THE USE OF ALGORITHMIC AUTOMATION AND ARTIFICIAL INTELLIGENCE BY THE PUBLIC ADMINISTRATION IN SLOVENIA

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Abstract

Artificial Intelligence (AI) and algorithmic automation are rapidly reshaping public administration globally. In Slovenia, public authorities are gradually adopting AI-driven technologies, particularly in sectors such as tax management, agriculture, and public procurement. However, Slovenia has not yet established a comprehensive legal framework for algorithmic governance, relying instead on existing laws that govern public administration and data protection. This paper examines the legal foundations for the use of AI and algorithmic automation in Slovenian public administration. It also attempts to identify gaps, compares Slovenia's regulatory approach with European Union (EU) Law, and discusses some key challenges related to privacy, transparency, and human oversight in AI deployment.

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1. The Legal Framework for AI and Algorithmic Automation in Public Administration

In the Republic of Slovenia, there is currently no specific, overarching legal framework for the use of algorithmic automation and AI by public administration. There are also no legal bans specifically targeting the reliance on algorithmic automation or artificial intelligence (AI) in public administration. However, pre-existing legislation allows the use of some aspects of AI and automated processes. The legal framework consists of various data protection, transparency, administrative procedures, and human rights laws that indirectly regulate the deployment of AI in public administration.

1.1. Existing Legal Foundations

(a) General Administrative Procedure Act

The Slovenian General Administrative Procedure Act ('ZUP')[1] is based on the principles of legality, transparency, and accountability of public administration. It seems to follow that any use of AI or algorithmic systems in decision-making processes – insofar as it is considered admissible – should be transparent and (human) control should be possible[2]. Furthermore, an administrative decision should

[1] Zakon o splošnem upravnem postopku (ZUP), Official Gazette of the Republic of Slovenia, No. 80/99, last amendment 3/22).
[2] See below, section 3.

also contain a justification, at least the decisions against which the parties may appeal [3]. Justification (the stating of reasons) for administrative decisions seems to be a problematic aspect of AI-generated decisions, as the results of processes by machine learning models may sometimes be very difficult to explain *ex post* (the so-called 'black box' phenomenon)[4].

(b) Privacy and Data Protection

The General Data Protection Regulation ('GDPR')[5] of the EU is applicable to the processing of personal data, including processing by AI systems. Any use of personal data in algorithmic systems by public bodies should follow the principles of data protection, including legality, fairness, transparency, and purpose limitation.

The Slovenian Data Protection Act ("ZVOP-2")[6], adopted in 2022, helps ensure the implementation of the GDPR in a systematic manner and is largely based on the GDPR. It uses terms from both the GDPR and the Data Protection Directive[7]. In some areas, it regulates in more detail the operation of the GDPR. The ZVOP-2 outlines the specific regulations for processing personal data in various contexts, including scientific, historical, statistical, and archival research, biometric and genetic data, freedom of expression and public information, and the protection of personal data of deceased individuals.

As required under Art. 5(1) (c) GDPR, any AI systems may only process the minimum amount of data necessary for a specified purpose. Furthermore, data collected by a public body for a specific

[3] See e.g. P. Kovač, *Funkcije in (ne)nujnost obrazložitve upravne odločbe* 29–30 Pravna praksa 6 (2024).
[4] See e.g. J. Fornazarič, *Obrazložitev upravne odločbe v okolju UI*, Pravna praksa 35 (2024).
[5] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).
[6] Zakon o varstvu osebnih podatkov (ZVOP-2), Official Gazette of the Republic of Slovenia, no. 163/22.
[7] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (Data Protection Directive).

