprehensive combination of institutional theory and the theory of European integration. The institutional theory was used to consider the EU public procurement legal framework as a complex institutional mechanism that includes formal and informal rules of interaction between different actors in the procurement process, mechanisms for enforcing these rules and a system of sanctions for their violation. The theory of European integration, particularly the concept of multi-level governance, provided a theoretical basis for analysing the specifics of the implementation of European standards at the national level and studying the mechanisms of coordination between different levels of decision-making in the field of public procurement. The concept of good governance also plays an important role in the theoretical framework of the study, which can be used to assess the effectiveness of the legal regulation system in terms of transparency, accountability and participation of all stakeholders in the decision-making process.

The methodological tools of the study are formed by accounting for its interdisciplinary nature. The theoretical and methodological basis of the study is a comprehensive combination of institutional theory and the theory of European integration. The systemic method is used to analyse the structure of legal regulation of public procurement in the EU. The comparative legal method was used to compare the approaches of Germany, France, Italy, Croatia, Poland and Luxembourg to the implementation of directives into national legislation. The statistical method was used to analyse the dynamics of procurement system performance indicators. The modelling method was used to develop a model of public procurement transformation.

The empirical basis of the study was formed by a wide range of EU legal documents and initiatives. The key directives in the field of public procurement were analysed: Directive of the European Parliament and of the Council No.

2014/24/EU “On Public Procurement and Repealing Directive 2004/18/EC”,<sup>13</sup> Directive of the European Parliament and of the Council No. 2014/25/EU “On Procurement by Entities Operating in the Water, Energy, Transport and Postal Services Sectors and Repealing Directive 2004/17/EC” (2014),<sup>14</sup> and Council Directive No. 89/665/EEC “On the Coordination of the Laws, Regulations and Administrative Provisions Relating to the Application of Review Procedures to the Award of Public Supply and Public Works Contracts”.<sup>15</sup> EU strategic initiatives were studied, in particular, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions,<sup>16</sup> Green Public Procurement (GPP),<sup>17</sup> “ProcurCompEU”,<sup>18</sup> “Joint Cross-Border Procurement Initiative”,<sup>19</sup> “Big Buyers Working Together”.<sup>20</sup> An important source of information were reports and analytical documents: annual reports on the state of the single market Scoreboard, reports of the European Court of Auditors,<sup>21</sup> Organisation for Economic Co-operation and Development<sup>22</sup> analytical materials on pro-

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<sup>13</sup> European Commission: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2014.

<sup>14</sup> European Commission: Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance, 2014.

<sup>15</sup> European Commission: Council Directive 89/665/EEC on the coordination of the laws, regulations and administrative provisions relating to the application of review procedures to the award of public supply and public works contracts”, 1989.

<sup>16</sup> European Commission: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 03.10.2017.

<sup>17</sup> European Commission: Green Public Procurement. Procuring goods, services and works with a reduced environmental impact throughout their life cycle., 2024.

<sup>18</sup> European Commission: European Commission unveils ProcurCompEU – The European Competency Framework for Public Procurement Professionals, 16.12.2020.

<sup>19</sup> Vieira, F.: The iProcureNet toolbox: Contributions to foster joint cross-border public procurement in the security sector, 06.07.2023.

<sup>20</sup> ICLEI: New phase in sustainable public procurement project enhances collaboration between public buyers, 2023.

<sup>21</sup> European Court of Auditors: Trade defence instruments: System for protecting EU businesses from dumped and subsidised imports functions well, Luxembourg: European Court of Auditors, 2020; 26. European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>22</sup> Organisation for Economic Co-operation and Development: Professionalising the public procurement workforce: A review of current initiatives and challenges, *OECD Public Gover-*

curement professionalisation. The statistical basis of the study was provided by the Tenders Electronic Daily database, statistics of the European Court of Auditors on procurement performance indicators, as well as data from national e-procurement systems of the EU member states.

The study was implemented in three consecutive stages, each with its objectives and methodological tools. The first stage involved an analysis of the theoretical and legal framework for public procurement regulation in the EU, which included a study of the legal framework and theoretical concepts in this area. The second stage was devoted to identifying and systematising key problems of legal regulation, based on the analysis of statistical data and expert opinions. The third stage identified promising areas for improving the system based on a summary of the identified problems and an analysis of best practices in public procurement.

### **3. RESULTS AND DISCUSSION**

#### *3.1. THEORETICAL AND LEGAL PRINCIPLES AND PECULIARITIES OF PUBLIC PROCUREMENT REGULATION IN THE EU*

The system of legal regulation of public procurement in the EU is a complex and multi-level mechanism that skilfully combines EU-wide rules with the national legislation of the Member States, thereby creating a unique legal structure that ensures the effective functioning of the single market. The fundamental element of this mechanism are the EU directives that establish common principles and standards for procurement aimed at creating an open and competitive market. The European Commission<sup>23</sup> emphasises in its studies that the main purpose of these directives is to promote the efficient use of public funds, stimulate innovation and ensure equal access to the market for all participants, which are fundamental principles of the functioning of the single European market.

In this context, the Directive of the European Parliament and of the Council No. 2014/24/EU “On Public Procurement and Repealing Directive 2004/18/

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*nance Policy Papers*, 30.01.2023; Organisation for Economic Co-operation and Development: Public procurement performance: A framework for measuring efficiency, compliance and strategic goals, *OECD Public Governance Policy Papers*, 08.08.2023.

<sup>23</sup> European Commission: Public Procurement Guidance for Practitioners, Brussels: European Commission, Directorate-General for Regional and Urban policy Competence centre Administrative Capacity Building; Solidarity Fund, 29.10.2015; European Commission: Public Procurement Strategy, Brussels: European Commission, 2015.

EC”<sup>24</sup> is of particular importance, as it has made a revolutionary breakthrough in modernising and simplifying previous rules. This directive introduced several innovative procedures and concepts, among which a special place is occupied by innovative partnerships, which open new horizons for the development of goods, services or works that are not yet available on the market. An important aspect of this directive is the emphasis on the use of electronic means in the procurement process, which significantly increases the transparency and efficiency of procedures. Sánchez-Rodríguez et al.<sup>25</sup> demonstrated that the introduction of e-procurement not only significantly improves the efficiency of procurement processes but also creates favourable conditions for the participation of small and medium-sized businesses, positively affecting their overall performance. Based on the analysis of data from 199 managers of small and medium-sized enterprises in the manufacturing sector, the researchers found a significant relationship between e-procurement and top management support, which directly affects the success of such systems. Moreover, their findings emphasise the importance of a strategic approach to procurement and the need to overcome IT obstacles to maximise the benefits of e-procurement systems.

