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AI in the Czech Public Administration, Selected Topics

Keywords: artificial intelligence, public administration

Summary. The implementation of artificial intelligence (AI) is undoubtedly a growing trend in the public sector. This is because the public sector has access to a vast amount of data. For this reason alone, the potential for using AI is significantly higher here than in the private sector. It is fair to say that artificial intelligence 'feeds' on data, and its task is to process it at a speed beyond human capability. It is therefore clear that its development in this area is inevitable. Issues related to cost-effectiveness, efficiency and effectiveness mean that technological innovations driven by artificial intelligence systems are appearing with increasing frequency in public administration. Incidentally, it is precisely this kind of administration – that is, a modern administration – that contemporary society expects. There is no doubt that artificial intelligence algorithms can be successfully used to automate routine administrative processes. This article aims to provide the reader with an overview of the state of advancement of the Czech public administration in the use of groundbreaking technologies.

The introduction of generative artificial intelligence into the Czech public administration is intended to help streamline decision-making, optimise internal processes, improve accessibility and simplify bureaucratic procedures. In this regard, the Czech Republic is focusing on the development of e-government services, such as the eDoklady system – digital documents on a mobile phone. Four public sectors in particular appear to be ideal candidates for experimenting with artificial intelligence: the judiciary, healthcare, education, and infrastructure and municipal services¹.

¹ F. Křepelka, *Artificial intelligence in the Czech government: political and economic hype, bureaucratic paralysis, and demarcation with the European Union*, Italian Journal of Public Law, vol. 17, issue 2/2025, p. 603.

Development in this area must take security issues into account, particularly data security. For this reason, in July 2025, following warnings from the National Cyber and Information Security Agency (NUKIB), the Czech government banned the use of services provided by the Chinese company DeepSeek AI in public administration, citing data security risks as well as concerns over potential surveillance by Beijing. Czech experts have highlighted the risk of unauthorised access to user data, as DeepSeek – which offers a large AI-based language model – is obliged, under Chinese law, to cooperate with the authorities there².

AI w czeskiej administracji publicznej, zagrożenia wybrane

Słowa kluczowe: sztuczna inteligencja, administracja publiczna

Streszczenie. Wdrażanie sztucznej inteligencji (Artificial Intelligence, AI) jest niewątpliwie rosnącym trendem w sferze publicznej. Sektor publiczny dysponuje bowiem olbrzymią ilością danych. Już chociażby z tego powodu potencjał wykorzystania AI jest tu znacznie wyższy niż w sferze prywatnej. Zasadnie można stwierdzić, że sztuczna inteligencja „karmi się” danymi, a jej zadaniem jest ich przetwarzanie, w tempie niedostępnym dla człowieka. Oczywistym więc jest, że jej rozwój w tym obszarze jest nieuchronny. Kwestie związane chociażby z oszczędnością oraz wydajnością czy skutecznością powodują, że innowacje technologiczne napędzane przez systemy sztucznej inteligencji pojawiają się coraz częściej w administracji publicznej. Nawiasem mówiąc takiej właśnie administracji – czyli administracji nowoczesnej – oczekuje współczesne społeczeństwo. Nie ulega wątpliwości, że algorytmy sztucznej inteligencji mogą być z powodzeniem wykorzystywane do automatyzacji rutynowych procesów administracyjnych. Artykuł ma na celu przybliżenie czytelnikowi stanu zaawansowania czeskiej administracji publicznej w korzystaniu z przełomowych technologii.

Wprowadzenie generatywnej sztucznej inteligencji do czeskiej administracji publicznej ma pomóc usprawnić proces decyzyjny, zoptymalizować procesy wewnętrzne, poprawić dostępność i uprościć procedury biurokratyczne. W tym zakresie Czechy stawiają na rozwój usług e-government, takich jak system eDoklady – czyli cyfrowe dokumenty w telefonie komórkowym. Zwłaszcza cztery sektory publiczne wydają się być szczególnie idealnymi kandydatami do prowadzenia eksperymentów z wykorzystaniem sztucznej inteligencji: sądownictwo, służba zdrowia, edukacja oraz infrastruktura i usługi komunalne³.

Rozwój w tym obszarze musi uwzględniać kwestie bezpieczeństwa, zwłaszcza bezpieczeństwa danych. Z tego względu w lipcu 2025 r. czeski rząd, po ostrzeżeniach Krajowej Agencji Bezpieczeństwa Cybernetycznego i Informatycznego (NUKIB), zakazał korzystania z usług chińskiej firmy DeepSeek AI w administracji publicznej, powołując się na zagrożenia dla bezpieczeństwa danych, jak również w obawie o potencjalny nadzór ze strony Pekinu. Czescy eksperci wskazali na ryzyko nieautoryzowanego dostępu do danych użytkowników, ponieważ firma DeepSeek – oferująca duży model językowy oparty na sztucznej inteligencji – zgodnie z chińskimi przepisami prawnymi, jest zobowiązana do współpracy z tamtejszymi organami państwowymi⁴.