purpose must not be repurposed without legal justification, Art. 5(1) (b) GDPR. Art. 5(1) (d) GDPR requires that data be accurate and updated, ensuring the quality of datasets used in automated systems. Moreover, public bodies must provide a lawful basis for data processing in accordance with Art. 6 GDPR. In the public sector, personal data of an individual who has consented to its processing for one or more specific purposes may be processed, provided that such processing is permitted by law. If the processing by the public body does not involve the execution of statutory powers, duties, or authoritative obligations of the public body, the processing of individual's data must be based on consent as well (Art. 6(3) ZVOP-2). In the case of automated decision-making and profiling, Art. 22 GDPR must be observed, i.e. individuals should not be subject to decisions based solely on automated processing unless there is explicit consent or it is necessary for contractual reasons. Moreover, the individuals have the right to access their personal data and request corrections, as stipulated in Arts. 15 and 16 GDPR. Regarding transparency obligations, the public bodies using AI must provide individuals with clear and understandable information about how their data is being processed, including the purposes and logic of automated decision-making (Arts. 12–14 GDPR).

In accordance with Slovenian law, the impact assessment for personal data processing is mandatory when there is a likelihood that the type of processing, particularly with the use of new technologies, could pose a high risk to the rights and freedoms of individuals. GDPR and ZVOP-2 specify instances where an impact assessment must be conducted. These include situations involving systematic and extensive evaluation of personal aspects of individuals based on automated processing, including profiling, which serves as the basis for decisions that have legal effects or significantly impact individuals in a similar way. It is also required in cases of large-scale processing of special categories of data, or data related to criminal convictions, as well as extensive systematic monitoring of publicly accessible areas. Additionally, ZVOP-2 imposes further obligations regarding impact assessments in specific areas. These include maintaining processing logs and conducting impact assessments as per Arts. 22 and 24 ZVOP-2, the processing of personal data for research purposes under Art. 69 ZVOP-2, and conducting traffic surveillance in accordance with Art. 80

of ZVOP-2. An impact assessment is also required when linking personal data collections as stated in Art. 87 ZVOP-2. In the context of personal data processing for national security, the responsible state security authority must prepare an impact assessment, which must be accessible to supervisory bodies, such as the Slovenian Human Rights Ombudsman and relevant working bodies. Furthermore, for video surveillance of public roads, an impact assessment must be conducted before determining the locations to be monitored, and the findings must be submitted for prior review by the supervisory authority, Art. 80(9) ZVOP-2. When linking personal data collections, an impact assessment and prior consultation with the supervisory authority (Slovenian Information Commissioner) must be conducted, Art. 87(2) ZVOP-2.

(c) Information Security Act

In their reliance on algorithmic automation and Al, the public administration must also observe the provisions of the Slovenian Information Security Act[8]. This act transposes the EU NIS 1 Directive[9] (and thereby stipulates cybersecurity requirements, mandating public institutions to implement security measures necessary to protect data and systems against cybersecurity threats). The public administration must implement appropriate and proportionate technical and organisational measures to manage risks posed to their network and information systems. Inter alia, the public administration must conduct a risk analysis, assessment, and evaluation and, based on this, prepare and implement the necessary measures to manage risks concerning the security of information systems and network components they manage (Art. 16 ZInfV) Public administration bodies must adopt necessary measures to prevent and mitigate the impact of incidents that affect the security of their information systems and networks to ensure the continuous operation of government services. To ensure information security and a high level of security for their

[8] Zakon o informacijski varnosti (ZInfV) (Official Gazette of the Republic of Slovenia, No. 30/18, 95/21, 130/22, 18/23, 49/23).

[9] Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (NIS 1 Directive).

networks and information systems, public administration bodies must establish and maintain a documented system for information security management and business continuity management (Art. 17 ZInfV). Moreover, in accordance with the Art. 18 ZInfV, public administration bodies must notify the Computer Security Incident Response Team (CSIRT) for public administration bodies without unnecessary delay of any incidents that significantly impact the continuous provision of government services, whereby those public administration bodies with their own security operations centre must notify the competent national authority (Art. 18 ZInfV). Pursuant to the Art. 27(1) ZInfV, the competent national authority is the Slovenian Information Security Authority (*Urad Vlade Republike Slovenije za informacijsko varnost*). On May 15, 2024, the Slovenian Information Security Authority prepared a second draft of the proposal for the amendment of the existing ZInfV, which is set to transpose the new NIS 2 Directive[10] into Slovenian national law.

