

Financial Law Review

No. 42 (2)/2026

UNIVERSITY OF GDAŃSK • MASARYK UNIVERSITY • PAVEL JOZEF ŠAFÁŘIK UNIVERSITY
<http://www.ejournals.eu/FLR>

GULNARA NURBEKOVA*
EDVARDAS JUCHNEVICIUS**
RUSLAN BOTAGARIN***
DANIYAR ALIMBAYEV****

DIGITALISATION OF TAX ADMINISTRATION: FOREIGN EXPERIENCE AND OECD APPROACHES

Abstract

The aim of this study is to analyse the current legislation of the European Union, the Republic of Kazakhstan, and relevant international legal instruments in the field of tax administration. The article examines the development of a service-oriented model of tax administration and the application of digital tools. On the basis of the research conducted, the authors conclude that the use of digital technologies is necessary and that their entrenchment in national legislation and the adoption

* Karaganda National Research University named after Academician E. A. Buketov, Kazakhstan.
Contact email: nurbekova.G@karnu-buketov.edu.kz, ORCID ID: <https://orcid.org/0009-0009-4950-6137>.

** University of Gdansk, Poland.
Contact email: edvardas.juchnevicius@prawo.ug.edu.pl, ORCID ID: <https://orcid.org/0000-0001-7390-4885>.

*** Karaganda National Research University named after Academician E. A. Buketov, Kazakhstan. Contact email: botagarin.R@karnu-buketov.edu.kz, ORCID ID: <https://orcid.org/0000-0002-9633-8182>.

**** Karaganda National Research University named after Academician E. A. Buketov, Kazakhstan.
Contact email: alimbaevdaniar05@gmail.com, ORCID ID: <https://orcid.org/0009-0005-4154-0059>.

of international standards recommended by the OECD are essential. The authors consider it necessary to align national legislation with international and European standards in order to improve cooperation on taxation matters. It is emphasised that the effectiveness of digital tools is enhanced when they are employed for the prevention of violations rather than solely for the imposition of sanctions, thereby increasing voluntary compliance with tax obligations. Full digitalisation of tax control, as a core element of tax administration, will allow for a significant reduction in the number of tax reporting forms. A study of the experience of various countries (OECD member states, Singapore, and others) with respect to the service model of tax administration has revealed a number of common principles that are currently being applied in Kazakhstan.

Key words: tax administration; digitalisation of tax administration; service model of management in tax administration; OECD; Kazakhstan; digital tools; voluntary compliance

JEL Classification: H20, H83, K34, O33, H26

1. Introduction

Current trends in the global economy demonstrate that the efficiency of the tax system directly depends on its ability to adapt to digital changes. The introduction of automated mechanisms, electronic services and digital platforms makes it possible to improve the level of administration, enhance tax collection and reduce the administrative burden on businesses. At the same time, digitalisation is accompanied by new risks, among which the protection of personal data, ensuring information and network security and the development of international standards for the exchange of tax information are of particular importance. In this regard, the effectiveness of tax administration is determined by how consistently the state integrates digital technologies into its economic and fiscal development strategy, achieving a balance between the efficiency of control and convenience for taxpayers.

In the context of digitalisation and the globalisation of the world economy, economic instruments such as tax policy and tax administration acquire strategic significance not only in the national context but also on the international stage, becoming mechanisms of governance that can strengthen financial stability, facilitate integration into global processes and build trust in the state. Moreover, the efficiency of tax administration largely reflects the overall level of development of state institutions and their ability to respond in a timely manner to changes in the world economy. As noted in the

Organisation for Economic Co-operation and Development (OECD) report, digital modernisation is not merely a technical update but also a response to challenges such as “Scale without mass”, which enable businesses to “scale very quickly, often with few employees, tangible assets and/or no geographic footprint” [OECD 2020: 70]. The better the tax system adapts to new conditions, such as digitalisation, the growth of international financial flows and the increasing complexity of cross-border tax evasion schemes, the more stable and resilient the state's economic policy becomes.

The aim of this research is to provide a comprehensive analysis of the processes of digitalisation of tax administration based on scientific approaches, foreign practice and OECD recommendations, as well as to assess their impact on the effectiveness of tax administration and the interaction of tax authorities with taxpayers. The hypothesis of the article is that the digitalisation of tax administration becomes effective only when it is embedded in a service-oriented model based on risk analytics, preventive measures, taxpayer support, and legal safeguards for data protection.

To achieve the stated objective, the research is aimed at addressing the following tasks:

1. To analyse theoretical approaches and scientific positions of domestic and foreign authors on the concept and content of digitalisation of tax administration.
2. To investigate the key directions and tools of digitalisation of tax administration applied in foreign countries.
3. To summarise the experience of implementing digital technologies in tax administration in selected foreign jurisdictions.
4. To examine the provisions and recommendations of the OECD contained in reports and papers concerning the digital transformation of tax administrations.
5. To reveal the impact of digitalisation on the effectiveness of tax administration, the quality of tax control and the level of interaction between tax authorities and taxpayers.

In the context of the development of tax administration and tax policy, the European Union plays a significant role. As follows from the materials of the European Commission, the aim of digital modernisation is “Expand and improve the e-services provided to businesses, to the public, to partner organisations and public bodies” [European Commission 2024: 2] as well

as to “Increase the effectiveness and efficiency of the actions against tax avoidance and evasion, and customs and tax fraud through implementation of data-driven digital tools for business intelligence and investigations” [European Commission 2024: 2]. Thus, we can observe a gradual transition from the control model to the service-oriented model, which is aimed at simplifying procedures, preventing violations and promoting voluntary tax compliance.

The modern tax system of Kazakhstan is undergoing comprehensive modernisation, following the adoption of the new Tax Code of the Republic of Kazakhstan, which entered into force on 1 January 2026, aimed at improving the quality of tax administration, reducing administrative barriers and building trust between taxpayers and state bodies. For example, the new Tax Code of the Republic of Kazakhstan introduced a new principle, namely the transparency of taxation [Tax Code of the Republic of Kazakhstan 2025: Art. 28]. One of the important directions of the reforms is the transition from the previously prevailing traditional model to approach oriented towards the taxpayer, where the emphasis is placed on the prevention of violations, the provision of advice to taxpayers and the digitalisation of procedures. In the context of globalisation and integration into the international economy, such measures ensure not only the effective collection of taxes but also increase the attractiveness of the country for foreign investments, stimulate legal business and create a predictable environment for economic development.

1.1. Methods

In conducting this scientific study, various theoretical and empirical methods were employed. General scientific methods – including analysis, synthesis, deduction, and induction – were applied alongside special legal methods, namely the comparative legal method and the formal legal [dogmatic] method. The comparative legal method was applied to the analysis of the legislation of the Republic of Kazakhstan, the Republic of Poland, and relevant international instruments, as well as to the study of the experience of selected foreign jurisdictions [Estonia, the United Kingdom, Germany, Finland, Singapore]. The formal legal method was used to interpret legal provisions governing the organisation and functioning of tax administration.

2. The Content of Tax Administration

The concept of “tax administration” is interpreted in various ways in the scientific and regulatory literature; however, in general it encompasses a set of organisational and legal measures and administrative arrangements ensuring the completeness, timeliness and correctness of the receipt of taxes and other compulsory payments into the budget. Thus, the official OECD source provides a rather narrow definition of tax administration: “Tax administration is a big and complex operation affecting all parts of the economy. The main taxes collected by tax administrations to fund government spending are taxes on: personal income, for example tax paid on an individual’s wages corporate income, for example tax paid on the profits made by businesses taxes on purchases made by individuals or businesses, for example value added tax (VAT) or sales tax” [OECD 2026].

M.K. Aliev and Zh.N. Turdaly believe that the activities of tax authorities in administration are aimed specifically at simplifying and liberalising taxpayer registration procedures in order to lay a truly effective foundation for the qualitative growth of the entrepreneurial environment. According to their position, coping with the service of a considerable number of taxpayers has become easier and more accessible thanks to the automation of part of the tax administration processes. One of the key features of these digital systems and services is their accessibility and the presence of a personal information space for the taxpayer. In their opinion, the transition to a “digital” format and the use of modern information technologies is aimed at building a new paradigm of relations between tax authorities and taxpayers in the direction of client orientation [Aliev, Turdaly 2018].

