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## **New Technologies in the Control of Public Finances and Building Public Confidence in the State**

**Abstract:** This article addresses the directions of change in the area of control of the collection and distribution of public funds, in the context of the possibility of using new technologies, with a view to compliance with the legal standards of a democratic law-governed state and the challenges facing law-makers in properly legislating the use of AI. Issues related to the risks and threats posed by the implementation of new technologies in the public sector regarding technical (e.g. algorithmic bias) and legal (e.g. inadequate regulation of the possibility of using technology by a public administration) aspects are raised, bearing in mind that incorrect regulation of these issues is not without impact on trust in the state and ensuring the protection of democratic values. Analysing the issues related to the implementation of technological solutions to control public finances, it also indicates new areas for control in the public sector, for example the control of algorithm-based applications.

**Keywords:** artificial intelligence, new technologies, public finance sector

### **Introduction**

Assuming legislative understanding of public finance, according to which it includes processes related to the accumulation of public funds and their disposition,<sup>1</sup> and narrowing the inclusion of control to the examination within the public sector of financial activities, the use of state or municipal funds, or the fulfilment of financial obligations to the state, one can raise questions about the scope of the use of new technologies in this context, as well as about possible risks requiring regulatory an-

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1 Article 3 of the Public Finance Act of 27 August 2009 (Journal of Laws of 2022, item 1634).

icipation. These considerations may be particularly interesting in relation to building the legal values of a democratic state and public confidence in the state. This has significance against the backdrop of the ongoing debate on the risks associated with the use of new technologies for the rule of law and human rights (invasion of privacy, data protection, the potential for discrimination and unequal treatment, etc.), which, however, is most often focused on the area of security or public services in the performance of public tasks by units of the public finance sector. However, it seems necessary and important to conduct broader, more complex research on the risks of the technologization of the public sector, precisely from the point of view of the use of new technologies in the control of public finances.

Reflecting on the use of new technologies in the control of processes related to the collection and distribution of public funds, one cannot help but begin by noting that the implementation of the set of values derived from the rule of law and democratic state clause is intertwined with the various challenges currently facing the governments of all democratic countries.<sup>2</sup> The set of values have been subject to changes over the years, one of the important ones being the perception of the way the authorities operate in a democratic state, with a shift away from ‘the exercise of the state imperium in such a way that only certain activities and especially their effects (e.g. legal norms, acts of applying the law) were overt’ and where ‘many manifestations of the activities of public authorities’ were kept secret, towards transparency and ensuring the possibility of control over the actions of state bodies.<sup>3</sup> This is reflected in legal norms, including, among others, the guaranteed right (in Poland specified in the Constitution) to obtain information about the activities of public authorities or, in the context of the subject matter of this article, the openness of public finances, requirements for spending public funds, etc. Nowadays, it is becoming important to assess the legitimacy and legality of the actions of public bodies, making it possible not only to hold violators accountable, but affecting the level of trust in institutions, which builds the ‘resilience of democracy’.<sup>4</sup> It is clear that a high level of trust in institutions has benefits in terms of reducing costs and gaining support for public policies. An OECD report published in June 2022 states unequivocally that in democratic countries, an adequate level of trust, along with a healthy level of public scrutiny, can positively strengthen democratic institutions.<sup>5</sup> Today, in order to maintain these institutions, it is no longer only important to obtain a socially acceptable result for the

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2 See The judgment of the Constitutional Tribunal, 25.11.1997, K 26/97, OTK 1997, pp. 5–6, *item* 64.

3 Commentary on Article 61, (in:) B. Banaszak, *Konstytucja Rzeczypospolitej Polskiej. Komentarz* (2nd ed.), Warsaw 2012.

4 OECD, *Building Trust to Reinforce Democracy: Main Findings from the 2021 OECD Survey on Drivers of Trust in Public Institutions*, Paris 2022.

5 *Ibidem*

policies carried out by the state – the public tasks performed – but also to be able to evaluate the process of their implementation.

In this context and through the prism of the subject of this paper, we can ask whether the development currently observed in the field of control in public administration aimed at automation and digitization, i.e. the implementation of new technologies, can affect the growth of public confidence in the state, and thus the strengthening of democratic institutions. It seems important to point out two areas of influence in this regard in particular: the first is the increased efficiency or transparency in the control of public finances (the ability to detect irregularities resulting from changes in the way audits are carried out and the ability to carry out more comprehensive and targeted audits on a very broad set of data, increasing the speed and quality of audits). This will affect, among other things, the implementation of the principle of accuracy and efficiency in making expenditure, making an analysis of the costs incurred in carrying out public tasks, responsible use of public funds, and, as a result, the assessment of management efficiency and confidence in the state. The second is the public's access to information, including, for example, how automated decision-making (ADM) is used in public administration, ensuring the correctness of technological processes and protecting the rights of individuals. However, a prerequisite for building trust is the proper implementation of new technology solutions in both technical and legal aspects.