² <https://pl.euronews.com/next/2025/07/10/czechy-blokuja-sztuczna-inteligencje-w-administracji-publicznej>, dostęp do chińskiego chatbota zablokowały także inne kraje – między innymi Włochy oraz Australia, [accessed on: 01.04.2026].

³ F. Křepelka, *Artificial intelligence in the Czech government: political and economic hype, bureaucratic paralysis, and demarcation with the European Union*, Italian Journal of Public Law, vol. 17, issue 2/2025, p. 603.

⁴ <https://pl.euronews.com/next/2025/07/10/czechy-blokuja-sztuczna-inteligencje-w-administracji-publicznej>, dostęp do chińskiego chatbota zablokowały także inne kraje – między innymi Włochy oraz Australia [accessed on: 04.01.2026].

The Etymology of the Word ‘Robot’ – The Czech Contribution to Global Technological Vocabulary

Even before the term ‘artificial intelligence’ had taken hold, the word ‘robot’ – which had appeared several decades earlier and rapidly gained popularity as a Europeanism – was probably the first term associated with the field of automated yet intelligent operation⁵. Czech artists made a particular contribution in this field. The whole world owes them the introduction of the word “robot” into common usage on a transnational scale. The word originates from the Czech language and means hard labour, including forced labour. It came into wider circulation following the translation of Karel Čapek’s play *R.U.R.*, staged in Prague in 1920⁶. Josef Čapek derived the word from the noun ‘*robota*’, meaning hard labour, even drudgery. This classic neologism, typical of the creators of that era, would probably have been forgotten had it not been for the poet’s brother, Karel, who used it in his utopian comedy, the science-fiction novel ‘*R.U.R.*’ (full title: ‘*Rossumovi Univerzální Roboti*’), to name the humanoid machines featured in it. In “*R.U.R.*”, robots are beings made of laboratory tissue, highly intelligent, resembling humans in appearance, yet devoid of emotions and needs. Over time, the word ‘robot’ came to refer to mechanical devices. The English translation of this novel (*Rossum’s Universal Robots*) made it famous worldwide, particularly through theatrical productions⁷.

Reasons for Using Artificial Intelligence in Public Administration

Regardless of the country in which artificial intelligence is used in public administration, the underlying motivations are similar. These include: increasing efficiency (*e.g.*, because artificial intelligence can process information much faster than humans), improving decision-making and policymaking (*e.g.*, a higher level of accuracy/consistency may be achievable with automated rather than human decision-making), giving officials more time for work requiring creativity – rather than performing routine tasks (*e.g.*, simple, repetitive tasks can be carried out by

⁵ The term “artificial intelligence” was coined during a workshop held in 1956 in Dartmouth, in which J. McCarthy participated. This date is regarded as a symbolic moment marking the birth of a new digital discipline, , ebook.pwn.pl/wp-content/uploads/2022/04/ Sztuczna-inteligencja_ebook_Final.pdf?utm_source=google&utm_medium=cpc&utm_campaign=0048_ebookownia&gclid=EAIaIQobChMIkZmI7dvdhwMVTFyRBR37HR-0mEAAAYAiAAEgI6N_D_BwE, p. 27 [accessed on: 04.06.2026].

⁶ <https://blog.archive.org/2021/03/24/major-scifi-discovery-hiding-in-plain-sight-at-the-internet-archive/> [accessed on: 06.04.2026].

⁷ <https://elportal.pl/blog/ciekawostki/904-etymologia-slowa-robot> [accessed on: 04.07.2026].

artificial intelligence, allowing officials to undertake tasks requiring creativity or social intelligence) and improving the speed and quality of public services⁸.

The Czech Innovation Strategy

The Czech Republic regards artificial intelligence (AI) as a key technology and is committed to contributing to its development. According to the AI Readiness Index, published annually by Oxford Insights, which assesses the effectiveness of governments in creating conditions for AI development in terms of strategy, regulation and investment, the Czech Republic consistently ranks around 30th in the world⁹.

The Czech government is implementing the National Artificial Intelligence Strategy (NAIS) as part of the Innovation Strategy for 2019–2030 (approved by Government Resolution No. 520 of 24 July 2024)¹⁰.