It follows that at this stage of the development of taxation, the introduction of digital tools is the foundation of tax administration. In foreign scientific literature, the digitalisation of tax administration is regarded as one of the key stages in the development of the activities of tax authorities. Thus, He Yueying believes that “The emergence of cutting-edge technologies such as big data, artificial intelligence, and blockchain has not only driven industrial upgrading and model innovation but also profoundly transformed the approach and efficiency of government governance” [He 2024: 86]. At the same time, digitalisation is regarded not only as an advanced process that affects the model of state governance, but is also considered the main element of state governance, reflecting the depth of changes in approaches

and mechanisms of control and interaction. According to the He Yueying, “As a vital component of national governance, the tax collection and administration system has inevitably been deeply impacted by digital technologies” [He 2024: 86], which also determines the thoroughness and care of changes in the tax environment, as the most important component of state governance, the tax collection and administration system has inevitably been profoundly affected by digital technologies.

A similar opinion is offered by authors such as Edidiong Bassey, Emer Mulligan and Adegboyega Ojo, who in their work highlight not only the importance of introducing digitalisation into tax administration but also the set of institutions and participants. The authors believe that the success of tax administrations largely depends on their ecosystem. This ecosystem is an interdependent network of actors, technologies and institutions. “Tax administrations are reliant on their ecosystem to succeed. This ecosystem is an interdependent network of actors, technologies, and institutions” [Bassey et al. 2022: 1], which emphasises the importance of interaction between both technological and institutional components within a unified system.

This position is also shared by scholars such as Siamand Hisami, Hatice Jenkins and Glenn P. Jenkins. In their opinion, the tax system serves as a key component in the financial well-being of the state: “At the heart of a state’s financial well-being is its tax system, a vital source of income that must continually adapt to the ever-evolving technological and economic landscape” [Hesami et al. 2024: 2]. The authors also emphasise the importance of introducing digital technologies into the tax system: “An innovative perspective is gaining traction, focusing on harnessing the potential of information and communication technologies (ICT) to enhance tax collection efficiency, thereby reducing the risks of tax evasion and reporting errors” [Hesami et al. 2024: 2], thereby they not only highlight the significance of integrating such an innovative model but also consider it to be an effective and sustainable model of the tax system.

Thus, summarising the authors' opinions, it can be concluded that in foreign scientific literature, the digitalisation of tax administration is regarded as a systemic and purposeful development. Moreover, the authors emphasise that the introduction of modern technologies into the tax system has a noticeable impact on its operation, strengthening the role of information tools. At the same time, digital tax administration is understood not merely

as the improvement of individual procedures, but as a key reform affecting the interaction between the state, the tax authorities, and taxpayers.

A study has been published on the website of the European Parliament, “The work of tax administrations: Resources, strategies and cooperation,” which states that “the work of tax administrations is key to protecting national budgets [and in turn the EU budget] and enforcing tax legislation” [Baert 2022: 1]. This highlights the importance of the work of tax administrations within the EU not only as a means of preserving the budget, but also as the principal body for ensuring security and compliance with legislation. This study, devoted to the digitalisation of tax administration, addresses the key aspects and questions surrounding the application of automation within fiscal management. The document states that “the use and development of digital tools have changed every aspect of tax administrations' work significantly” [Baert 2022: 1]. Particular attention is paid here to the introduction of methods for the online submission of tax returns and the use of data-analysis tools for the more accurate and rapid detection and tracking of VAT fraud [the carousel scheme], including investment in artificial intelligence and cloud technologies. It follows that in the European Union, tax administration is interpreted as the most important factor in the implementation of legal norms in the field of taxation, as well as in securing the state budget. Moreover, in recent years a growth in cooperation between the tax administrations of the countries of the European Union has been observed, while the ultimate right to levy taxes remains with the member states. Thus, the widespread use of digitalisation in the European Union shows that they are increasingly relying on the introduction of digital technologies and universal cooperation. In addition to this, the expansion of cooperation between the tax administrations of EU Member States, as well as the improvement of the quality of tax administration, is largely linked to the introduction of modern information technologies and digital solutions.

Therefore, it is worth examining the experience of a specific EU Member State, for example the Republic of Poland. The content of tax administration in the Republic of Poland is established in the Tax Ordinance Act, which defines the basic procedures and actions of tax authorities. According to Article 1, the main components of tax administration include “tax obligations; tax information; tax proceedings, tax audits, and verification activities; fiscal secrecy” [Tax Ordinance Act: Art. 1]. A special role in this system is played

by tax audits and tax activities. The purpose of a tax audit is defined in Article 281 § 2: “The purpose of a tax audit is to verify whether the audited parties are fulfilling the obligations arising from the provisions of tax law” [Tax Ordinance Act: Art. 281 § 2]. Moreover, the audit must be carried out following receipt of notification of the inspection, and the legislator also specifies a time interval: “An audit shall be commenced no earlier than after the lapse of 7 days and no later than before the lapse of 30 days from the date of service of the notification of the intention to commence the audit. If the audit is not commenced within 30 days of the date of service of the notification, its commencement requires renewed notification” [Tax Ordinance Act: Art. 282b § 2].

As a result, tax control functions in Polish legislation as a more comprehensive procedure for monitoring compliance with obligations, requiring the fulfilment and execution of formal procedures, as well as the conduct of an inspection. In turn, verification activities are organised, in accordance with tax law, by first-instance tax authorities and constitute a primary inspection under tax legislation. According to Article 272, such activities are aimed at “1) verifying the timeliness of: a) the submission of tax returns, b) the payment of taxes, including those collected by remitters and collectors; 2) establishing the formal correctness of the documents referred to in point 1; 3) ascertaining the factual circumstances to the extent necessary to confirm conformity with the documents submitted; 4] verifying the expenditure incurred and the revenue (income) obtained by the taxpayer, whether taxed or untaxed – to the extent necessary to reveal the tax base in respect of revenue not covered by disclosed sources or derived from undisclosed sources” (Tax Ordinance Act: Art. 272). Consequently, this mechanism represents a primary and key stage of inspection aimed at identifying a range of errors and inconsistencies.

One of the most important elements of the Polish model of tax administration is also fiscal secrecy, which ensures the protection of taxpayer data. Article 293 specifies the data that falls within the concept of fiscal secrecy: “Individual data contained in the return and in other documents submitted by taxpayers, remitters, or collectors are covered by fiscal secrecy” (Tax Ordinance Act: Art. 293). Consequently, tax administration, which is carried out on the basis of the collection of databases and the analysis of information, must be conducted within the framework of the legislation in force, which ensures both the protection of personal data and the improvement of efficiency. Thus,

tax administration in Poland is characterised by its systemic and procedural nature, aimed at the implementation and control of the fulfilment of tax obligations. As a member of the European Union, the Republic of Poland is developing its own national concept of tax administration based on the pan-European trend of improving tax administration, which is aimed at increasing efficiency and a high level of interaction between tax authorities and taxpayers. In our view, these procedures represent a key stage in the transition to a service-oriented management model.

Turning to the experience of the Republic of Kazakhstan, the new Tax Code of the Republic of Kazakhstan of 2025, in Article 90, provides the following definition of tax administration: “Tax administration is a set of measures by the tax authority and other authorised state bodies aimed at ensuring compliance with the tax legislation of the Republic of Kazakhstan and other legislation of the Republic of Kazakhstan the observance of which is entrusted to the tax authorities, and at creating conditions for the payment of taxes and payments to the budget. Tax administration is carried out, inter alia, through the application of a tax risk management system” [Tax Code of the Republic of Kazakhstan 2025: Art. 90 § 1]. It should also be noted that Kazakhstan is rapidly strengthening the service model of tax administration, which is particularly enshrined in the new Tax Code of the Republic of Kazakhstan of 2025, which provides for the expansion of the advisory functions of tax authorities, the development of electronic services and the prevention of violations instead of a predominantly punitive approach. Such a transition reflects the global trend towards digitalisation and the service model of management, where tax authorities become partners of businesses and citizens in the fulfilment of their fiscal obligations, rather than solely bodies of control and punishment.