At the same time, the Directive of the European Parliament and of the Council No. 2014/25/EU “On Procurement by Entities Operating in the Water, Energy, Transport and Postal Services Sectors and Repealing Directive 2004/17/EC”<sup>26</sup> plays an equally important role in regulating specific sectors of the economy, establishing a special regime for procurement in the strategically important areas of water supply, energy, transport and postal services. These sectors of the economy are of exceptional importance for the national security and economic stability of the Member States, which necessitates special regulation. The Directive expertly considers the specifics of these industries, creating an optimal balance between ensuring market openness and guaranteeing the uninterrupted provision of critical services to the population. Jämsén-Smith<sup>27</sup>

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<sup>24</sup> European Commission: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2014.

<sup>25</sup> Sánchez-Rodríguez, C., Martínez-Lorente, A. R., Hemsworth, D.: E-procurement in small and medium sized enterprises; facilitators, obstacles and effect on performance, *Benchmarking: An International Journal*, 27(2) 2019, pp. 839-866.

<sup>26</sup> European Commission: Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance, 2014.

<sup>27</sup> Jämsén-Smith, I.: *Interpreting article 57(4)(d) of Directive 2014/24/EU on public procurement in line with EU competition law and its application in the context of joint bidding*, Helsinki: Helsinki University Library, 2022.

demonstrates that such a special procurement regime not only promotes the efficient use of public funds but also ensures an appropriate level of competition and transparency in these strategically important sectors of the economy. The process of implementing EU directives into the national legislation of the Member States is a complex and multi-stage process that requires careful harmonisation of legal provisions and the creation of effective mechanisms for their implementation. An illustrative example of successful implementation is the experience of France, which has adopted the Order of the Government of France No. 2015-899 “On Public Contracts”,<sup>28</sup> which organically integrates the provisions of EU directives into the national legal system. Germany, for example, has adopted the Act of Germany No. 3245 “Against Restraints of Competition”,<sup>29</sup> which integrates the provisions of the directives and sets modern standards for public procurement. Drahn<sup>30</sup> analysed in detail the results of the implementation of these acts and demonstrated that they not only optimised procurement procedures but also significantly increased their transparency and efficiency, which has had a particularly positive impact on the involvement of various business entities in public procurement.

Regardless of the specifics of national implementation, all the EU member states are obliged to follow a single public procurement algorithm established by the directives. This algorithm provides for a clear sequence of actions from procurement planning to contract execution and appeal of the results. For a better understanding of this process, it is worth analysing each stage of public procurement in the EU and its specifics (Table 1).

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<sup>28</sup> Order of the Government of France No. 2015-899 “On Public Contracts”, 2015.

<sup>29</sup> Bundesamt für Justiz: *Act of Germany No. 3245 “Against Restraints of Competition”*, 1998.

<sup>30</sup> Drahn P.: Empirical analysis I: Transposition of the directives, in Drahn P. (ed.): *Adoption of EU Business and Human Rights Policy. Contributions to Political Science*, Cham: Springer, 2020, pp. 121-176.

**Table 1. The main stages of the public procurement process in the EU and their peculiarities**

PROCESS STAGE	DESCRIPTION AND FEATURES
<b>Procurement planning</b>	Determining the need for goods, works or services, analysing the market, setting a budget and deadlines. A special feature is the need to address strategic goals such as innovation or environmental sustainability. Planning helps optimise costs and ensure that procurement meets customer needs.
<b>Preparation of tender documentation</b>	Developing clear and non-discriminatory technical specifications and establishing selection and evaluation criteria for proposals. It is necessary to avoid excessive requirements that may limit competition. Technical specifications should be formulated in a way that does not favour specific brands or suppliers.
<b>Publishing an advert</b>	Posting procurement information on the Tenders Electronic Daily portal and/or national platforms. This ensures transparency and accessibility of information for all potential tenderers. The announcement must contain complete and accurate information about the subject of procurement, requirements for participants and deadlines for submitting proposals.
<b>Submission and acceptance of proposals</b>	Tenderers prepare and submit bids following the requirements of the tender documents. Electronic systems facilitate this process and ensure confidentiality until the bids are opened. The contracting authority accepts the bids and checks them for compliance with the formal requirements. It is necessary to ensure a level playing field for all bidders and to avoid discriminatory practices.
<b>Evaluation of proposals and selection of the winner</b>	The procuring entity evaluates proposals against established criteria, which may include price, quality, delivery time, and environmental or social aspects. Transparency and objectivity of the evaluation are critical to the credibility of the procurement system. The results of the evaluation should be documented and made available to participants upon request.
<b>Conclusion of the contract</b>	After the winner is selected, a contract is concluded, the terms of which correspond to the tender documentation and the bidder's proposal. Significant changes to the terms and conditions after the tender are not allowed, as this may violate the principles of transparency and equal treatment. The contract must contain all the necessary provisions for the fulfilment of obligations, liability of the parties and dispute resolution.
<b>Contract execution and monitoring</b>	Control over the fulfilment of the terms of the contract, qualitative and quantitative acceptance of goods, works or services. The customer must ensure proper monitoring and respond to violations or deviations in a timely manner. The contract may be amended to the extent permitted by law, but it must not change the essential terms or violate competitive principles.
<b>Appeals and protection of participants' rights</b>	Participants have the right to appeal against actions or decisions of the contracting authority if they believe that their rights have been violated. This can be done through administrative bodies or the courts. An effective appeal mechanism increases trust in the system and ensures compliance with the law. The timeframes and procedures for appeal are regulated by both EU directives and national legislation.

Source: compiled by the authors based on the analysis of Public Procurement Strategy,<sup>31</sup> Directive of the European Parliament and of the Council No. 2014/24/EU “On Public Procurement and Repealing Directive 2004/18/EC”,<sup>32</sup> Council Directive No. 89/665/EEC “On the Coordi-

<sup>31</sup> European Commission: Public Procurement Strategy, Brussels: European Commission, 2015.

<sup>32</sup> European Commission: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2014.

nation of the Laws, Regulations and Administrative Provisions Relating to the Application of Review Procedures to the Award of Public Supply and Public Works Contracts”,<sup>33</sup> Council Directive No. 92/13/EEC “Coordinating the Laws, Regulations and Administrative Provisions Relating to the Application of Community Rules on the Procurement Procedures of Entities Operating in the Water, Energy, Transport and Telecommunications Sectors”<sup>34</sup>

Table 1 is a thorough analytical tool that reveals the complex architecture of the public procurement process in the EU and demonstrates the systemic interconnection between the various stages of the procurement process. The integration of innovative technologies and modern management approaches at each stage, which ensures process optimisation and efficiency, is noteworthy. An important aspect is the availability of a comprehensive quality control and monitoring system at each stage, which guarantees compliance with established standards and requirements. The system also provides effective mechanisms for protecting the rights of all participants in the process, including the possibility of appealing decisions and resolving disputes, which is fundamental to ensuring trust in the public procurement system. Mechanisms to ensure transparency and accountability at each stage, implemented using modern information systems and technologies, play a special role. An important element is also the availability of clear criteria for the evaluation and selection of proposals, which ensures objectivity and impartiality in decision-making. The system provides for flexible responses to changes in market conditions and adaptation of procedures to meet new challenges and needs.