In seeking an answer to this question, it should first be noted that new technologies, especially artificial intelligence (AI), bring many benefits in various areas of life, including the socio-economic sphere. Currently, both in society and in the minds of law-makers, AI-based solutions are seen as enabling more efficient forecasting, optimization of operations and resource allocation. Their potential is seen in the public sector and in the area of finance.<sup>6</sup> Even the obligation to technologize or to try out new technological approaches is derived from current legislation on the need for efficient use of public funds.<sup>7</sup> This does not change the fact that AI also generates risks for the public interest, given the possibilities of its application as well as the imperfections of new technologies (in particular, partially autonomous behaviour in the case of some artificial intelligence systems, a certain unpredictability, possible bias or the so-called 'black-box effect').<sup>8</sup> There is recognition of the dangers

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6 Explanatory Memorandum, Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts, 21.04.2021, COM (2021) 206 final, <https://eur-lex.europa.eu/legal-content/PL/TXT/HTML/?uri=CELEX:52021PC0206&from=IT>, p. 1 (12.09.2022).

7 Centre for Data Ethics and Innovation, Review into Bias in Algorithmic Decision-Making (November 2020), <https://cdei.blog.gov.uk/2020/11/27/overview-of-our-review-into-bias-in-algorithmic-decision-making/> (12.09.2022).

8 This implies the necessity of the legislator's interference, as exemplified by the acts in force in the EU: European Parliament Resolution of 20 October 2020 with recommendations to the Commis-

of creating new tools for manipulation, exploitation and social control practices.<sup>9</sup> All these risks are sometimes raised as an argument against the use of new technologies in the public sector.<sup>10</sup> There is no doubt that as the public sector becomes more technologized, there is a growing awareness of the risks (not only operational, but also ethical, legal, political and social) and systemic challenges in the area of governance and law-making.<sup>11</sup>

Taking these findings as preliminary assumptions underlining the weightiness of the issue under consideration here, and treating this study as a prelude to further research findings on the possibility of using modern technologies in the control of public finances, on the scope of necessary legislative changes, as well as on the relationship between the use of new technologies and trust in the state, the article's deliberations will focus on selected aspects of the technologization of the public sector. Firstly, my purpose will be to analyse the meaning of the terms 'new technologies' and 'AI' in legal language in order to demonstrate the difficulty of accurately capturing what new technologies and AI are. At the same time, this will delineate the scope of legislative challenges flowing from the lack of definition in legislation, while the definitional findings made will provide a base for further considerations in the article. Secondly, the broader context of the threats to the use of new technologies by public entities will be presented in order to identify the sources of the threats, as well as the initial requirements for AI in the EU, which can be viewed as taking support for democratic processes into account. Thirdly, the purpose of the article is to show the areas of possible use of new technologies in the process of controlling public finances, taking into account the aspect of trust in the state and the obligations incumbent on public administration. The objectives thus defined, straddling the boundaries of legal sciences, determined the research method employed to reach my findings, which were made on the basis of current legislation but also to a large extent by confronting theory with the results of the observations made.

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sion on a framework of ethical aspects of artificial intelligence, robotics and related technologies (2020/2012(INL)), O.J. C 404, 06.10.2021, p. 63; European Parliament Resolution of 20 October 2020 with recommendations to the Commission on a civil liability regime for artificial intelligence (2020/2014(INL)), O.J. C 404, 06.10.2021, p. 107; European Parliament Resolution of 20 October 2020 on intellectual property rights for the development of artificial intelligence technologies (2020/2015(INI)), O.J. C 404, 06.10.2021, p. 127.

9 Explanatory Memorandum..., *op. cit.*, p. 9.

10 Z. Engin, P. Treleaven, Algorithmic Government: Automating Public Services and Supporting Civil Servants in Using Data Science Technologies, 'The Computer Journal' 2019, vol. 62, no. 3, pp. 451–453.