The aim of these measures is to make the country a leader in innovation, including through the implementation of AI in the public sector. Details relating to the public sector are set out in Chapter III of the Strategy, focusing on the introduction of modern e-government services, including in the transport and health sectors. The issues of key importance to this study are set out in the section entitled 'Artificial Intelligence in Public Administration and Public Services'. The vision for this key area is: "A modern and efficient public administration utilising artificial intelligence, whose employees possess the necessary skills and adhere to ethical and security standards, thereby ensuring the provision of high-quality and efficient services in the Czech Republic". The aim of this area is to use artificial intelligence to support decision-making, reduce errors and ensure that services provided to citizens are as user-friendly as possible. Furthermore, this area aims to simplify decision-making processes, improve the efficiency of public administration, and reduce the staffing and administrative burden associated with carrying out certain tasks. In accordance with the Strategy, the sub-objectives are intended to help achieve this vision and goal. In order for these to be realised, the public administration must have access to both high-quality data and a robust digital

⁸ L. Lane, L. .Haitsma, T. Nowak, Tommaso De Mari Casareto dal Verme, E. Marchesini, R. Carbone, S. Ranise, O. Davidsson, S. Molinari, *AI and Public Administration: The (legal) limits of algorithmic governance*, PUBLICATION IS FUNDED BY THE EUROPEAN UNION'S JUSTICE PROGRAMME (2021–2027), 2025, p. 11.

⁹ <https://www.globallegalinsights.com/practice-areas/ai-machine-learning-and-big-data-laws-and-regulations/czech-republic/> [accessed on: 03.04.2026].

¹⁰ <https://mpo.gov.cz/en/business/digital-economy/artificial-intelligence/> [accessed on: 02.04.2026].

infrastructure. In this regard, the training of public administration staff is no less important so that they understand the possibilities and limitations of using artificial intelligence. High security standards are emphasised, linking this area to the key area entitled: 'Security aspects of artificial intelligence'. With regard to the implementation of artificial intelligence in public administration, it is crucial to focus on the ethical and transparent use of artificial intelligence.

By 2026, the Strategy envisages the implementation of groundbreaking AI projects in public administration to make life easier for citizens and businesses, streamline operations and increase the added value of public administration. By 2035, the Strategy envisages a significant strengthening of the Czech Republic's position on the international stage in terms of competitiveness and technological and industrial capabilities across all key sectors, underpinned by close cooperation between businesses and the public administration. According to the assumptions set out in the Strategy, the introduction of artificial intelligence into public administration aims to simplify the lives of citizens and businesses and increase its efficiency, in particular by boosting productivity, improving service quality, enforcing tax collection and detecting fraud. This will be achieved through the maximum use of open-source technologies, where their nature permits, whilst maintaining the protection of intellectual property rights and conditions conducive to investment and cooperation with private entities.

The Strategy is complemented by other initiatives and sectoral strategies. These include: the National Space Plan (to be implemented between 2020 and 2025), which relates to the National AI Strategy in the area of AI use in data processing, and the National Health Framework (2030), which covers the development of AI applications for use in healthcare¹¹.

Chatbots and Smart Cities

Chatbots are widely used in the public sector. They have become intuitive guides and helpers for navigating the often highly complex websites of public institutions¹². Before the chatbot was introduced, citizens had to look for information in written instructions or obtain it by calling the telephone number provided. Since its introduction, the chatbot has handled the majority of enquiries. It is a relatively inexpensive and easy-to-implement technology capable of performing a variety of

¹¹ <https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2025%2Fdata%2Fpolicy-Initiatives%2F24171> [accessed on: 03.04.2026].

¹² Wawrosz, P. & Jurásek, M. (2022) Wykorzystanie chatbotów w Republice Czeskiej ze szczególnym uwzględnieniem czeskiej administracji publicznej. *International Journal of Public Administration, Management and Economic Development*, 7 (2), pp. 62–78. Source: <https://www.ijpamed.eu/index.php/journal/article/view/76>.

tasks, such as customer service, booking appointments and answering questions. The use of multilingual chatbots or chatbots combining (languages) with English, which may be useful for people who do not have a good knowledge of Czech. Their usefulness largely depends on whether the chatbot's communication with users is as close as possible to human interaction.

Artificial intelligence is becoming an integral part of modern cities and public administration. One of the AI-based solutions in the Czech transport sector, introduced in Prague, involves improving road condition forecasting through the use of satellite imagery and sensor data. Appropriate models enable the analysis and forecasting of traffic and congestion to prevent accidents and other traffic complications. AI-powered technology helps Prague's road authorities plan targeted repairs and optimise long-term investments. Furthermore, it reduces traffic disruption and improves safety and travel efficiency. This ensures a much more thoughtful approach to urban mobility planning and infrastructure lifecycle management¹³.