The process of harmonisation of public procurement legislation faces several objective challenges and obstacles, among which the fundamental differences in the legal systems of the Member States, between the continental and Anglo-Saxon legal traditions, which may lead to different interpretations and application of the directives in practice, are of particular importance. The effectiveness of implementation is also significantly affected by language barriers and cultural differences between the Member States, which can create additional difficulties in understanding and applying complex legal constructs. García-Altés et al.<sup>35</sup> emphasise that such differences can create legal uncertainty and negatively affect the efficiency of the single market. Harmonisation

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<sup>33</sup> European Commission: Council Directive 89/665/EEC on the coordination of the laws, regulations and administrative provisions relating to the application of review procedures to the award of public supply and public works contracts”, 1989.

<sup>34</sup> European Commission: Council Directive 92/13/EEC of 25 February 1992 coordinating the laws, regulations and administrative provisions relating to the application of Community rules on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors”, 1992.

<sup>35</sup> García-Altés, A. et al.: Understanding public procurement within the health sector: A priority in a post-COVID-19 world, *Health Economics, Policy and Law*, 18(2) 2023, pp. 172-185.

issues are also closely related to the different levels of economic development and administrative capacity of the Member States, which creates additional challenges for the effective implementation of common standards. Some countries face objective difficulties in securing the necessary resources to implement modern technological solutions, such as electronic procurement systems, or to train highly qualified specialists in this area. The European Court of Auditors<sup>36</sup> in its analytical report notes that such delays can create an uneven playing field for market participants and undermine overall confidence in the public procurement system.

A comprehensive analysis of the effectiveness of the existing public procurement regulatory system in the EU demonstrates significant achievements in creating an open and competitive market, where the introduction of e-procurement, simplification of procedures and harmonisation of legislation have significantly increased the transparency and accessibility of tender procedures. However, despite the successes achieved, several unresolved issues remain, including excessive bureaucracy, complexity of the regulatory framework and significant barriers to the participation of small and medium-sized businesses in public procurement. Small Business Standards<sup>37</sup> have highlighted the fact that small and medium enterprises often face significant difficulties due to high qualification requirements and complex procedural mechanisms, which significantly limits their ability to participate in public procurement. In addition, the problems associated with corruption risks and potential conflicts of interest in public procurement deserve special attention. Despite the existence of strict rules and control mechanisms, these issues continue to be relevant in the Member States such as Greece, Romania, Bulgaria and Hungary. In its recommendations, the European Commission<sup>38</sup> emphasises the need to strengthen oversight mechanisms and apply more effective sanctions to prevent and counteract such violations. To improve the efficiency of the public procurement system in the EU, it is necessary to continue systematic work on simplifying procedures, increasing transparency and creating favourable conditions for the participation of small and medium-sized businesses. Of particular importance is the issue of professional development of specialists directly involved in pro-

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<sup>36</sup> European Court of Auditors: Trade defence instruments: System for protecting EU businesses from dumped and subsidised imports functions well, Luxembourg: European Court of Auditors, 2020.

<sup>37</sup> Small Business Standards: *Textile services: SBS calls for the implementation of circularity principles in standardisation and public procurement*, Brussels: Small Business Standards, 2020.

<sup>38</sup> European Commission: Report on Advanced Driver Distraction Warning Systems, 15.06.2021.

curement processes, both on the part of procuring entities and suppliers. Strategic investments in training and development of professional competencies will contribute to more efficient and ethical performance of duties, which will have a positive impact on the functioning of the system. Thus, further development of the EU public procurement legal framework requires a comprehensive approach that will take into account both the successes achieved, and the challenges faced, while ensuring a balance between the different interests and needs of all stakeholders.

### **3.2. PROBLEMS OF LEGAL REGULATION OF PUBLIC PROCUREMENT IN THE EU AND MECHANISMS FOR THEIR SOLUTION**

A comprehensive analysis of the system of legal regulation of public procurement in the EU, which is a complex mechanism of interaction between supranational and national legislation, and primary and secondary EU law, has revealed several systemic problems that require coordinated solutions at different levels of government. As noted by the European Court of Auditors,<sup>39</sup> the downward trend in competition in public procurement over the past decade is of particular concern, as evidenced by the increase in the share of single-tender procedures from 23.5% in 2011 to 41.8% in 2021, while the average number of bidders has almost halved from 5.7 to 3.2 bidders per procedure. Such dynamics indicate the formation of an unfavourable competitive environment and possible structural deficiencies in the organisation of procurement procedures, which may lead to inefficient use of public funds and a decrease in the quality of purchased goods, works and services. At the same time, there is a high level of direct procurement without competitive procedures – according to a study by Duguay et al.,<sup>40</sup> in 2021, the share of such procurement was about 15.8% of the total volume in the EU single market, with 23 out of 27 Member States exceeding the critical threshold of 10% set by the European Commission as an indicator of an increased risk of inefficient use of public funds.

A particularly acute problem is the insufficient level of cross-border integration of the public procurement market, which contradicts the basic principles of the EU single market enshrined in Article 26 of the Rome Treaty. According

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<sup>39</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>40</sup> Duguay, R. Rauter T, Samuels D.: The impact of open data on public procurement, *Journal of Accounting Research*, 61(4) 2023, pp. 1159-1224.

to the European Commission,<sup>41</sup> despite the existence of harmonised legislation and common procedures, the share of direct cross-border contracts has been steadily maintained at around 5% in recent years, which is the same as in 1992, when it was around 2%. At the same time, there is a significant differentiation between the Member States, ranging from almost 30% in Luxembourg and 15% in Ireland to less than 5% in most large Member States, indicating that significant barriers to cross-border trade remain and the potential of the single market is not fully realised. According to a study by the European Court of Auditors,<sup>42</sup> the main obstacles to the development of cross-border procurement are language barriers and differences in administrative procedures, different technical standards and requirements for supplier qualifications, difficulty in accessing information on procurement opportunities in other Member States, the lack of a single system for identifying suppliers and customers, and insufficient harmonisation of electronic procurement systems.