11 M.M. Maas, Regulating for 'Normal AI Accidents': Operational Lessons for the Responsible Governance of AI Deployment, Proceedings of 2018 AAAI/ACM Conference on AI, Ethics, and Society (AIES 18), 2–3 February 2018, New Orleans, Association for Computing Machinery (ACM), <https://matthijsmaas.com/uploads/Maas%20-%202018%20-%20Regulating%20for%20Normal%20AI%20Accidents%20Operational%20Lessons.pdf>, p. 223 (12.09.2022).

## 1. The concepts of ‘new technologies’ and ‘artificial intelligence’ in statutory language

The terms ‘new technologies’, ‘modern technologies’ and ‘artificial intelligence’ are used in the formulation of EU law as well as Polish law.<sup>12</sup> In the case of AI, the concept itself is still not defined in legal acts. Moreover, not only at the regulatory or normative level, but also at the technical one,<sup>13</sup> there is no supranational agreement on a universally accepted working definition.<sup>14</sup> The same is true with regard to the term ‘modern technologies’. On the other hand, a definition of the term ‘new technologies’ has been formulated at the national level for the purposes of specific solutions for supporting innovative activities. According to the understanding adopted by the Polish legislator, a new technology is a technology ‘in the form of industrial property rights or the results of research and development, or the results of applied research, or unpatented technical knowledge, which enables the production of new or significantly improved products, processes or services.’<sup>15</sup> This state of affairs regarding fundamental concepts in the law of new technologies causes some difficulties in the proper normative approach and normalization of important issues in the application of new technologies in public administration.<sup>16</sup>

Nevertheless, the legislative work carried out at the EU level over the past few years and the recognition of the need to regulate artificial intelligence have resulted in the delineation of the approximate meaning of the term ‘artificial intelligence’. We can cite the definition that has been prepared as part of the activities of the European Parliament and the work accompanying the preparation and enactment of EU legislation:

Artificial intelligence (AI) refers to systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy

12 E.g. the Law of 17 January 2019 on the foundation of the future of industry platform, consolidated text Journal of Laws of 2023, item 489, and the Law of 11 August 2021 on open data and reuse of public sector information (Journal of Laws of 2021, item 1641).

13 In the scholarly literature we may even find the statement that ‘AI is an umbrella term, comprised by many different techniques’; R. Calo, Artificial Intelligence Policy: A Primer and Roadmap (9 August 2017), <http://dx.doi.org/10.2139/ssrn.3015350>, p. 5 (12.09.2022).

14 M. Kritikos, Artificial Intelligence *ante portas*: Legal and Ethical Reflections, European Parliamentary Research Service 2019, STOA/Panel for the Future of Science and Technology, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/634427/EPRS\\_BRI\(2019\)634427\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/634427/EPRS_BRI(2019)634427_EN.pdf), p. 1 (12.09.2022).

15 Article 2, paragraph 1, item 9 of the Law of 30 May 2008 on certain forms of support for innovative activity, O.J. 2021, item 706.

16 In the literature, the problems and doubts raised by the definitions of the terms ‘artificial intelligence’, ‘code’ and ‘algorithm’ are described, among others, by D. Szostek, Is the Traditional Method of Regulation (the Legislative Act) Sufficient to Regulate Artificial Intelligence, or Should It Also Be Regulated by an Algorithmic Code? *Białostockie Studia Prawnicze* 2021, vol. 26, no. 3, pp. 45–46.

– to achieve specific goals. AI-based systems can be purely software-based, acting in the virtual world (e.g. voice assistants, image analysis software, search engines, speech and face recognition systems) or AI can be embedded in hardware devices (e.g. advanced robots, autonomous cars, drones or Internet of Things applications).<sup>17</sup>

In a forthcoming act on artificial intelligence by the European Parliament, it is instead defined as follows:

Artificial intelligence is a fast evolving family of technologies that can contribute to a wide array of economic and societal benefits across the entire spectrum of industries and social activities. By improving prediction, optimising operations and resource allocation, and personalising digital solutions available for individuals and organisations, the use of artificial intelligence can provide key competitive advantages to companies and support socially and environmentally beneficial outcomes.<sup>18</sup>

Artificial intelligence can therefore be understood as a specific type of new technology. In this article, it will be understood as a group of technologies related to the ability to ‘reason’ (planning, programming of actions, knowledge representation and reasoning, search and optimization), make decisions and learn, and to a combination of applied techniques. This will therefore include AI and other technological solutions from robotics and related technologies.