Another initiative in this area involves the Prague 6 district office, which has been using an advanced chatbot based on Citymind's technology since June 2025. This tool assists residents with matters such as document replacement and navigating the office's structure. Over time, the chatbot has also been rolled out in smaller towns. The automation of this type of service enables communication in multiple languages (including, since the war in Ukraine, in Ukrainian) and 24/7 availability. Chatbots in the Czech public administration are also used to analyse data from the Czech Statistical Office and cadastral registers. Their operations assist officials with spatial planning and crisis management. This solution benefits officials, who, thanks to the chatbot, can focus on more specialised matters rather than standard enquiries. In addition, the chatbot generates reports on the most frequently asked questions by residents, providing officials with valuable data for further service improvement¹⁴.

One of the latest achievements is the 'Public Administration Contact Centre' project (reg. no. CZ.31.5.0/0.0/0.0/24_112/0011231, funded under the National Recovery Plan, component 1.7 – Digital transformation of public administration). The project focuses on the development of the so-called Public Administration Contact Centre (hereinafter referred to as "PACC") with services supported by artificial intelligence. These primarily involve the development of a chatbot, voice bot and mail bot to serve PACC customers. The project aims to address the current

¹³ <https://digital-strategy.ec.europa.eu/pl/events/genai-meets-public-administrations-in-fo-days-funding-opportunities-and-future-adoption-strategies> [accessed on: 01.04.2026].

¹⁴ <https://www.citymind.tech/en/case-studies/prague6-oict#:~:text=On%20Wednesday%2012%20June%202025%2C%20a%20new,cooperated%20as%20one%20of%20the%20pilot%20cities> [accessed on: 01.04.2026].

situation where there is no single central point providing comprehensive assistance and information on public administration services and solutions related to the use of digital services. Citizens often struggle to find the necessary information and frequently encounter problems when using government information systems. The PACC project offers a solution in the form of a universal, multi-channel Public Administration Contact Centre, emphasising the use of artificial intelligence in citizens' interactions with public administration. This solution will enable users to obtain the necessary information and support quickly and effectively. The project aims to automate routine enquiries using AI-based voice and chatbots, which will speed up and streamline service delivery¹⁵.

eDoklady

At the start of 2024, the Czech Republic launched the eDoklady app, which allows electronic identity documents to be stored digitally on a mobile phone. The rollout of digital documents for Czech citizens was divided into three phases. Initially, it covered central government bodies (all ministries and a number of other state institutions). After a few months, institutions such as the police, courts, tax offices, employment offices and registry offices were included in the programme. Following the completion of the final stage, the use of e-Documents is now possible in other institutions where the law requires identity verification. The eDoklady app represents a significant step towards the introduction in the Czech Republic of the European digital identity wallet, which will be valid in all European Union member states and contain a range of documents and certificates¹⁶.

The gateway to digital services is the Citizen Portal (*Portál občana*), which facilitates communication between citizens and public institutions and can be linked to the eDoklady app. On the Citizen Portal, Czechs can manage their documents and other data from state registers and databases. They can also create a data box, which they can use to communicate electronically with public administration offices, the eRecepta portal, the Vaccination Portal, the Czech Social Security Administration or the Labour Office.

¹⁵ J. Nešpor, A. Jareš, E. Klimentová, *AI and public administration: transforming governance with caution*, ACTA UNIVERSITATIS CAROLINAE – IURIDICA 1 2026, p. 107.

¹⁶ <https://ies.lublin.pl/komentarze/proces-cyfryzacji-w-republice-czeskiej-edoklady-i-dipsy/> [accessed on: 01.04.2026].

Digitalisation in the Public Health Sector

Another area that has undergone digitalisation is the healthcare sector. Initiatives in this area aim to improve access to medical services, manage patient data and integrate IT systems across different healthcare institutions. Czech citizens can also use prescriptions issued online.

AI in Customs Law

Artificial intelligence is currently being used in the economic sector for automated risk assessment, document verification and the classification of goods. This technology enables goods to be assigned the correct tariff codes, thereby improving efficiency, speed and accuracy in cross-border trade.