A significant problem in the field of legal regulation of public procurement in the EU is the lack of efficiency in the system of monitoring and analysis of procurement at the supranational level. According to experts,<sup>43</sup> the existing Single Market Scoreboard, which is the main tool of the European Commission to assess the effectiveness of the single market, has significant limitations and does not allow for a full assessment of procurement efficiency. There are no indicators for regional and sectoral procurement, indirect cross-border procurement through local subsidiaries, strategic aspects of procurement (environmental, social, innovative), quality and efficiency of procurement, and price trends in the public procurement market. The Tenders Electronic Daily system, which is a primary method for ensuring transparency of procurement at the EU level, also demonstrates significant shortcomings in its functioning – about 30% of contracts do not contain information on the value, in more than 86% of cases there is no national registration number of the supplier, and in 63% of cases the expected value of the procurement is not indicated, which significantly complicates monitoring and analysis of procurement efficiency, as well as creates obstacles for potential bidders in finding relevant opportunities.

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<sup>41</sup> European Commission: *Annual single market Report 2023*, Brussels: European Commission, 31.01.2023.

<sup>42</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>43</sup> Sánchez-Graells, A.: Competition and public procurement, *Journal of European Competition Law & Practice*, 9(8) 2023, pp. 551-559; Tátrai, T., Vörösmarty, G., Juhász, P.: EU public procurements - Analysis of Tenders Electronic Daily, *International Journal of Procurement Management*, 20(2) 2024, pp. 171-186.

The problem of insufficient administrative capacity of contracting authorities, especially at the regional and local levels, also needs to be addressed systematically. According to a study by Kuźma and Hartung,<sup>44</sup> more than 50% of surveyed representatives of procurement authorities point to a lack of qualified staff and limited opportunities for professional development as key obstacles to effective procurement. This leads to formalised procedures, an over-emphasis on price criteria when selecting the winner (in 2021, the share of contracts awarded solely based on the lowest price exceeded 80% in some Member States) and insufficient use of strategic procurement opportunities to achieve broader societal goals such as sustainable development, social inclusion and innovation.

To address the identified problems, several legal mechanisms and instruments were introduced at the EU level, the key to which was the reform of public procurement directives in 2014, which included the update of the Directive of the European Parliament and of the Council No. 2014/24/EU “On Public Procurement and Repealing Directive 2004/18/EC”<sup>45</sup> on common procurement rules, the Directive of the European Parliament and of the Council No. 2014/25/EU “On Procurement by Entities Operating in the Water, Energy, Transport and Postal Services Sectors and Repealing Directive 2004/17/EC”<sup>46</sup> on public procurement in the utility sector and the introduction of the new Directive 2014/23/EU on concession contracts. However, the analysis of the practice of applying the updated legislation shows that the achievement of the set goals is much slower than expected – instead of simplifying procedures, there is an increase in their duration from 62.5 days in 2011 to 96.4 days in 2021, which creates an additional administrative burden on both procuring entities and bidders, especially small and medium-sized enterprises.

To systematically address the identified problems, the European Commission has adopted a comprehensive strategy “Making Public Procurement Work in and for Europe”, which has identified six priority areas of action: ensuring wider implementation of strategic procurement, professionalisation of procurement, improving access to procurement markets, increasing transparency

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<sup>44</sup> Kuźma, K., Hartung, W.: *Combating collusion in public procurement: Legal limitations on joint bidding*, Cheltenham: Edward Elgar Publishing Limited, 2020.

<sup>45</sup> European Commission: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2014.

<sup>46</sup> European Commission: Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance, 2014.

and integrity, digital transformation of procurement and development of joint procurement.<sup>47</sup> An important step in the implementation of this strategy was the introduction of electronic forms (eForms) to standardise procurement documentation, but their use remains limited – as noted by the European Court of Auditors,<sup>48</sup> out of 432,520 announcements published in the first six months after the introduction, only 374 were in eForms, which indicates the need for additional measures to stimulate the transition to new documentation standards and increase the digital maturity of procurement systems. In addition, the European Commission has initiated the creation of the Public Procurement Data Space, a single information system that will bring together European procurement databases, including Tenders Electronic Daily and national systems, to improve the availability and quality of procurement data.

Another important aspect of solving problems in public procurement is the need to strengthen coordination between different levels of government and harmonise national practices. As the experience of individual Member States shows, successful procurement reforms are often based on a comprehensive approach that combines improvements in legal regulation with institutional capacity building and the introduction of innovative methods. For instance, Croatia has introduced a mandatory certification system for public procurement professionals, which requires that all procurement procedures be conducted by a team that includes at least one certified professional. This system, which combines in-depth training with practical training, is available to both civil servants and representatives of the private sector, which contributes to the professional development of all participants in the procurement process. An initiative is underway in Poland to develop special recommendations on the specifics of public procurement in neighbouring countries, which should help increase the participation of Polish companies in cross-border procurement.

To strengthen the coordination and exchange of best practices in public procurement, the European Commission has launched the project “Big Buyers Working Together”, coordinated by Eurocities, ICLEI Europe and BME.<sup>49</sup> The project aims to support cooperation between contracting authorities with high purchasing power and promote the use of strategic procurement for innova-

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<sup>47</sup> European Commission: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 03.10.2017.

<sup>48</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>49</sup> ICLEI: New phase in sustainable public procurement project enhances collaboration between public buyers, 02.05.2023.

tive and sustainable solutions. As part of this initiative, ten English-language “communities of practice” are being created on the Public Buyers Community platform, each focusing on the procurement of specific goods or services where cross-border cooperation is required. This approach allows municipal, regional and central procurement authorities to maximise their market influence. The project is a continuation of the Big Buyers for Climate and Environment initiative, where four working groups have achieved significant results in the areas of circular construction, digital health solutions, electric heavy vehicles and zero-emission construction sites.<sup>50</sup> In particular, the cities of Oslo, Copenhagen, Helsinki, Vantaa and Bodo signed a joint statement on the transition to fossil fuel-free construction equipment by 2025 and increasing the use of zero-emission equipment to at least 50% by 2030.

The problem of potential conflict between the different goals of the 2014 public procurement reform and the need to find an optimal balance between them deserves special attention. As noted in a study by the European Court of Auditors,<sup>51</sup> simplification of procedures through the expansion of direct procurement opportunities may harm competition, while the division of contracts into lots to facilitate access for small and medium-sized enterprises may reduce competition in markets dominated by large companies. This problem is particularly acute in specific sectors of the economy, such as healthcare and transport services, where there is a growing trend of single-tender procedures. The study also found that in the construction sector, the level of competition remains higher, with a lower rate of single tender and slower growth compared to other sectors, which may indicate the need for a differentiated approach to procurement regulation in different sectors of the economy. According to Koltay et al.,<sup>52</sup> all industrial and service sectors have seen an increase in market concentration over the period of analysis. This dynamic is in line with global trends recorded by the Organisation for Economic Co-operation and Development.<sup>53</sup>

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<sup>50</sup> European Innovative Procurement of Health Innovation: Big buyers for climate and environment, 2021, <<https://euriphi.eu/news/big-buyers-for-climate-and-environment/>>, last accessed on 15/02/2025.