3. The Development of a Service-Oriented Model of Tax Administration

The current Tax Code of the Republic of Kazakhstan establishes that “tax administration is based on the principles of creating service procedures and applying preventive measures to minimise tax risk before applying control measures to minimise tax risk and compulsory collection of tax arrears” [Tax Code of the Republic of Kazakhstan 2025: Art. 90 § 2]. The instruments of the service model of tax administration for the fulfilment of tax obligations

include: the pre-filling of tax returns on the basis of data available to tax authorities, the creation of mobile service groups to serve socially vulnerable categories of citizens, the training of newly registered taxpayers, as well as the provision of clarifications by telephone [Tax Code of the Republic of Kazakhstan 2025: Art. 47].

It is worth noting that under the previously applicable Tax Code, service services were present and used. In particular, tax authorities assisted taxpayers (tax agents) by: “sending information messages through service software products, including to the head and/or the employee responsible for budget settlements” [Tax Code of the Republic of Kazakhstan 2017: Art. 73]. At the same time, the provisions of this article did not apply to large business entities. However, the current Tax Code does not contain such restrictions. Moreover, the list of service mechanisms has been significantly expanded, which indicates an active transition to a service-oriented model.

The modern concept of the “service model of management” in tax administration reflects the transition from the traditional fiscal-control model to a format of interaction with taxpayers based on trust, partnership and the simplification of the fulfilment of obligations. The Organisation for Economic Co-operation and Development determines that improving the conscientious fulfilment of tax legislation requirements is directly linked to the quality of services provided to taxpayers. Thus, the OECD report Tax Administration 2025 notes: “A core part of supporting taxpayer compliance is the provision of a wide range of effective and easy to use services for taxpayers. Providing the right services, to the satisfaction of taxpayers and other stakeholders, will increase the level of participation, taxpayer trust, and confidence in the tax system as a whole” [OECD 2025a: 59].

There are also other approaches to the development of the service model of tax administration, which traditionally include: service-oriented attitude, the essence of which lies in providing increasingly high-quality and transparent services that meet the needs of the client. As Andrew Okello emphasises, “Self-assessment demands that tax administrations adopt a service-oriented attitude towards taxpayers” [Okello 2014: 11]. In turn, risk-based audit is aimed at identifying specific tax violations, this approach is more based on tax risks. The author states, “Taxpayers must know that if they fail to comply with the tax laws, they face a reasonable risk of being detected. Self-assessment systems therefore rely heavily on a strong audit

program focused on higher-risk taxpayers” [Okello 2014: 16]. In addition, analytical tools are used to ensure an accurate and effective assessment of tax administrations. Thus, a vivid example of the implementation of the analytical approach is the creation and introduction of the TADAT system. One of these is the joint development of the OECD and the IMF – the Tax Administration Diagnostic Assessment Tool (TADAT), which is an institutional tool aimed at improving not only the efficiency of tax authorities but also at identifying and eliminating various shortcomings in tax administrations. This tool is enshrined in World Bank documents, “Tax Administration Diagnostic Assessment Tool Module 1”. As noted in the aforementioned document: “a tool that provides an objective, standardized performance assessment of a country’s system of tax administration”. It should be noted that the importance of this mechanism for the implementation of a fair, sustainable and effective tax administration [World Bank 2021: 5].

The application of the service model of tax administration is a natural stage in the development of modern tax systems. In the context of digitalisation and the simplification of economic processes, the previous approach no longer ensures the stability of tax revenues and the appropriate level of trust on the part of taxpayers. Tax mechanisms and the efficiency of tax administration rely above all on convenient digital tools, transparency of procedures and the introduction of a partnership interaction model. In this way, they ensure the fulfilment of tax obligations, reduce the risk of errors and foster a culture of tax discipline.

The OECD documents contain various mechanisms of the service model of tax administration in analytical sections devoted to taxpayer services. The Tax Administration 2025 report emphasises that the key role of services is in ensuring independent compliance with tax obligation norms: “How tax administrations’ compliance goals are met by providing effective and efficient services to taxpayers, increasingly through technology. This is helping increase voluntary compliance amongst taxpayers by making it easier to understand tax obligations, report taxable income and make payments” [OECD 2025: 58]. Consequently, in the OECD’s interpretation, the service model is built around orienting tax authorities towards the needs of taxpayers, providing convenient digital services, reducing the administrative burden and building trust-based relations between the state and business.

A similar approach is also reflected in an earlier study, which notes that “Taxpayers are more likely to comply voluntarily when the tax administration: (1) adopts a service-oriented attitude toward taxpayers, and educates and assists them in meeting their obligations; (2) creates strong deterrents to non-compliance through effective audit programs and consistent use of penalties; and (3) is transparent and seen by the public to be honest, fair, and even-handed in its administration of the tax laws” [Okello 2014: 4].

Moreover, these findings are confirmed in contemporary literature. Thus, in a systematic review entitled “Understanding the role of tax services in shaping compliance behavior: a systematic literature review”, three key factors were identified that substantiate the impact of tax services on taxpayers: “(a) Digital Tax Services and Compliance Behavior, (b) Psychological Impact of Tax Services on Compliance Behavior, and (c) Tax Education Services for Compliance Improvement” [Sapidin et al. 2025: 202]. Thus, the contents of both the OECD and other research materials emphasise the need to transition from control to partnership relations, where service and trust become the foundation of tax administration, which is convincingly confirmed by the results of systematic analysis of empirical research.

Thus, the service model of management in the tax sphere is a reflection of the global trend aimed at increasing the efficiency of the interaction between the state and taxpayers. In practice: the introduction of feedback, risk-oriented and digital tools is the most important factor in ensuring tax obligations. This will lead to achieving a balance and mutual interests between the state and taxpayers. Foreign and national experience shows that the introduction of the service model not only increases the efficiency of tax administration but also strengthens trust in the institutions of power, forming a sustainable basis for economic development.

4. Experience in Implementing Digital Tax Administration

The experience of foreign countries demonstrates the effectiveness of introducing service-based approaches in the tax sphere. For example, Estonia operates the e-Tax/e-Customs system, developed by the Tax and Customs Board (Maksu-ja Tolliamet), which allows declarations to be filed, taxes to be paid, and advice to be obtained entirely electronically. This system was launched in 2000 and became an essential part of the Estonian government's tax system. As noted in the European Commission review, “E-tax in Estonia

is part of the long-standing shift towards e-government” [Williams 2019: 1]. Moreover, the system covers a wide range of regulated obligations: “This e-tax covers not only individual income tax returns but also companies can declare income tax, social tax, unemployment insurance and pension fund contributions through e-Tax” [Williams 2019: 1]. Therefore, thanks to the automation and transparency of its procedures, Estonia ranks among the world leaders in the level of voluntary tax compliance.

It is also worth noting the successful experience of the United Kingdom. In 2005, on the basis of the Commissioners for Revenue and Customs Act, a single body was created – His Majesty's Revenue and Customs (HMRC) – replacing two historically distinct departments, the Inland Revenue and Customs and Excise [HMRC 2025]. As stated in official documents, the mission of the new department is to “help the honest majority to get their tax right and make it hard for the dishonest minority to cheat the system” [HMRC 2025]. Among HMRC's strategic priorities, particular emphasis is placed on “improve day-to-day performance and the overall customer experience” and “reform and modernisation of tax and customs administration” [HMRC 2025], which lays a structured foundation for the subsequent digital transformation. This direction of development fully corresponds to global trends. Thus, the OECD report *Tax Administration Digitalisation and Digital Transformation Initiatives* emphasises that “the tax administration of the future will be fully taxpayer-centric, with a focus on how to make taxation a seamless and burden-free process” [OECD 2025b: 13]. Similar trends are observed in other OECD countries, where the emphasis is placed on advisory services, digital notifications, the automatic pre-filling of tax returns, and integration with national e-government platforms.