(d) State Administration Act

Article 74.a of the Slovenian State Administration Act (ZDU-1)[11] regulates the management of information technology in the state administration with regard to its electronic operation. It outlines the framework, responsibilities, and principles for managing and developing IT infrastructure, systems, and services across various government bodies. It defines the roles of key institutions in ensuring the effective, secure, and transparent use of technology to support administrative processes and public service delivery.

Pursuant to Art 74.a ZDU-1, the Ministry of Digital Transformation is responsible for managing and developing IT infrastructure and solutions in the state administration, ensuring compliance with the central system and handling budget resources. This does not apply to systems related to defence, disaster

[10] Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive).

[11] Zakon o državni upravi *(*ZDU-1) (Official Gazette of the Republic of Slovenia, No. 52/02, last amendment 95/23).

management, police, internal affairs, intelligence, foreign affairs, and financial crime prevention.

1.2. The National Programme to Promote AI

According to the Slovenian Ministry of Public Administration, Slovenia is currently not preparing standalone legislation on artificial intelligence [12]. However, in 2021 the government approved the National Programme to Promote the Development and Use of Artificial Intelligence in the Republic of Slovenia by 2025 (NpAI)[13]. The NpAI acknowledges that an environment conducive to AI development, deployment, and use requires legislation ensuring AI solutions align with societal norms. It emphasizes the dedication of to fostering transparent, ethical AI that citizens can trust, collaborating with European partners to establish a legal and ethical framework grounded in EU values and human rights, emphasizing privacy, dignity, fair trial, consumer protection, and non-discrimination. Special attention is needed for privacy, data protection, and anti-discrimination, with AI development guided by ethical criteria like human control, technical safety, transparency, fairness, and accountability. The NpAI expresses Slovenia's commitment to ensuring that regulation of AI enforces existing norms, ensures transparency in AI operations, and addresses liability in cases of discriminatory AI outcomes. According to the NpAI, the use of AI must respect democratic principles and contribute positively to society and the environment, promoting sustainability[14].

[12] R. Biljak Gerjevič, *Umetna inteligenca v Sloveniji: "Želimo biti med vodilnimi"* (N1, 30 June 2021), at https://n1info.si/novice/slovenija/umetna-inteligenca-v-sloveniji-zelimo-biti-med-vodilnimi, accessed 30 September 2024.

[13] See the National programme to promote the development and use of AI in the Republic of Slovenia by 2025 (27 May 2021), at https://nio.gov.si/api/files/c5f4072c-7662-4d05-a7d2-a48eaf8b2df5/file, accessed 30 September 2024.

[14] National programme, cit. at 13, 51.

2. Applications of Algorithmic Automation and AI in Slovenia's Public Sector

The initial attempts to integrate AI into public administration date back to 2007, when the Slovenian Tax Administration (DURS) launched a virtual tax assistant named "Vida" on their website[15]. A few years later, a similar project called "Asistent" was introduced, which helps visitors to the municipality or association website by facilitating information search and the use of services offered on the site[16]. The primary purpose of both chatbots was to assist users by answering their questions. In 2018, another chatbot named "Ljubo" became available, offering information via messaging, such as bus schedules and road closures to residents, under the jurisdiction of the Municipality of Ljubljana[17].

AI tools are now successfully being used in the Slovenian public sector for tasks such as analysing and monitoring public procurement, anonymizing documents, and tracking analytics related to combating tax evasion[18]. The Ministry of Public Administration is also developing a semantic document analyser powered by AI systems. This technology is expected to facilitate document search and the grouping of documents with similar content[19]. AI technologies are also employed in the healthcare sector, where machine learning algorithms assist in disease recognition and diagnosis[20].