<sup>51</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>52</sup> Koltay, G., Lorincz, S., Valletti, T.: Concentration and competition: Evidence from Europe and implications for policy, *CESifo Working Paper*, (96402022) 2022.

<sup>53</sup> Organisation for Economic Co-operation and Development: Professionalising the public procurement workforce: A review of current initiatives and challenges, *OECD Public Governance Policy Papers*, 30.01.2023; Organisation for Economic Co-operation and Development:

Another significant challenge remains: ensuring effective monitoring of prices for goods, works and services procured. Currently, the European Commission does not carry out centralised monitoring of procurement prices, which creates risks for ensuring optimal value for money. Sánchez-Graells<sup>54</sup> notes that the lack of systematic analysis of price trends makes it difficult to assess the impact of reduced competition on the efficiency of public funds and does not allow for timely detection of price fixing between suppliers. This problem is particularly relevant in the context of rising inflationary pressures and the need to ensure the efficient use of funds under the economic recovery programmes following the COVID-19 pandemic. In addition, as part of the Recovery and Resilience Facility, a key EU instrument to overcome the economic consequences of the pandemic, several Member States (Croatia, Hungary, Italy, Romania, Slovakia and Greece) have included in their recovery plans measures to improve administrative procedures for public procurement, in particular through digitalisation of processes, modernisation of existing systems and implementation of training programmes.<sup>55</sup> This creates additional opportunities to systematically address procurement challenges but requires effective coordination between different initiatives and ensuring the sustainability of the changes introduced after the end of the support programmes.

The problem of ineffective price monitoring is acute in public procurement, which has a particularly negative impact on the modernisation of the industry and the implementation of sustainable development principles. The absence of a systematic approach to tracking and analysing price fluctuations creates significant obstacles to assessing the effectiveness of strategic procurement, and excessive focus on short-term price indicators can offset long-term sustainable development goals. To overcome these challenges, the European Commission has developed a system of technical assistance for the Member States, which was first implemented through the Structural Reform Support Programme and later transformed into the Technical Assistance Instrument. According to the European Court of Auditors,<sup>56</sup> in the period 2017-2023, funding was allocated for 32 procurement reform projects in fourteen Member States, including Belgium, Estonia, Ireland, Greece, Spain, France, Croatia, Lithuania, Hungary,

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Public procurement performance: A framework for measuring efficiency, compliance and strategic goals, *OECD Public Governance Policy Papers*, 08.08.2023.

<sup>54</sup> Sánchez-Graells, A.: Competition and public procurement, *Journal of European Competition Law & Practice*, 9(8) 2023, pp. 551-559.

<sup>55</sup> European Commission: The Recovery and Resilience Facility, 2021.

<sup>56</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

Malta, Portugal, Romania, Slovenia and Slovakia. The current status of the projects shows that eleven have been completed, fourteen are in the process of implementation, one is being prepared for launch and six are still pending, which is particularly important for countries with less developed procurement infrastructure and limited management capacity.

The problem of ensuring integrity and transparency in public procurement requires special attention, given the significant amounts of public funds used to purchase goods, works and services. According to World Bank experts,<sup>57</sup> transparency in public procurement is critical not only for the ability to monitor and control processes and decisions but also to ensure the accountability of decision-makers. The main obstacle in this area is the extensive network of small procurers at the local and regional levels, which makes it difficult to monitor compliance with the principles of transparency and integrity. This is especially true for small public contracts, where direct procurement is prevalent. To assess the transparency of procurement, Scoreboard uses a special indicator – the ratio between the value of procurement contracts published in the Tenders Electronic Daily system and the gross domestic product of a Member State. This indicator demonstrates the level of competitiveness and openness of procurement procedures – the higher the value, the better. However, the statistics show an unsatisfactory situation: more than 50% of the EU-27 countries demonstrated a consistently low level of publication (less than 5%) during 2011-2021, and this situation remains unchanged. To address the identified problems, experts and practitioners propose a set of measures, including strengthening the coordination role of the European Commission in the implementation of common standards and best practices, developing mechanisms to stimulate cross-border participation in procurement, introducing mandatory data quality requirements in the Tenders Electronic Daily system, creating a unified system for identifying suppliers and customers, as well as developing professional training and experience exchange programmes for procurers. Particular attention is paid to the need to introduce artificial intelligence and other modern technologies to overcome language barriers and facilitate access to information on procurement opportunities in different Member States.

Modernisation of the public procurement system requires the introduction of a strategic approach that considers not only price parameters but also environmental, social and innovation components. However, statistics show that price criteria still dominate the selection of suppliers in all the EU Member States. The year 2021 is particularly illustrative, when eight Member States preferred

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<sup>57</sup> World Bank: Benchmarking public procurement 2017: Assessing public procurement systems in 180 economies, Washington: International Bank for Reconstruction and Development / The World Bank, 2016.

the cheapest offers in more than 80% of cases, which was noted as a critical indicator in the Scoreboard system. Moreover, in most EU countries, the tendency to select suppliers solely based on price is not only maintained but also intensified, which calls into question the effectiveness of implementing a strategic approach to procurement.

The problem of interaction between the legal regulation of public procurement at the EU level and in individual Member States is becoming particularly relevant. The practice of implementing the 2014 Directives shows that there are significant differences in the approaches of different countries to procurement regulation. For example, as noted by the European Court of Auditors,<sup>58</sup> some Member States, such as Germany, reduced the use of direct procurement during the period under review, while others, such as Cyprus, significantly increased its use. Such differences may be due to the specificities of national legal systems, administrative traditions and different levels of institutional capacity. As demonstrated by Srail and Lorentz<sup>59</sup> and Guggenberger et al.,<sup>60</sup> a positive example of harmonisation of national approaches can be found in the experience of Scandinavian countries, which have implemented a decentralised information system for the exchange of procurement data and created a unified platform for supplier evaluation. Such digital infrastructure ensures transparency of information, bilateral data exchange between procurement participants and automation of processes through standardised interfaces. This has significantly increased the level of cross-border participation in procurement between these countries and could serve as a model for other regional initiatives within the EU, especially for the creation of decentralised information hubs to support cross-border procurement cooperation.

Ensuring the effective functioning of the system of appealing decisions in public procurement remains a significant challenge. The Scoreboard currently does not contain any information on appeal procedures initiated by unsuccessful bidders challenging decisions on procurement procedures in which they participated, such as their number, duration and results. This creates an information vacuum regarding the effectiveness of legal remedy mechanisms and

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<sup>58</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>59</sup> Srail, J. S., Lorentz, H.: Developing design principles for the digitalisation of purchasing and supply management, *Journal of Purchasing and Supply Management*, 25(1) 2019, pp. 78-98.