As noted in the report, “Prefilled returns are particularly common for PIT, as shown in Table 4.3., where 85% of administrations prefill PIT returns with the data that they have collected. With more data being available, close to 40% of tax administrations reported being able to prefill VAT returns and around 25% reported being able to prefill CIT returns” [OECD 2025b: 29], which demonstrates the expanding scope of application of pre-filled tax returns. This shows that digitalisation contributes to a substantial simplification of the taxpayer's participation in the reporting process.

In the new Tax Code of the Republic of Kazakhstan, the cases of application of service procedures have been significantly expanded. It is clearly stated

that the Code establishes the priority of preventive and advisory measures, aimed at preventing violations even before the application of liability. Thus, for example, paragraph 2 of Article 90 of the Tax Code of the Republic of Kazakhstan establishes the creation of service procedures, digital tools for accompanying taxpayers and mechanisms for early notification of possible risks [Tax Code of the Republic of Kazakhstan 2025: Art. 90, paragraph 2]. On its official website, the State Revenue Committee of the Republic of Kazakhstan provides clarifications on the norms of the new Tax Code. What support measures for taxpayers are provided within the service model in the new Tax Code, it is explained that the main goal of the service model is to minimise administrative costs for taxpayers, the introduction of a notification-based approach to control and the pre-filling of returns [State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan (SRC), n.d.]. In practice, Kazakhstan implements digital tools such as e-Salyq Azamat, Salyk Business and e-Halyk, allowing citizens and entrepreneurs to remotely manage their tax obligations, obtain advice and pay taxes online. These measures are aimed at reducing bureaucratic procedures and strengthening trust in state institutions.

In turn, the Polish experience shows that the introduction of independent innovations can radically change the approach to tax regulation and analytics. The most important feature of the changes in tax administration in Poland is the introduction of the Jednolity Plik Kontrolny (JPK) system, which in foreign scientific literature is regarded as the national implementation of the international SAF-T standard. This source indicates that the Polish Jednolity Plik Kontrolny (JPK) system (in English – Standard Audit File, “SAF”) is a standardised electronic reporting framework designed to enhance tax compliance and streamline communication between businesses and tax authorities. It requires the submission of various datasets in XML (eXtensible Markup Language) format to ensure uniformity, machine readability and ease of processing. “Poland’s SAF system is a standardized electronic reporting framework that is designed to enhance tax compliance and streamline communication between businesses and the tax authorities. It requires the submission of various datasets in XML format to ensure uniformity, machine readability, and ease of processing” [Microsoft 2025].

In the European Union countries, tax administration is oriented towards a service approach and full electronic integration. Thus, in Germany, the

ELSTER system operates – (Electronic Tax Return), allowing declarations to be filed online and advice to be obtained through a single portal. “ELSTER – the electronic tax return – is a procedure that allows you to submit your tax return to your tax office electronically via the Internet” [Electronic Tax Return 2026]. Finland, meanwhile, operates the “Tax Compliance Program”, based on trust-based relations between tax authorities and citizens, which makes it possible to prevent violations at an early stage. Tax administration is built on trust-based relations between tax authorities and citizens. As noted in the analytical report on the reform of tax administration in Finland, “Digitization is transforming how tax administrations operate, helping to improve process efficiency and service delivery. A striking example is the adoption of electronic invoicing (e-invoicing), which allows for the automatic transfer of billing information between firms and the tax authority” [Jenkins et al. 2024: 9]. This experience demonstrates that the combination of technological solutions and trust-based models contributes to reducing administrative costs, improving tax discipline and creating a fair tax environment.

One of the successful examples of the development of a service-oriented model of tax administration is Singapore. The Inland Revenue Authority of Singapore (IRAS) is gradually changing its approach to interacting with taxpayers, moving from blanket, door-to-door control to selective audit with the help of digital solutions. As emphasised in the IRAS annual reports for 2024/2025, the body aims at “a more seamless and user-centric experience” [IRAS, 2025a: 6]. The digital solutions of IRAS are based on client orientation and proactive interaction. The IRAS report Annual Report FY2024/25 [Singapore: Inland Revenue Authority of Singapore 2025] states that “myTax Portal exemplifies our commitment to user-centric design, featuring streamlined navigation and a centralised notifications hub that has significantly improved the tax management experience for all users” [IRAS 2025a: 6]. The result of this approach has been that “100% of YA2024 Individual Income Tax returns received in 2024 and assessed by March 2025” [IRAS 2025a: 13], which testifies to the high efficiency of the processes that allow taxpayers to minimise the time spent on fulfilling their tax obligations. Significant improvements have also been made in the area of payment services. IRAS “expanded e-GIRO services on myTax Portal for both corporate and individual taxpayers and increased the number of participating banks from two to seven for individual taxpayers, reducing GIRO arrangement set-up time from 21 days to mere minutes” [IRAS 2025a: 5], which has

provided convenience for taxpayers, effectively neutralising the barriers to making payments. According to the press release accompanying the report, this innovation makes “tax payments more convenient,” and today “95% of taxpayers now submit their GIRO applications electronically” [IRAS 2025b]. It follows that Singapore's practice demonstrates the gradual introduction of a client-oriented strategy based on a technological foundation as well as on international cooperation aimed at creating a tax system that is convenient for citizens and effective for the state. This experience demonstrates that in order to create an effective structure, it is necessary not only to introduce digital tools but also to create auxiliary regulatory mechanisms that will ensure high tax discipline and taxpayer satisfaction.

The importance of this system is emphasised by a number of authors. Grzegorz Bucior and Elżbieta Jaworska note in their scientific work “The costs of tax accounting digitalization from the perspective of Polish small enterprises” and provide a systematic assessment of the implementation of this system. The authors note that: “VAT reporting through SAF-T files, the so-called VAT taxpayers' whitelist, and the mandatory split payment mechanism all demanded rapid adjustments from both small and large enterprises. Never has tax reporting in Poland been as extensive as it is today”, “VAT reporting through SAF-T files, the so-called VAT taxpayers' whitelist, and the mandatory split payment mechanism all demanded rapid adjustments from both small and large enterprises. Never has tax reporting in Poland been as extensive as it is today” [Buciora, Jaworska 2025: 2], which shows the growth in the volume of tax reporting as well as the expansion of the role of analytics in tax administration, thereby emphasising the positive role of the implementation of this system. The latest European Commission report for 2025 establishes that the transition to digitalisation does not solve the problem of tax evasion, “In 2023 the VAT compliance gap amounted to EUR 128 billion, or 9.5% of the VTTL” “Compared to 2022, the gap increased by EUR 27.2 billion” [European Commission 2025: 36]. Moreover, this problem continues to grow “Compared to 2022, the gap increased by EUR 27.2 billion” [European Commission 2025: 36].

In the former State Programme “On approval of the National Development Plan of the Republic of Kazakhstan until 2025 and the invalidation of certain decrees of the President of the Republic of Kazakhstan,” the President of the Republic of Kazakhstan approved the task of “forming a service and

'human-centred' model of public administration," which provides that "a large-scale reform will be carried out to form a service and 'human-centred' model of public administration, in which citizens and their well-being are the main values." The document also reveals a trend towards a complete transition to digitalisation: "The functionality of state bodies will be accompanied by the introduction of a process approach. This implies a review, re-engineering and reduction of unnecessary business processes and a transition to full digitalisation. 100% of the services of state bodies will be automated and converted into electronic format" [Decree of the President of the Republic of Kazakhstan No. 636 2018]. These provisions envisage the development of electronic public services and the enhancement of their accessibility to the population.