Baltic AI Gigafactory

AI GigaFactories (AIGF) are to be based on the world-class European supercomputing network, EuroHPC. These will be large-scale AI computing infrastructure facilities, designed to create, train and deploy very large AI models and applications on an unprecedented scale (*e.g.*, AI models with hundreds of trillions of parameters). They are intended to be state-of-the-art, large-scale artificial intelligence and data storage centres, specifically designed for the development, training and deployment of next-generation AI models and applications, such as models with hundreds of trillions of parameters. A total of 13 such facilities are planned across Europe. Poland, Lithuania, Latvia and Estonia have formed the Baltic AIGF initiative, which involves the construction of one or two such facilities in our country¹⁷. In autumn 2025, the countries participating in the Baltic AI Gigafactory began collaborating with the Czech Republic on the integration of projects that had been submitted to Brussels several months earlier. The Czech Republic's inclusion in this initiative will lend the project additional political and economic weight. According to the Deputy Minister of Industry and Trade of the Czech Republic, the country will become a technological leader in this field. This will enable the creation of the most advanced AI models, which will be used in healthcare, transport, and security, as well as for research, to support universities, and to create an entire technological ecosystem. This will lead to the development of data

¹⁷ <https://pwr.edu.pl/uczelnia/aktualnosci/gigafabryka-ai-moze-powstac-we-wroclawiu-silne-wsparcie-dla-projektu-pwr-13985.html> [accessed on: 07.04.2026].

centres, the creation of facilities for training models, and will ensure cooperation with research centres¹⁸.

The Automatic Issuance of Administrative Decisions in Czech Administrative Proceedings

The use of artificial intelligence algorithms to issue administrative decisions is quite common in many countries. This is the case in several Scandinavian countries, Canada and Germany. In these countries, algorithms have already replaced humans in handling certain administrative matters and issuing the final decisions on those matters.

At the end of 2024, a bill was tabled in the Czech Parliament to amend the Czech Code of Administrative Procedure by introducing a new Article 15a, which would pave the way for the automatic performance of certain acts in administrative proceedings¹⁹.

This initiative is undoubtedly timely and forms part of a broader global trend. At present, however, the Czech Code of Administrative Procedure does not provide for the possibility of issuing administrative decisions automatically, without the involvement of an official. For the time being, automated tools may only be used in practice to support the activities of the public administration.

The proposed Article 15a would read as follows:

Unless the nature of the case under consideration, the protection of the rights of the persons concerned or the protection of the public interest requires that a procedural act be performed by an official, that act may be performed automatically, without the involvement of an official. In particular, such an act may not be performed in this manner if it requires the exercise of discretionary powers or concerns a decision on an appeal.

The relevant literature emphasises that a reform of this scale should not be carried out by means of an ad hoc parliamentary amendment, but through a comprehensive government initiative. The legislator should conduct a full review of existing administrative procedures to determine which are suitable for automation and which are not. These procedures should be clearly and exhaustively listed in the legislation, or at the very least, criteria should be established to enable authorities and citizens to unequivocally determine when automation is permitted. Further-

¹⁸ <https://cyberdefence24.pl/technologie/polska-i-czechy-nawiazaly-wspolprace-ws-baltic-ai-gigafactory> [accessed on: 07.04.2026].

¹⁹ Act No. 500/2004 Coll., the Administrative Procedure Code.

more, human oversight would be desirable and should be incorporated into the system, at the very least²⁰.

Conclusions

Public administration, which is bringing its services closer to the public through digitalisation, is perceived by citizens as innovative and modern. The latest analyses clearly indicate that, whilst interest in artificial intelligence is growing in the Czech Republic, practical implementations have not yet reached a large scale and remain uneven. In this respect, the path to the digitalisation of public administration in Poland and the Czech Republic looks quite similar²¹. There are many examples of groundbreaking technologies being implemented in the public sector, but these have not yet resulted in systemic solutions. The potential available to public administration in this area has not yet been ‘tapped’ by AI. Numerous matters falling within the remit of public administration, involving straightforward facts, which are currently handled on a massive scale, will in future be dealt with without the involvement, or with only minimal involvement, of an official or human being. At present, one might rather speak of a sort of ‘early spring’ for artificial intelligence in public administration, which so far relies only to a limited extent on automation.

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²⁰ V. Sharp, J. Nešpor, E. Klimentova, *Automation of administrative proceedings in the Czech Republic: critical reflections on the draft “adm amendment” to the administrative procedure code*, STUDIA IURIDICA Cassoviensia vol. 13, 2025, pp. 177, 184.

²¹ Szerzej na temat zastosowania AI w administracji publicznej w Polsce E. Szewczyk, *Algorytmizacja jurysdykcyjnego postępowania administracyjnego i jej skutki społeczne*, Warszawa 2025, p. 8.