<sup>60</sup> Guggenberger, T., Schweizer, A., Urbach, N.: Improving inter-organizational information sharing for vendor managed inventory: Towards a decentralized information hub using blockchain technology, *IEEE Transactions on Engineering Management*, 67(4) 2020, pp. 1074-1085.

may lead to a decrease in business confidence in the public procurement system. In the context of the digital transformation of procurement, it is important to ensure the interoperability of various electronic procurement systems. The absence of common standards and protocols for data exchange between national systems creates technical barriers to the development of cross-border procurement and complicates data aggregation for analytical purposes. The Public Procurement Data Space initiative<sup>61</sup> has the potential to address this issue, but its success depends on the willingness of the Member States to actively participate and ensure the necessary level of data standardisation.

The further development of the public procurement system requires a balanced consideration of various aspects: from technical issues of standardisation and digitalisation to strategic objectives of ensuring competition and efficiency in the use of public funds. The success of the system's reform depends on the ability to ensure effective coordination between different levels of government, overcome existing barriers to cross-border trade, and improve the professional level of participants in the procurement process. At the same time, the need to continuously monitor and evaluate the effectiveness of the changes being implemented is of particular importance, which will allow timely adjustments to the chosen approaches and ensure the achievement of the set goals.

### *3.3. PROMISING AREAS FOR IMPROVING THE SYSTEM OF LEGAL REGULATION OF PUBLIC PROCUREMENT*

An analysis of current trends in the development of the public procurement system in the EU shows a gradual transition from the traditional regulatory model to a more flexible and innovative system that can effectively respond to the challenges of the digital age and the changing needs of society. According to a study by the European Commission,<sup>62</sup> a key trend in recent years has been the active digital transformation of procurement processes, which is manifested in the introduction of electronic procurement systems, the development of electronic document management systems and the creation of unified digital platforms for cross-border procurement. An important aspect of this transformation is the introduction of artificial intelligence and machine learning technologies to automate routine processes and improve the efficiency of data analysis. According to a study by Terlecki,<sup>63</sup> the use of artificial intelligence

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<sup>61</sup> European Commission: The public procurement data space, 2023.

<sup>62</sup> European Commission: The public procurement data space, 2023.

<sup>63</sup> Terlecki, K.: Transforming procurement: The effective use of AI in procurement, 27.05.2024.

technologies in e-procurement systems can reduce administrative costs by up to 30% and significantly improve the accuracy of risk assessment during tender procedures. An illustrative example of the successful implementation of digital innovations is the Tenders Electronic Daily platform, which, thanks to the introduction of machine translation technologies, provides automatic translation of tender documents into all official EU languages, which simplifies access to information on procurement opportunities for participants from different Member States.

Particularly noteworthy is the trend towards an increasingly strategic nature of public procurement, which is manifested in the more active use of procurement as a tool for achieving broader social, environmental and innovation goals. The GPP initiative has set an ambitious goal of achieving 75% green procurement by 2030, which includes the inclusion of environmental criteria in technical specifications and evaluation criteria for proposals.<sup>64</sup> Rosell's<sup>65</sup> analysis of the implementation practices of this initiative shows significant cross-country differences in GPP implementation. The study, based on Tenders Electronic Daily data for the period 2006-2017 for 25 European countries, showed that more developed countries and countries with a larger public sector demonstrate a higher level of GPP implementation. Important success factors include the quality of public administration and contract size. The study also found that regional and local administrations show a clearer preference for GPP than national governments or EU bodies. In addition, joint procurement between contracting authorities increases the likelihood of using GPP.

A promising area for improving the system of legal regulation of public procurement is the development of joint and cross-border procurement mechanisms. The Directive of the European Parliament and of the Council No. 2014/24/EU "On Public Procurement and Repealing Directive 2004/18/EC"<sup>66</sup> has created a legal framework for joint procurement between contracting authorities from different Member States, but the practical implementation of these mechanisms faces several challenges related to different administrative traditions, language barriers and differences in technical standards. That is why the European Commission has initiated the Joint Cross-Border Procurement Initiative project, which envisages the creation of a network of centralised

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<sup>64</sup> European Commission: Green Public Procurement. Procuring goods, services and works with a reduced environmental impact throughout their life cycle., 2024.

<sup>65</sup> Rosell, J.: Getting the green light on green public procurement: Macro and meso determinants, *Journal of Cleaner Production*, 279(January) 2021, pp. 123710.

<sup>66</sup> European Commission: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC Text with EEA relevance, 2014.

procurement organisations and the development of standardised procedures for joint procurement.<sup>67</sup> According to a study by Lombardi and Rossa,<sup>68</sup> the practical implementation of the joint cross-border procurement mechanism has proved to be difficult due to the high level of complexity of legal regulation and the presence of practical barriers, such as language differences and incompatibility of electronic procurement platforms. The authors note that these factors often encourage contracting authorities to prefer traditional procurement procedures, although in some cases, especially when procuring standardised goods at the lowest price on the EU market, the Joint Cross-Border Procurement mechanism has proven to be effective.

An important area for improving the procurement legal regulation system is the development of professional competencies and the institutional capacity of procurement organisations. According to the Organisation for Economic Co-operation and Development study,<sup>69</sup> the insufficient level of professional training of procurers remains one of the key factors limiting the effectiveness of implementing innovative practices and achieving strategic procurement goals. In response to this challenge, the European Commission<sup>70</sup> has developed a comprehensive programme, ProcurCompEU, which defines common standards of professional competencies for public procurement professionals and offers tools for assessing and developing these competencies. The programme includes 30 key competencies grouped into six clusters: horizontal skills, procurement planning, tender procedures, contract management, digital technologies and sustainable development. The programme is flexible and can be adapted to the specific needs of different categories of procurers and levels of management.

Another promising area for the development of the public procurement system is the strengthening of mechanisms for monitoring and evaluation of efficiency. As noted in the report of the European Commission,<sup>71</sup> the existing Single Market Scoreboard does not provide full coverage of all aspects of the

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<sup>67</sup> Vieira, F.: The iProcureNet toolbox: Contributions to foster joint cross-border public procurement in the security sector, 06.07.2023.

<sup>68</sup> Lombardi, R., Rossa, S.: Theoretical models and implementation practices: Critical legal analysis of joint cross-border procurement, *CERIDAP*, (1) 2024, pp. 84-102.

<sup>69</sup> Organisation for Economic Co-operation and Development: Professionalising the public procurement workforce: A review of current initiatives and challenges, *OECD Public Governance Policy Papers*, 30.01.2023.

<sup>70</sup> European Commission: European Commission unveils ProcurCompEU – The European Competency Framework for Public Procurement Professionals, 16.12.2020, European Commission: Legal Rules and Implementation, 2020.