Kazakhstan researchers note that the effectiveness of tax administration is determined by the level of trust between the state and the taxpayer, the digitalisation of procedures, as well as the presence of feedback mechanisms and legal protection. Thus, Sembiyeva L.M., Bekbolsynova A.S. and Bashu Z.R. in their research emphasise that at the same time, modern digital solutions create new opportunities for creating a new level of accessibility: automated accounting and data analysis systems, artificial intelligence and blockchain can embed tax obligations into business processes and detect fraudulent operations in real time [Bekbolsynova et al. 2025: 358].

In addition, in their scientific article, Khamitkhan N., Bekbulatova R.K. and Niyazbekova Sh.U. note that the further development of the digitalisation process of tax administration in the Republic of Kazakhstan will contribute to increasing the efficiency of the country's tax system, reducing the level of the shadow economy and the effective use of modern digital technologies and artificial intelligence systems, as well as increasing taxpayers' trust in state tax and executive bodies through the use of international experience. In the authors' opinion, the need for digitalisation in the tax system is to create convenient conditions for taxpayers, reduce administrative costs of payment, create conditions taking into account citizens' responsibility for paying taxes, and culture. The researchers emphasise that the next important task in the transformation process is to increase Kazakhstan's international competitiveness, bringing it closer to the experience of developed countries and the international payment system [Khamitkhan et al. 2025: 228–229]. The approaches of Kazakhstani researchers considered allow us to conclude

that a new concept of tax administration is being formed in the country, based on trust, digitalisation and service interaction between the state and the taxpayer.

Thus, the Prime Minister of the Republic of Kazakhstan, O. Bektenov, during a meeting on tax administration on 23 January 2026, emphasised that digitalisation in tax administration is necessary: “Fair, convenient and understandable. This is exactly what the tax payment process should be. Tax service employees should become consultants and partners of business,” thereby noting the importance of striving towards a service-oriented model of administration [Prime Minister of the Republic of Kazakhstan 2026]. This approach demonstrates a transition from the traditional model of control to a system oriented towards supporting taxpayers and simplifying their fulfilment of tax obligations through transparent and accessible procedures.

Vice Minister of Finance of the Republic of Kazakhstan Aseta Turysa, within the framework of the “Digital Finance Day”, noted that “In the modern world, digitalisation is becoming a necessary element of sustainable development of any economy. Our task – is to make public finances and all processes related to them more accessible, transparent and oriented towards the convenience of citizens” [Ministry of Finance of the Republic of Kazakhstan 2024]. It follows that digitalisation is regarded not as an end in itself but as a tool to improve the quality of services provided to citizens.

On the website of the unified platform of Internet resources of state bodies, the State Revenue Committee of the Republic of Kazakhstan posted information on the introduction of various tools, such as “Integrated Tax Administration System (ISNA), Smart Data Finance (SDF), Astana-1 Customs System (Keden), which ensures the improvement of tax and customs administration processes, as well as the reduction of the administrative burden for businesses and citizens” [State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan 2025].

The website of the State Revenue Committee of the Republic of Kazakhstan contains information on the service model of interaction between the state and entrepreneurs: “To further improve tax administration, the issue of transitioning to a service model of interaction between the state and entrepreneurs is currently being actively developed: expanding services through API (Application Programming Interface), outsourcing of services, one-click

tax write-off, pre-filing and automatic declaration” [State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan 2022]. As a result, Kazakhstan is moving towards a service format of tax administration. These circumstances allow us to conclude that Kazakhstan is striving to introduce modern technologies and improve the quality of interaction with taxpayers, guided by international practice.

States have created new tax mechanisms that simplify procedures for taxpayers, as noted in the OECD report: “The ability to submit returns electronically has certainly made things easier for taxpayers, although not dramatically so” [OECD 2020: 19]. At the same time, despite the active introduction of digital platforms e-Salyq, e-Tax and the mobile application e-Salyq Azamat, in practice, difficulties remain in the field of digitalisation of tax administration of the Republic of Kazakhstan:

Firstly, there is no simplification, but rather a transfer to a digital format. The current tax administration model has largely remained within the framework of Tax Administration 2.0. Thus, the OECD 2020 report emphasises that under such a system, “the current tax administration system continues to have some significant structural limitations as to the outcomes it can achieve” [OECD 2020: 11].

Secondly, despite noticeable progress in the field of the digitalisation of tax processes -the development and expansion of platforms such as e-Salyq, e-Tax, e-Salyq Azamat, and other electronic interaction tools – problems remain related to the incomplete integration of information systems and the insufficient unification of databases between state agencies. The lack of end-to-end interoperability and analytical connectivity limits the effectiveness of risk-oriented approaches and reduces the ability to forecast tax revenues to the budget. As Bassey, Mulligan, and Ojo note, “how the recent digital reforms have influenced its broader ecosystem, which consists of the people, processes, and institutions behind the provision of digital services” [Bassey et al. 2022: 1].

Thirdly, the problem of human resources also remains relevant: the introduction of digital technologies requires specialists who possess not only knowledge in the field of taxation but also competencies in digital data analysis, information security and the use of technologies for data analysis. At the same time, the insufficient qualifications of certain categories of

workers cause errors in administration, increase the time required to process information and, consequently, negatively affect the level of trust on the part of taxpayers. This problem is becoming more significant, as according to the concept of the “ICT ecosystem”, “an ICT ecosystem includes people – diverse individuals who create, buy, sell, regulate, manage, and use technology” [Bassey et al. 2022: 2].

Fourthly, despite the development of digital solutions, the automation of individual procedures does not yet ensure the complete removal of the administrative burden. As a result, many entrepreneurs turn to professional specialists for assistance, which increases the costs of conducting business activities. Raising the level of automation, simplifying interfaces, and introducing intelligent prompts within digital tax services can reduce these costs and increase the level of voluntary fulfilment of tax obligations. Solving this problem requires simplifying user interfaces, introducing intelligent support systems, and providing advisory services that will make interaction with the tax authorities more comprehensible, convenient, and technologically advanced. Moreover, in the context of the global economy, the risks of cross-border tax evasion are also increasing, which requires not only internal harmonisation of national legislation but also alignment with international standards of transparency and information exchange.

Based on scientific approaches and official actions by state bodies, it can be concluded that a service-oriented model of tax administration is being consistently formed in the Republic of Kazakhstan. Its foundation lies in the principles of digitalisation, transparency and client centricity. This direction of development reflects the concept of “Tax Administration 3.0”, “These changes provide an opportunity to address some of the structural limitations of the current system of tax administration, moving away from sequential taxpayer-facing processes and beginning to integrate taxation processes into the systems used by taxpayers as part of their daily lives and businesses. Such integration will allow compliance-by design outcomes to an increasing extent as well as possible step-change reductions in compliance costs for taxpayers” [OECD 2020: 12]. In practice, this approach is expressed in the introduction of integrated IT systems, the development of analytical tools and the transition to an advisory-partnership format of interaction with taxpayers. The expected effect lies in simplifying the fulfilment of tax obligations, ensuring the accessibility of administrative procedures and reducing the

pressure on business. The long-term sustainability of these transformations will be determined by the consistency of legal regulation, the effectiveness of data exchange and compliance with information security requirements, which generally contributes to the growth of voluntary compliance with tax legislation and the strengthening of trust in state institutions.

Consequently, tax administration includes not only accounting, control, analysis, debt collection, and the provision of services to taxpayers, but also becomes a fully-fledged service-oriented institution that assists taxpayers. Such development reflects a movement towards digitalisation and the formation of an intelligent model of administration. Thus, D. Cyman, E. Gromova, and E. Juchnevicius point out that AI-based (Artificial Intelligence) technologies play a key role in the development of modern states: "It is widely acknowledged that AI-based technologies have a crucial role in increasing innovation and productivity, improving standards of living and enhancing competitiveness and economic and societal modernization across the globe" [Juchnevicius et al. 2021: 90]. In particular, the authors note that, with the help of AI, it is possible to "provide the opportunity to develop appropriate institutions and mechanisms of tax law in a timely manner" [Juchnevicius et al. 2021: 88]. On this basis, the authors rightly observe that, under conditions of digitalisation, AI becomes a key factor in strengthening and securing development, encompassing all spheres of public life. This implementation not only contributes to enhancing the effectiveness of the service-based model of tax administration but also to the formation of trust in national institutions in an era of global innovative change.