## **2. New technologies in the process of the control of public finances: regulatory challenges**

In analysing the current direction of development in the implementation of new technologies in the control of processes related to the collection of public funds and their allocation, it is first necessary to present the broader context of their application in the public sector. The academic literature points out that in the transformation of public administration, from the technological side, new technologies include systems capable of performing tasks requiring intelligence (AI) and processes for studying very large data sets that allow the discovery of hidden patterns, unknown correlations, etc. (Big Data).<sup>19</sup> It is impossible not to point out that technological development has reached a level where it is possible to make decisions and learn without explicit programming. There are now knowledge-based systems (including programs that base decision-making on previous experience) and machines learning skills

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17 High-Level Expert Group on Artificial Intelligence, A Definition of Artificial Intelligence: Main Capabilities and Scientific Disciplines (8 April 2019), <https://digital-strategy.ec.europa.eu/en/library/definition-artificial-intelligence-main-capabilities-and-scientific-disciplines> (12.09.2022).

18 Explanatory Memorandum..., *op. cit.*

19 Z. Engin, P. Treleaven, Algorithmic Government..., *op. cit.*, p. 449.

without explicit programming (machine learning, ML).<sup>20</sup> At the same time, a distinction is made between supervised machine learning (where historical data is used to predict future performance) and unsupervised machine learning (where the system sets data patterns on its own, which allows detection of previously unforeseen risks).<sup>21</sup> Depending on the type of interaction (state–citizen, public sector–public sector), the use of new technologies brings slightly different challenges. For example, automated online dispute resolution (so-called ‘digital courts’) or the use of algorithms to convict defendants are particularly prone to dysfunctions that threaten democratic institutions and human rights (e.g. possible bias, incomplete or imperfect data, lack of transparency in the processes that lead to the outcome).<sup>22</sup> Hence it is important to have a slightly different legislative approach to, for example, the use of LawTech (new legal technologies) in automating and linking judicial and legal practice, or the use of ADM in public administration, e.g. for issuing tax decisions, compared to the introduction of new technologies in the process of auditing public sector entities.

Nonetheless, regardless of the area of implementation of new technologies in EU Member States, it has become important to introduce rules that allow only so-called ‘trustworthy’ artificial intelligence to function. The three main characteristics, which AI systems developed, implemented or used in EU Member States should meet, have been defined: they should be legal, ethical and robust from a technical as well as from a social point of view throughout their operation.<sup>23</sup> One of the requirements for a trustworthy AI is that it serves to support democratic processes.<sup>24</sup>

Analysing the current state of development in the field of the control of public finances aimed at the implementation of new technologies, it should be noted that in all EU countries there is a progressive process of automating decisions in the public sector, digitization and use of algorithms, including the use of technology to increase the efficiency of control over the collection and spending of public funds. Examples include Poland’s Clearing House Information and Communication System (System Teleinformatyczny Izby Rozliczeniowej, STIR), used by the tax administration as a control and analytical tool, or Portugal, where the supervisory authority (i.e. the Court of Auditors) uses an AI-based public expenditure control system that allows

20 *Ibidem*.

21 G. Dickey, S. Blanke, L. Seaton, Machine Learning in Auditing: Current and Future Applications, ‘The CPA Journal’ 2019, vol. 89, pp. 16–21.

22 See C. O’Neil, Broń matematycznej zagłady. Jak algorytmy zwiększają nierówności i zagrażają demokracji, Warsaw 2017; R. Calo, Artificial Intelligence Policy, *op. cit.*

23 Ethics Guidelines for Trustworthy AI, <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai> (accessed 12.09.2022). Also see OECD, Artificial Intelligence, Machine Learning and Big Data in Finance: Opportunities, Challenges, and Implications for Policy Makers (2021), <https://www.oecd.org/finance/artificial-intelligence-machine-learning-big-data-in-finance.htm> (12.09.2022), p. 45.

24 Ethics Guidelines..., *op. cit.*



real-time tracking of the expenditure of the public entities it audits (the expenditure of some 6,500 entities audited by the institution are checked in real time).<sup>25</sup>

The increasing use of new technologies is forcing states to plan long-term activities related to the directions and areas of use of AI and robotics solutions and related technologies. To focus on the tasks set by public authorities in Poland, a policy for the development of artificial intelligence has been adopted and implemented in the design of activities, which assumes that new technologies can improve the efficiency of national and local government, and 'the task of public administration should be to set standards for the implementation of AI solutions, in particular ensuring respect for AI ethics, protection of citizens' rights and raising the quality of public services offered'.<sup>26</sup> The need to develop appropriate rules for transparency as well as auditing and accountability for the use of algorithms by the public administration is indicated. Such an approach should also determine the direction of legislative activities in Poland. However, the adopted document lacks targeted, comprehensive resolutions on the implementation of new technologies in the process of controlling the collection and spending of public funds.<sup>27</sup>