<sup>71</sup> European Commission: Access to public procurement, 2022.

procurement system and needs to be significantly improved. To address this problem, the European Commission has initiated the creation of the Public Procurement Performance Framework, which provides for the introduction of a comprehensive system of indicators to assess procurement performance at various levels.<sup>72</sup> The system includes four groups of indicators: effectiveness (achievement of cost and quality targets), efficiency (optimisation of processes and resources), transparency (accessibility of information and competitiveness of procedures) and strategic impact (achievement of social, environmental and innovation goals). An important feature of the new system is the use of big data and artificial intelligence technologies for the automated collection and analysis of procurement information.

The issue of improving the mechanisms of legal protection and dispute resolution in public procurement deserves special attention. The analysis of the practice of application of the Directives on legal protection (89/665/EEC and 92/13/EEC), conducted by Caranta and Fričová,<sup>73</sup> revealed several issues related to the length of appeal procedures, differences in national practices and insufficient effectiveness of preventive mechanisms. To address these problems, it is proposed that specialised complaints bodies at the EU level be created, alternative dispute resolution mechanisms be introduced and a system of preventive control using artificial intelligence technologies be developed. An important element of this system should be the creation of a unified database of decisions on procurement disputes, which will ensure uniformity of law enforcement practice and increase the predictability of decisions for market participants.

In the context of developing cooperation between the EU and other integration associations, the possibility of applying European experience within the Eurasian Economic Union is of particular interest. A comparative analysis of the EU and Eurasian Economic Union public procurement legal regulation systems conducted by World Bank<sup>74</sup> experts revealed significant potential for harmonising approaches and implementing best practices. In particular, the EU's experience in e-procurement, professional competence development and

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<sup>72</sup> Organisation for Economic Co-operation and Development: Public procurement performance: A framework for measuring efficiency, compliance and strategic goals, *OECD Public Governance Policy Papers*, 08.08.2023.

<sup>73</sup> Caranta, R., Fričová, V.: EU Procurement and Concessions Law, in Scholten M. (ed.): *Research Handbook on the Enforcement of EU Law*, Cheltenham: Edward Elgar Publishing, 2023, pp. 415-430.

<sup>74</sup> World Bank: *Benchmarking public procurement 2017: Assessing public procurement systems in 180 economies*, Washington: International Bank for Reconstruction and Development / The World Bank, 2016.

strategic procurement can be successfully adapted to the Eurasian Economic Union, considering the specifics of legal systems and the level of development of digital infrastructure in the EU member states. Particular attention should be devoted to ensuring the technical compatibility of electronic procurement systems, developing common data exchange standards and creating effective mechanisms for cross-border cooperation.

Two out of three countries out of 180 surveyed do not exceed 50 points out of 100 on the Public Sector Corruption Perceptions Index, where 0 corresponds to “highly corrupt” and 100 to “highly honest”. While the introduction of electronic procurement systems and open data has significantly increased transparency, the researchers note that compliance with transparency regulations is still insufficient. However, the researchers note that there are still significant problems with the availability and quality of contract performance data, especially concerning the participation of small and medium-sized businesses, which account for only 17% of total procurement against a target of 20%. To address these problems, the European Commission initiated the Transparency and Accountability in Procurement project, which envisages the creation of a unified system for monitoring contract performance and the introduction of public control mechanisms.<sup>75</sup> The project features the use of blockchain technology to ensure the immutability and traceability of procurement information, as well as the implementation of an Open Contracting Data Standard to facilitate the analysis and comparison of data between different jurisdictions.

Improving mechanisms for assessing the efficiency of public spending is also a relevant area of development. According to the analysis conducted by the European Court of Auditors,<sup>76</sup> existing procurement efficiency assessment methodologies focus on procedural aspects and do not fully take into account long-term effects and impact on sustainable development. In response to this challenge, a new methodology, Value for Money in Public Procurement, is being developed, which provides for a comprehensive assessment of procurement efficiency, addressing economic, social and environmental aspects.<sup>77</sup> The methodology is based on the concept of Total Cost of Ownership and includes an assessment of indirect effects, such as the impact on innovation, job creation and environmental impact. In addition, to increase the efficiency

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<sup>75</sup> Government of the Republic of the Philippines: Enhancing transparency and accountability in procurement under RA 12009, 2024.

<sup>76</sup> European Court of Auditors: Special report 28/2023: Public procurement in the EU – Less competition for contracts awarded for works, goods and services in the 10 years up to 2021, 04.12.2023.

<sup>77</sup> European Bank for Reconstruction and Development: Value for money in public procurement, 15.07.2024.

of cross-border procurement cooperation, special attention is paid to the development of mechanisms for mutual recognition of standards and certificates. The study by Blind et al.<sup>78</sup> confirms that differences in technical specifications and standards remain a significant barrier to international trade through public procurement. The authors note that in sectors with higher public demand than domestic production, the public sector's tendency to select domestic firms can reduce trade between countries, especially if these sectors are characterised by monopolies and economies of scale.

The issue of adapting the system of legal regulation of public procurement to the challenges of the digital economy and new technological opportunities is becoming particularly relevant. According to Shaham et al.,<sup>79</sup> the introduction of artificial intelligence and big data analytics in procurement can provide significant budgetary savings through demand aggregation. The researchers demonstrate that the use of artificial intelligence algorithms to identify common procurement needs allows for better pricing due to four key factors: lower wholesale prices, expanding the range of suppliers in tenders, reducing delivery and order processing costs, and reducing legal and administrative costs. The results of the practical implementation of such a solution in a Singapore government research organisation with an annual procurement budget of hundreds of millions of dollars confirm the effectiveness of the approach – an 81% accuracy rate of identifying potential aggregation opportunities was achieved along with savings of USD 7 million. This experience is particularly valuable for the EU, as it demonstrates concrete mechanisms for optimising procurement in a developed digital economy. As part of the Digital Procurement Transformation initiative, a comprehensive procurement digitalisation strategy is being developed, which includes the introduction of blockchain-based smart contracts, the use of predictive analytics for risk assessment, and the automation of routine processes through robotic process automation.<sup>80</sup> At the same time, special attention is paid to ensuring cybersecurity and personal data protection following the requirements of the General Data Protection Regulation. Therefore, an analysis of a comprehensive model of public procurement transformation is required (Figure 1).