In the scientific community, there is a shift away from the purely control-based, fiscal model towards a partnership model of management and the application of a service model. These trends reflect Kazakhstan's striving to create an efficient, technologically advanced and socially oriented tax system, where priority is given to the prevention of violations, the provision of advice to taxpayers and the formation of a sustainable level of tax discipline. Taken together, this indicates a gradual transition from a fiscal-control to a partnership-service model of tax administration, ensuring the improvement of the efficiency of the tax system, its adaptability to the digital economy and compliance with international standards of transparency, accountability and sound governance.

5. International Legal Regulation of the Digitalisation of Tax Administration

International practice confirms that tax administration is not only an instrument of fiscal policy but also an element of global economic governance. A central role in this process is played by the OECD Forum on Tax Administration (FTA), established in 2002 and uniting the tax administrations of more than 50 countries. Its activities are aimed at forming transparency standards, improving the efficiency of tax authorities and developing the digital infrastructure of tax administration. According to the OECD report “Tax Administration 3.0 and Beyond” (2022), the priority of the Forum is the construction of a tax interaction ecosystem, in which the use of digital technologies and data analytics ensures natural tax compliance -the principle of “compliance by design”, which involves embedding tax requirements into the business processes of taxpayers. According to the OECD document “Tax Administration 3.0: The Digital Transformation of Tax Administration” (2020), “Closer to home for tax administrations is the long-standing compliance-by-design example of PAYE systems. From the perspective of salaried employees, this is transparent in its outcome [i.e. notification of the amount of tax deducted] but largely invisible and burden-free in its operation. Where the employer has complete information about the individual taxpayer’s taxable position from verified sources [including from the tax administration] and there are no special allowances for the individual [e.g. for children or specified expenses], then there are no compliance choices for the employee to make. (Of course, the employer will still have compliance choices, for example remitting payroll taxes on time and in full.)” [OECD 2020: 15]. This document demonstrates how the principle of “compliance by design” allows the burden of compliance to be shifted from the taxpayer to the built-in mechanisms of the tax system.

A significant contribution to the development of international approaches to tax administration is also made by the UN Committee of Experts on International Cooperation in Tax Matters. It is engaged in the development of universal principles of fair taxation, the formation of the UN Model Double Taxation Convention and recommendations on tax administration in developing countries. In this report, the “Report on the 28th session (New York, 19–22 March 2024)”, in section “Q” “Capacity Building”, paragraph 99 states that the Committee emphasises the need for institutional strengthening of tax authorities, noting that Member States are urged to “make additional

contributions to strengthen and expand the benefits of the work related to the Committee and capacity building” [United Nations 2024: 26]. At the same time, in the same section, paragraph 95, Capacity Development Group leader Emily Muya reports “on the implementation of the project to combat aggressive tax planning. In particular, she explains that within the framework of the project, a risk assessment tool will be developed and improved, which will help countries identify and eliminate opportunities for aggressive tax avoidance in developing countries, which demonstrates the Committee's direct focus on the development of risk-oriented analytics in the field of international taxation” [United Nations 2024: 25].

The coordinated activities of the OECD and the UN ensure the creation of a global architecture of tax administration, in which digitalisation, transparency and international cooperation are regarded as key conditions for sustainable economic development. It is worth noting that Kazakhstan, as a participant in OECD initiatives and a supporter of multilateral agreements on the exchange of tax information, is gradually adapting tax mechanisms to these international standards, integrating the accessibility of service procedures, technological advancement and trust into the national tax administration system. The OECD, in turn, focuses its attention on the fact that one of the key directions of development of modern tax administration is deep digital integration of processes and the transition to electronic interaction of tax authorities with the population and business.

The OECD concept also serves as a fundamental practical basis. In the report “Tax Administration 3.0: The Digital Transformation of Tax Administration” and in the expert materials of the ITC (International Tax Compact), three key stages in the development of fiscal bodies are identified. The first stage, “Tax Administration 1.0,” is traditional and is characterised exclusively by manual document circulation: “taxpayers were required to submit their tax-related information in hard copy format and tax authorities manually processed and reviewed these documents” [ITC 2023]. In turn, “Tax Administration 2.0” (or “e-administration”) arose as a response to the limitations of the previous model [ITC 2023]. This stage is characterised by the digitisation of data and paper, including “electronic submission of tax declaration files, downloading and e-mailing forms or digital payments” [OECD 2020: 77]. However, this paradigm led to the creation of a more advanced version – “Tax Administration 3.0.” Unlike the previous stages, Tax Administration 3.0 is not

merely a technical improvement but a fundamental transformation that turns taxation into a natural part of the digital ecosystem: “Tax Administration 3.0 envisions a future where taxation becomes an intrinsic part of taxpayers’ digital ecosystems” [ITC 2023]. According to the OECD concept, at this stage “tax administration processes are increasingly built into the natural systems used by taxpayers in their daily lives and businesses” [OECD 2020: 3]. As a consequence, this makes it possible to realise the principle of “compliance by design,” which ultimately transforms the process into a more “seamless and frictionless process over time” [OECD 2020: 7].

In recent years, the trend towards the digitalisation of tax administration has increased sharply. In the annual OECD report (2021), *Tax Administration 2021: Comparative Information on OECD and other Advanced and Emerging Economies*, Executive Summary, this dynamic was brought to the level of an analytical review. The report states that “In addition to the ongoing incremental improvement of the core tax administration functions, there are also increasing signs of transformation towards a more fundamental change in the nature of tax administration. This concerns a more system-wide compliance management approach in which tax administrations try to closely engage with the natural systems that taxpayers use to manage their business, engage in transactions and communicate in order to reduce errors, minimise burdens and increasingly build-in tax compliance” [OECD 2021: 30]. This formulation establishes and confirms that the transition of tax authorities to electronic formats of interaction is a long-term trend, which received its predictable development in the OECD report (2022), *Tax Administration 2022: Comparative Information on OECD and other Advanced and Emerging Economies*.

Thus, according to the annual OECD report (2022), *Tax Administration 2022: Comparative Information on OECD and other Advanced and Emerging Economies*, in the section *Moving towards digital transformation*, it is stated: “Previous editions of the TAS have shown a significant trend towards e-administration with an increasing uptake of online filing of tax returns as well as online payments and, in many jurisdictions, a move towards the full or partial prefilling of tax returns. This 2022 edition shows how that trend has continued and been accelerated by the pandemic, with digital contact channels now dominating interactions with taxpayers. For example, tax administrations reported that in 2020 there were around 1.3 billion contacts

via online taxpayer accounts – an annual growth of 27%. This report also highlights how tax administrations are starting to move towards digital transformation, with Figure 2 highlighting that around 75% of administrations have a digital transformation strategy in place” [OECD 2022a: 22]. These analytical materials allow us to draw an unambiguous conclusion that the digitalisation of tax administration is a long-term phenomenon. The integration of digital data and the development of online services are becoming key directions in the modernisation of international tax administration.

Previously observed trends in the development of tax systems indicated a steady transition to electronic administration: the share of online filing of declarations and electronic payments is growing, more and more jurisdictions are introducing partial or complete pre-filing of tax forms, and contact through digital channels is gradually replacing traditional face-to-face visits and paper document circulation. These changes were occurring even before the pandemic, but COVID-19 significantly accelerated the process of digital transformation – many processes that had previously been pilot-tested for years were implemented on a mass scale. As a result, tax administrations have been able not only to improve the convenience and speed of taxpayer service but also to collect more structured data for risk analytics, reduce administrative costs and improve the planning of supervisory activities. Digital services are becoming the dominant communication channel.