Areas where new technologies already are or may be applicable are those related to real-time monitoring of public entities' expenditure by supervisory agencies, assessing the correctness of the process of collecting public funds, including increasing the collection of receivables, combating fiscal fraud, and verifying the correctness and accuracy of taxpayer settlements.<sup>28</sup> Machine-learning tools, properly designed, could, for example, identify unusual obligations in contracts, which would allow auditors to focus specifically on the highest-risk contracts, influencing the speed and quality of audits.<sup>29</sup>

However, the use of new technology to control public finances carries risks. In the case of some technologies, for example, lack of transparency in the processes,

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25 Tribunal de Contas, <https://www.tcontas.pt/pt-pt/MenuSecundario/Noticias/Pages/n20230130-1.aspx> (11.05.2023).

26 Resolution No. 196 of the Council of Ministers of 28 December 2020 on the establishment of 'Policy for the development of artificial intelligence in Poland from 2020', Polish Monitor of 2021, item 23.

27 The policy described in the document is aimed at development and in the context of society (health and senior care), the economy or research, rather than on the possibilities of using new technologies to increase the efficiency of control over the collection and spending of public funds.

28 In Poland, the Treasury Administration uses the STIR as a control and analysis tool, and, for example, in accordance with Article 119(zn) of the Tax Ordinance, the clearing house determines the risk index. The risk index is determined for a qualified entity based on algorithms developed by the clearing house.

29 G. Dickey, S. Blanke, L. Seaton, *Machine Learning in Auditing...*, *op. cit.*, pp. 16–21; B. Brennan, M. Bacala, M. Flynn, *Artificial Intelligence Comes to Financial Statement Audits*, CFO.com (2017), <http://bit.ly/2Jx3CYO> (12.09.2022).



which give the final results, errors in the algorithms or reliance on incorrect data.<sup>30</sup> In particular, the introduction of technology-based tools must ensure that errors in the underlying data (including not allowing reliance on simplistic, biased data)<sup>31</sup> or human biases in machine learning are eliminated at the design stage. Constructing AI and ML algorithms based on biased data in the public sector will lead to distorted results and, consequently, large-scale discrimination and inequality.<sup>32</sup>

In the case of the application of new technologies in which automated decision-making is used, in addition to the benefits that may flow from the realization of the principle of swiftness of proceedings (e.g. tax proceedings), solutions should be introduced to properly normalize the automation of the proceedings themselves, as well as decision-making, so that the principles of good administration and the protection of the individual are realized, the liability of public administration bodies is defined, and data protection requirements are met.

In particular, in countries that are considering ADM norms, it is indicated that there is a need for resolving 'whether the ADM should (and could) be made to comply with existing law, or should existing law be amended to accommodate ADM'.<sup>33</sup> Currently, regulations designed on the assumption that the decision-maker is a human being are used for automated decision-making, which can have negative consequences for the protection of the individual and the implementation of the principles of the proceedings.<sup>34</sup> Solutions should also be put in place for the publication of algorithms to allow judicial review of decisions. The experience of states shows that often, the algorithms used by the systems are not publicly available or transparent.<sup>35</sup> One cannot help but notice that in seeking solutions to ensure the protection of the individual, states are placing restrictions on, for example, the application of ADM to cases in which decision-making does not involve discretion, and a solution can be 'mechanically derived' from the law on the basis of existing factual data.<sup>36</sup> In tax law,

30 Z. Engin, P. Treleaven, *Algorithmic Government...*, *op. cit.*

31 Auditing Machine Learning Algorithms: A White Paper for Public Auditors, <http://intosajournal.org/auditing-machine-learning-algorithms/> (12.09.2022).

32 As an aside, it can be pointed out that this raises challenges for top-level audit authorities, also in auditing applications based on AI and ML algorithms. A White Paper on AI and ML has been produced to help audit authorities gain knowledge about auditing algorithms (see note above).

33 M. Suksi, Administrative Due Process When Using Automated Decisionmaking in Public Administration: Some Notes from a Finnish Perspective, 'Artificial Intelligence and Law' 2021, no. 29, p. 89.

34 *Ibidem.*

35 For example, in Poland, the algorithm used by STIR. In Finland, in the absence of transparency in the algorithm, decisions have been issued on the unconstitutionality of the ADM.