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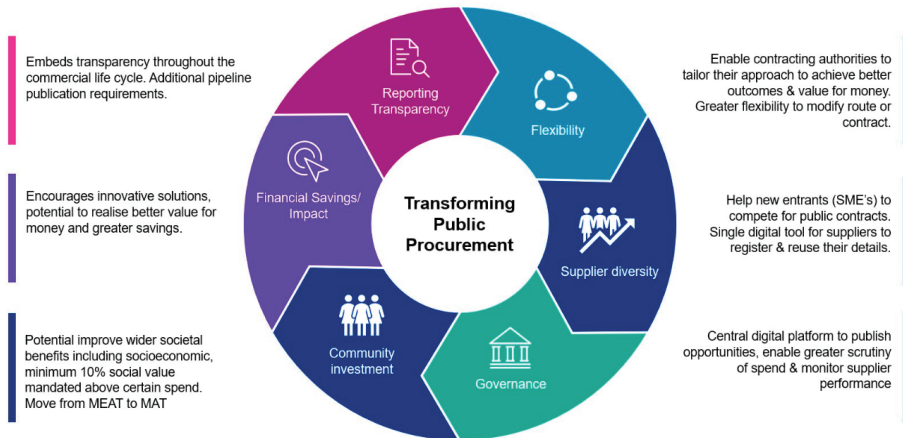
<sup>78</sup> Blind, K., Pohlisch, J., Rainville, A.: Innovation and standardization as drivers of companies' success in public procurement: an empirical analysis, *The Journal of Technology Transfer*, 45(3) 2020, pp. 664-693.

<sup>79</sup> Shaham, E. et al.: Using unsupervised learning for data-driven procurement demand aggregation, *Proceedings of the AAAI Conference on Artificial Intelligence*, 35(17) 2021, pp. 15175-15184.

<sup>80</sup> PricewaterhouseCoopers Greece: Digital Procurement Transformation: Combining human ingenuity with technology innovation to drive sustained procurement outcomes, 2022.

**Figure 1. Transformation of public procurement**

## Procurement Act 2023



Source: Pillai<sup>81</sup>

The presented model of public procurement transformation demonstrates a systematic approach to modernising procurement processes, where each element plays an important role in achieving the overall goal of increasing the efficiency and transparency of the system. Central to the model is the concept of public procurement transformation, which is implemented through six interrelated components: transparency of reporting, flexibility, supplier diversity, governance, community engagement and financial savings, each with specific implementation mechanisms and expected results. Particular attention is paid to the transparency of reporting, which is ensured through additional requirements for the publication of information throughout the procurement lifecycle, and to expanding opportunities for small and medium-sized businesses through the creation of a single digital supplier registration platform. Another important aspect is the introduction of mechanisms for assessing the social impact of procurement, which involves setting a minimum social value threshold of 10% for contracts above a certain value. The model also considers the need to ensure flexibility for procuring entities in choosing procurement approaches, which allows for better adaptation of procedures to specific needs and market conditions.

<sup>81</sup> Pillai, H: Getting ready for the new Procurement Act, 2024.

The future development of the EU's public procurement legal framework should be based on a comprehensive approach that combines technological innovation with institutional capacity building and regulatory improvement. The key success factors are ensuring a balance between different procurement policy objectives, creating effective coordination mechanisms between different levels of government, and developing the professional competencies of all participants in the procurement process. Of particular importance is the need to continuously monitor and evaluate the effectiveness of the changes being implemented, which will allow timely identification of problems and adjustment of the chosen approaches following the changing needs of society and new technological capabilities. The EU's experience in modernising the public procurement system may be useful for other integration associations and countries seeking to increase the efficiency of public funds and ensure the sustainable development of their economies.

#### **4. CONCLUSION**

The study of the legal regulation of public procurement in the EU has shown the complexity and multidimensionality of this system, which combines supranational rules with national legislation of the Member States. The results of the study confirm the achievement of the set goal through a comprehensive analysis of the regulatory framework, implementation mechanisms and practical aspects of the functioning of the public procurement system in the EU, which identified key problems and promising areas of development.

A comprehensive study has shown that the EU public procurement legal framework is based on directives that establish common principles and standards for procurement. The article analyses the peculiarities of the implementation of the Directive 2014/24/EU on public procurement and the Directive 2014/25/EU on procurement in strategically important areas, which has made a revolutionary breakthrough in modernising the previous rules. The main problems of the system's functioning are identified as: the insufficient level of cross-border integration of the procurement market (the share of direct cross-border contracts is only 5%), the limited efficiency of the monitoring and analysis system, and the insufficient administrative capacity of contracting authorities. The process of digital transformation of procurement processes, which includes the introduction of electronic systems, the development of electronic document management and the creation of unified digital platforms, was studied in detail. It is established that the use of artificial intelligence technologies in e-procurement systems can reduce administrative costs by up to 30% and significantly improve the accuracy of risk assessment in tender procedures.

Particular attention was paid to the analysis of the GPP initiative, which sets an ambitious goal of achieving 75% of green procurement by 2030.

The scientific and practical significance of the obtained results lies in the formation of a holistic understanding of the mechanisms of legal regulation of public procurement in the EU and the identification of key areas for their improvement. The identified patterns and trends can be used to assess the effectiveness of the implemented reforms and identify promising areas for the development of the system. Of value are the results of the analysis of the implementation of strategic procurement as a tool for achieving broader social, environmental and innovation goals, as well as the study of joint and cross-border procurement mechanisms. An important result is the definition of the role of the ProcurCompEU programme in the development of professional competencies of public procurement specialists, which includes 30 key competencies grouped into six clusters.

Based on the analysis, several practical recommendations can be made to improve the system of legal regulation of public procurement. Firstly, it is necessary to accelerate the digital transformation of procurement processes through the introduction of unified standards for electronic document management, the development of electronic identification systems and the creation of integrated platforms for cross-border procurement. Secondly, it is important to strengthen the strategic nature of procurement by developing clear criteria and methods for assessing the social, environmental and innovative impact of procurement, as well as creating a system of incentives for procuring entities and suppliers. Thirdly, it is necessary to ensure the development of professional competencies through the introduction of unified standards for training and certification of public procurement specialists, the creation of a network of competence centres and the development of international experience exchange programmes.

The limitations of this study include the lack of complete statistical data on the effectiveness of the implementation of new procurement regulatory mechanisms, especially in terms of assessing the impact of digital transformation on the efficiency of procedures and the level of competition. Moreover, the impact of cultural and language barriers on the development of cross-border procurement cooperation remains insufficiently studied, as evidenced by the limited number of successful examples of joint procurement between the Member States. Another limitation is the lack of data on the long-term impact of strategic procurement on the achievement of sustainable development goals and the insufficient development of a methodology for assessing the social impact of procurement. Promising areas for further research include studying the potential of using artificial intelligence and blockchain technologies to improve the efficiency and transparency of procurement, including the development of

smart contracts and predictive analytics systems. An important area is the study of mechanisms for integrating e-procurement systems of different Member States and creating a single digital public procurement space. The development of a methodology for a comprehensive assessment of the social, environmental and innovative impact of strategic procurement, as well as analysis mechanisms for harmonising national procurement systems in the context of deepening European integration and EU enlargement, should be prioritised. The issue of improving the system of professional training of public procurement specialists and developing international cooperation in this area remains relevant.

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