In a broader context of the global digitalisation of the world economy, there is an increase in risks related to cross-border tax evasion and the withdrawal of capital to offshore zones. This is due to the fact that digital businesses based on data mobility create additional challenges for traditional principles of international taxation. This conclusion is confirmed in the OECD document (2015), *Addressing the Tax Challenges of the Digital Economy*, Action 1 – 2015 Final Report, it is emphasised: “an unparalleled reliance on intangibles, the massive use of data (notably personal data), the widespread adoption of multi-sided business models capturing value from externalities generated by free products, and the difficulty of determining the jurisdiction in which value creation occurs” [OECD 2015a: 16]. Therefore, Kazakhstan, following the standards of the international BEPS initiative (Base Erosion and Profit Shifting), is taking measures to bring national legislation into line with OECD recommendations in the field of transparency and automatic exchange of tax information. However, to achieve full integration into the

international system of tax interaction, further steps are needed in the direction of improving the regulatory framework, increasing the technological compatibility of state systems and developing digital competencies within tax authorities.

The aggregate OECD assessment demonstrates that, despite the existence of formal technologies of international tax cooperation, the practical implementation of some mechanisms still needs to be refined for practical and successful application. It should be noted that this OECD data on Kazakhstan is available in official reports: on the minimum standard of Action 14 MAP (Mutual Agreement Procedure) and on the minimum standard of Action 5 (exchange of information on tax rulings). Thus, the OECD report materials on the Mutual Agreement Procedure (MAP) emphasise the need for further adjustments to the treaty base to meet the minimum requirements of Action 14. The report notes: "Out of Kazakhstan's 55 tax treaties, none contain a provision equivalent to Article 25(1), first sentence" [OECD 2022b: 27].

According to the content of paragraph 1 of Article 25 of the OECD material on the Mutual Agreement Procedure (MAP), it is noted that "Jurisdictions should ensure that their tax treaties contain a MAP provision which provides that when the taxpayer considers that the actions of one or both of the Contracting Parties result or will result for the taxpayer in taxation not in accordance with the provisions of the tax treaty, the taxpayer, may irrespective of the remedies provided by the domestic law of those Contracting Parties, make a request for MAP assistance, and that the taxpayer can present the request within a period of no less than three years from the first notification of the action resulting in taxation not in accordance with the provisions of the tax treaty" [OECD 2022b: 27]. In accordance with the OECD minimum standard, enshrined in the final report on Action 14, Article 25(1), the taxpayer has the right "present his case to the competent authority of either the Contracting State of which he is a resident or, if his case comes under paragraph 1 of Article 24, to that of the Contracting State of which he is a national" [OECD 2015b: 22].

Meanwhile, the 1994 Convention between Kazakhstan and Poland contains a similar version of this norm: "to present his case for consideration to the competent authorities of the Contracting State of which he is a resident", or, if his case falls under paragraph 1 of Article 24 of that Contracting State, of which he is a national" [Convention between the Government of the Republic

of Kazakhstan and the Government of the Republic of Poland, 1994: Art. 25, paragraph 1]. The absence of an updated wording in this agreement carries risks for taxpayers and requires further work to bring the treaty base into line with the Action 14 standard.

At the same time, the OECD emphasises that Kazakhstan has a practical basis for the further development of the MAP mechanism, including measures to settle organisational procedures. The report records statistics and the presence of cases pending: “26 MAP cases pending on 31 December 2020” [OECD 2022b: 11], which demonstrates the functioning of the procedure and the availability of opportunities for the consideration of applications. Within the framework of the analysis, the OECD also identifies specific directions for improvement. The preparation of explanatory materials is recognised as a priority measure, with the indication that Kazakhstan “should, without further delay, introduce clear and comprehensive MAP guidance” [OECD 2022b: 46]. The implementation of these measures contributes to strengthening the development of the service component of administration, owing to the stability of procedures and their accessibility. The OECD qualifies Kazakhstan as a state that is creating a legal basis for fulfilling the Action 5 standard. According to the review, Kazakhstan has received a number of recommendations for improving and completing its procedural infrastructure: “Kazakhstan is recommended to finalise its information gathering process, with a review and supervision mechanism, as soon as possible” [OECD 2025c: 218]. Such a focus in the recommendations indicates the priority of strengthening administrative procedures and compliance, which in the long term contributes to the improvement of tax procedures and taxpayer trust. In summary, the conducted analysis makes it possible to determine the current state of tax administration in the Republic of Kazakhstan and the measures taken to bring national legislation into line with OECD recommendations in the field of tax administration modernisation and automatic exchange of tax information.

In particular, to achieve full integration into the international system of tax interaction, a new Tax Code entered into force in the Republic of Kazakhstan on 1 January 2026, which focused on improving tax administration in order to simplify administrative procedures, increase state revenues and reduce tax reporting through the application of digital technologies. Thus, mutual cooperation demonstrates the integration of the Republic of Kazakhstan,

which allows for the exchange of experience at this stage of development. However, the OECD points to the further improvement of certain mechanisms for improving and completing the procedural infrastructure and completing the information gathering process through a verification and oversight mechanism.

Accordingly, the Republic of Kazakhstan is implementing various digital tools for supervision and applying various service-oriented approaches and international standards recommended by the OECD. Modern trends in the development of tax administration in Kazakhstan indicate the need for its further institutional and technological modernisation. The OECD report “Governing with Artificial Intelligence” (2025) emphasises that the introduction and use of artificial intelligence is aimed primarily at strengthening taxpayer trust. As emphasised in the document, “Tax administrations rely heavily on taxpayers’ voluntary compliance, which requires sustained trust in the impartiality and fairness of administrative processes. Taxpayers need to be able to trust the government’s use of AI systems, continue to believe tax systems are fair and remain willing to comply with their tax obligations” [OECD 2025d: 173]. This position reflects the key OECD position, according to which digitalisation and the integration of public services require not only technical solutions but also institutional reforms, predictability and security of the tax environment. In this context, Kazakhstan needs to make more active use of international approaches, including OECD standards and EU best practices, aimed at harmonising tax norms, developing electronic services and increasing trust between the state and the taxpayer.

6. Conclusions

The analysis of international acts allows us to conclude that modern tax administration strives for digitalisation and a service-oriented approach. From our point of view, the most effective is a model in which digitalisation is a mandatory element of the service model of tax administration. Thus, in OECD documents, the introduction of digitalisation into the tax system is regarded as a simplified tool for the effectiveness of tax authorities.

Of no small importance, in our view, is the experience of the Republic of Poland, where the digitalisation of tax administration places emphasis on the introduction of a unified tax reporting system and data exchange between taxpayers and tax authorities. The SAF system, in turn, serves as a single,

national mechanism for data transmission. In our view, the practice of the Republic of Poland shows that the introduction of the system is not limited only to a technical innovation, but also changes the very structure of tax administration, creating expanded opportunities for data analysis and control simultaneously with the introduction of digital technologies. Thus, for Kazakhstan it seems possible to focus on the development of digital tools while maintaining client orientation and convenience for taxpayers. At the same time, the formation of an analytical system will reduce the risks of the emergence of unscrupulous taxpayers and will also serve as a tool for increasing the effectiveness of the activities of the authorities.

The service model of tax administration, at the present time, represents the most effective model of tax administration given the current economic situation. In our view, this model is leading in terms of the accessibility of information, since this approach implies building honest relations between the state and the taxpayer.

1. The development of the service model of tax administration not only contributes to increasing the level of ensuring compliance with tax legislation but will also reduce the number of errors in tax reporting, accelerate the processing of reports and payments, which reduces the risk of disputes between tax authorities and taxpayers.
2. The use of digital technologies will become increasingly reliable and effective if digital solutions are implemented comprehensively and supported by a regulatory framework.
3. Furthermore, the effectiveness of the application of digital tools increases when digital tools are used for the prevention of violations and not only for the application of sanctions, which increases voluntary compliance with tax obligations.

This will ultimately lead to the formation of more sustainable trust in the state and tax authorities, as well as create a solid foundation for increasing voluntary compliance with tax legislation.

Recommendations:

1. It is important that digital services are oriented towards taxpayer convenience and the clarity of procedures in tax collection.
2. Implementation should be accompanied by user training and quality service support in the exercise of tax administration.