36 Cf. Lausuntopalvelu.fi, Memorandum Assessing the Regulatory Needs of General Legislation Related to Automatic Administrative Decision-Making, <https://www.lausuntopalvelu.fi/FI/Proposal/ParticipationNonJsShowReport?proposalId=081aedb9-f440-436f-abad-a71dd56a6cca> (12.09.2022).

the potential for such solutions is increased by the ‘technicality’ of tax law indicated in the scholarly literature.<sup>37</sup>

In implementing the EU guidelines, and bearing in mind the standards developed in the Artificial Intelligence Act, it should be emphasized that human agency is necessary in the design, implementation and use of new technologies, in addition to the indicated security, transparency, non-discrimination, privacy and data protection. AI developers should consider the type of technical measures to be implemented to ensure human oversight.<sup>38</sup>

To conclude, it is also worthwhile looking at the implementation of new technologies from yet another perspective, as a cost associated with the operation of administration and its rationalization in the design and introduction of new technologies through, for example, the adoption of standards for the implementation of new technologies in the public sector as part of the expenditure control process. An example is that of the United Kingdom, which has adopted a Technology Code of Practice which provides guidance and instructions on how to approach technology selection in the public sector.<sup>39</sup> This promotes monitoring of the efficiency of public spending.

## Conclusion

Currently, the growing use of new technologies is evident not only in the private but also in the public sector. In the latter, so-called GovTech allows the optimization of administration procedures or the more efficient performance of public tasks.<sup>40</sup> Currently, the process of implementing new technologies is focuses on the introduction of digital identity, automation of processes (e.g. the use of a voice-driven virtual assistant for tax-related services in Ireland) and repetitive tasks, cybersecurity or the implementation of data-sharing solutions. It is becoming the aspiration of policy-makers that digitization, and with it new technologies, should lead to the development of public services so that as many processes as possible are handled automatically.<sup>41</sup> However, it is possible and legitimate to use new technologies within the public sector in the processes of investigation of financial activities, use of public funds and fulfilment of financial obligations to the state. This requires targeted, com-

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37 B. Kuźniacki, Zastosowanie sztucznej inteligencji do prawa podatkowego: Spojrzenie w przeszłość, terażniejszość i przyszłość, ‘Kwartalnik Prawa Podatkowego’ 2017, no. 2, p. 67.

38 EU Guidelines on Ethics in Artificial Intelligence: Context and Implementation, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/640163/EPRS\\_BRI\(2019\)640163\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/640163/EPRS_BRI(2019)640163_EN.pdf), pp. 3–4 (12.09.2022).

39 Gov.uk, The Technology Code of Practice, <https://www.gov.uk/guidance/the-technology-code-of-practice> (12.09.2022).

40 See A. Łożykowski, J. Sarnowski, GovTech, czyli nowe technologie w sektorze publicznym, Warsaw 2019.

41 See e.g. Valtioneuvosto, Luonnos: Suomen digitaalinen kompassi, VN/24874/2021, 31.03.2022.

prehensive solutions for the implementation of new technologies in the process of controlling the collection and expenditure of public funds and the adaptation of laws to create solutions that are consistent with the values of a democratic and law-based state, realizing the principles of social justice.

Given the changes in EU law that are being prepared, the introduction of technological systems and solutions must be accompanied by measures to mitigate the risks inherent in the entire socio-technical environment. The adoption at the EU level of the concept of so-called trustworthy artificial intelligence means that the legal changes being prepared must take into account the conditions to which it must conform, formulated at the EU level. These include compliance with the law, compliance with ethical principles and values, and technical and social robustness. Adopted EU legislation, projects currently in preparation and guidelines emphasize the importance of trust and a democratic culture in the design and use of AI systems (and new technologies more broadly). Their reliability, including countering errors (such as algorithmic bias), transparency and explainability are prerequisites for building public trust in the state.

The existing threats can be divided into two groups: those arising from new technologies themselves and those arising from the failure to adapt regulations to the possibility of using these technologies by public administrations. In the latter case, it is necessary to decide whether the technologies can be introduced and used on the basis of current regulations, which were after all constructed for traditional methods of public administration activities, or whether there is a need for conceptual changes and a different standardization of them aimed at the use of tools based on ML, AI, etc. In this regard, it would be appropriate to anticipate regulation of these issues. Additionally, building public confidence in the state also requires providing opportunities for access to information on algorithms. They should not only be transparent, but also publicly available, and thus verifiable by independent entities.

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