3. It is necessary to ensure compliance with information security requirements and the protection of personal data.
4. The use of digital technologies and automation must rely on risk-oriented analytics and risk-oriented controls in the collection of taxes.
5. Work should continue on strengthening the interaction between tax authorities and taxpayers through the use of digital platforms providing remote, real-time access to information. Given the development of information technologies, such technologies must be advanced in the relationship between state bodies and taxpayers by expanding and revising the procedures for delivering existing services.

The study conducted, drawing on both national and international sources, allows us to identify the types of service-based models of tax administration. The contemporary approaches set out in OECD documents allow us to draw conclusions regarding the types of service-based model of tax administration: a self-service model built on digital platforms, a risk-oriented approach, and an integrated (comprehensive) approach. Today, international practice favors an integrated, service-oriented approach that introduces digital tools, risk management, and proactive engagement with taxpayers.

In turn, in the Republic of Kazakhstan a trend towards the formation of a service-based model of tax administration can be observed. This is established in the Tax Code of 2025 itself, which sets out a transition from the traditional model to a service-oriented one, together with a change in the approaches to the enforced recovery of tax arrears, founded on the principles of trust, transparency, and client-centricity. Moreover, Kazakh researchers emphasise that the introduction of digital platforms is not only a key stage in economic development but also represents a significant step towards strengthening the relationship of trust between the state and the taxpayer.

References

Asilo, I. J., Castillo, H. J., Abante, M. V., Vigonte, F. G.: Adoption and Impact of BIR Digital Services Among Taxpayers: An Analysis of Demographic Influence, Compliance Timeliness, and Policy Implications, SSRN, 2025.
Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5686304, accessed: November 7th, 2025.

Baer, K., Silvani, C.: Designing a tax administration reform strategy: Experiences and guidelines, International Monetary Fund, 1997.

Available at: <https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=882266>, accessed: November 7th, 2025.

Frecknall-Hughes, J. et al.: Tax Justice and Older People: An Examination Through the Lens of Critical Tax Theory (in: de Cogan, D., Harris, P. (eds.): Tax Justice and Tax Law: Understanding Unfairness in Tax Systems, Oxford: Hart Publishing, 2020.

Handrlica, J. (ed.): Veřejné právo a právo soukromé: aktuální tendence a výzvy veřejnoprávní úpravy plynoucí z problematiky právního dualismu [Public Law and Private Law: Current Trends and Challenges of Public Law Regulation Arising from the Problem of Legal Dualism], Praha: Eva Rozkotová, 2014.

Ihnatišinová, D.: Digitalization of tax administration communication under the effect of global megatrends of the digital age, SHS Web of Conferences, 2021.

Available at: https://www.shsconferences.org/articles/shsconf/abs/2021/03/shsconf_glob20_02022/shsconf_glob20_02022.html, accessed: November 7th, 2025.

Klapkiv, J., Koziuk, V., Hayda, Y., Dluhopolskyi, O., V. Martynyuk: Efficiency of environmental taxation in European countries: comparative analysis, Natsional'nyi Ekonomichnyi Zhurnal [National Economic Journal], 2020.

Available at: https://www.researchgate.net/publication/346500513_Efficiency_of_environmental_taxation_in_European_countries_comparative_analysis, accessed: November 7th, 2025.

Kolbenhayerová, K., Křížová, T.: Digitalization of Czech Republic Administration and its Effects not Only on Tax Administration, Financial Law Review, Issue 21(1), 2021, pp. 31–46.

Kubátová, K., Jareš, M.: Identifikace a kvantifikace daňových úlev v ČR v roce 2008 [Identification and Quantification of Tax Reliefs in the Czech Republic in 2008], Politická ekonomie [Political Economy], 2011.

Available at: <http://polek.vse.cz/pdfs/pol/2011/04/03.pdf>, accessed: November 7th, 2025.

Kubátová, K.: Daňová teorie a politika [Tax Theory and Policy], 7. vydání, Praha: Wolters Kluwer, 2018.

Künnapas, K., Maslionkina, P., Hinno, R., Liberts, R.: Current AI applications by Estonian tax authorities and use case scenarios, TalTech Journal of European Studies, 15(1), 2025, pp. 179–208.

Martínez, Y. U., Arzoz, P. P., Arregui, I. Z.: Tax collection efficiency in OECD countries improves via decentralization, simplification, digitalization and education, *Journal of Policy Modeling*, 2022.

Available at: <https://www.sciencedirect.com/science/article/pii/S0161893822000126>, accessed: November 7th, 2025.

Nazarov, M. A., Mikhaleva, O. L., Chernousova, K. S.: Digital transformation of tax administration. In S. I. Ashmarina, M. Vochozka, & V. V. Mantulenko (Eds.), *Digital age: Chances, challenges and future (Lecture Notes in Networks and Systems, Vol. 84, pp. 144–149)*. Springer, 2020.

Vítek, L., Pavel, J.: Tax compliance costs: Selected post-transitional countries and the Czech Republic, *Procedia Economics and Finance*, 2014.

Available at: <https://www.sciencedirect.com/science/article/pii/S2212567114003736>, accessed: November 17th, 2025.

Půček, J. M., Páleníková, M.: Hospodárnost, efektivnost a účelnost: Analýza vnitřních kontrolních systémů [Economy, Efficiency and Effectiveness: Analysis of Internal Control Systems], Praha: Ministerstvo financí České republiky, 2022.

Available at: https://www.mfcr.cz/assets/cs/media/2022-09-27_Priloha-c-1-k-Analyze-vnitrnich-kontrolnich-systemu-Hospodarnost-efektivnost-ucelnost.pdf, accessed: November 17th, 2025.

Ranchordás, S., Scarcella, L.: Automated Government for Vulnerable Citizens: Intermediating Rights, *William & Mary Bill of Rights Journal*, 2021.

Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3938032, accessed: November 17th, 2025.

Surrey, S.: *Pathways to tax reform: the concept of tax expenditures*, Cambridge: Harvard University Press, 1973.

Other official documents

OECD zveřejnilo hospodářský přehled ČR 2023 [OECD Published the 2023 Economic Survey of the Czech Republic], Ministerstvo financí České republiky, 2023.

Available at: <https://www.mfcr.cz/cs/ministerstvo/media/tiskove-zpravy/2023/oecd-zverejnilo-hospodarsky-prehled-cr-2-50792>, accessed: March 30th, 2023.

OECD: *Tax Administration 2025: Comparative Information on OECD and other Advanced and Emerging Economies*, OECD Publishing, Paris, 2025.

Available at: <https://doi.org/10.1787/cc015ce8-en>, accessed: November 17th, 2025.

VAT Gap in the EU – Report 2024, Taxation and Customs Union, European Commission, 2024.

Available at: https://taxation-customs.ec.europa.eu/taxation/vat/fight-against-vat-fraud/vat-gap_en, accessed: December 18th, 2024.

Guidelines on situations in which a third-country firm is deemed to solicit clients established or situated in the EU and the supervision practices to detect and prevent circumvention of the reverse solicitation exemption under the Markets in Crypto Assets Regulation (MiCA), ESMA35-1872330276-2030

Available at: https://www.esma.europa.eu/sites/default/files/2025-02/ESMA35-1872330276-2030_Guidelines_on_reverse_solicitation_under_MiCA.pdf (accessed: March 3rd, 2026).

Závěrečná zpráva z hodnocení dopadů regulace k návrhu změnového zákona v souvislosti s konsolidací veřejných rozpočtů [Final Regulatory Impact Assessment Report on the Draft Amendment Act in Connection with the Consolidation of Public Budgets], Ministerstvo financí České republiky, 2023.

Available at: <https://www.mfcr.cz/cs/kontrola-a-regulace/legislativa/legislativni-dokumenty/2023/zaverecna-zprava-ria-51775>, accessed: June 30th, 2023.

Zpráva o daních [Report on Taxes], Nejvyšší kontrolní úřad, 2024.

Available at: https://www.nku.cz/assets/pro-media/tiskove-zpravy/zprava-danich__2.pdf, accessed: November 17th, 2025.