2.1. Tax Administration

The tax management sector has also seen substantial algorithmisation, particularly by the use of predictive analytics in the Financial Administration (FURS). Machine learning models have been developed to assess the risk of value added tax (VAT) and corporate

[15] K. Fidermuc, *Davčna asistentka Vida se ni preselila v finančno upravo* (13 March 2015), at https://old.delo.si/gospodarstvo/finance/davcno-asistentko-vido-so-upokojili.html, accessed 30 September 2024.
[16] See the website of the project "Asistent" http://www.projekt-asistent.si/info/index, accessed 30 September 2024.
[17] See the website of the project "Ljubo" https://engagency.si/nasi-projekti/mol/, accessed 30 September 2024.
[18] National programme, cit. at 13, 37.
[19] National programme, cit. at 13, 37.
[20] National programme, cit. at 13, 34–35.

income tax (CIT) returns. These models analyse data from tax returns and other taxpayer information to calculate the risk of non-compliance or fraud even before returns are processed. This proactive approach allows for more precise targeting in tax audits and helps to manage fiscal risks more effectively. The adoption of predictive analytics tools, such as "KNIME" and "QlikSense", further improves the system's capability to systematically address tax and customs risks, enhancing both accuracy and efficiency in tax oversight[21].

An early attempt to introduce algorithmic decision-making in public administration is based on the Arts. 210 and 214 ZUP, seemingly enabling administrative decisions to be adopted automatically, signed with a facsimile (picture) of signature of the competent authority. The possibility was introduced for decision-making in mass and simple matters, such as the issuing of "informative calculations of income tax" to the taxpayers (see also Tax Procedure Act ('ZDavP-2')[22], Art. 84a). If the taxpayers do not agree with the informative calculation, they may file an objection.

However, it seems that the legislator simply did not really face the fact that these decisions are issued automatically, based on an algorithm, and that they are not being checked by the competent authority. In this sense, the picture of the signature is misleading as it creates the impression that the decision was taken (or was at least checked) by the person signed. In fact, the legislation does not foresee the possibility that anyone else (let alone an algorithm) aside from the competent authority can adopt a valid decision in the course of administrative procedure. Interestingly, no case-law is published where a party would challenge a decision on these grounds. It would appear that by analogous application of the case law of the Slovenian Administrative Court with regard to similar matters such a challenge might currently be successful[23].

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[21] See the Annual Report for the year 2023 of the Slovenian Financial Administration, at https://www.gov.si/assets/organi-v-sestavi/FURS/Strateski-dokumenti/2024/Letno-porocilo-Financne-uprave-za-leto-2023.pdf, accessed 30 September 2024.

[22] Zakon o davčnem postopku ("ZDavP-2") (Official Gazette of the Republic of Slovenia, No. 117/06, last amendment 131/23.

[23] See e.g. UPRS I U 502/2021-18, Administrative Court of the Republic of Slovenia, 3 January 2022, where the court stated that the absence of hand signature or electronic

On the other hand, the principles of independent (autonomous) decision-making and free assessment of evidence open up the possibility for the competent authority to use an AI system when establishing facts upon which a decision is based. The law does not seem to prohibit it. A decision is considered a decision of an official person and must be based on procedural and material law. This primarily means that the decision must state reasons, which is particularly important from the point of view of remedies against the decision.

2.2. Agriculture

A further public administration sector affected by AI is agriculture. The Agency for Agricultural Markets and Rural Development (Agencija Republike Slovenije za kmetijske trge in razvoj podeželja (ARSKTRP) as a body within the Ministry of Agriculture, Forestry, and Food, utilises an AI system that analyses agricultural land using satellite imagery. This technology enables the agency to monitor land use, assess compliance with agricultural policies, and optimise resource allocation, significantly reducing the need for manual inspections. The integration of AI in this sector not only enhances operational efficiency but also supports sustainable agricultural practices and better policy implementation[24].

signature of the competent authority represents grounds for invalidity of the decision and sent the case back to the first instance, whereby the underlying reason for such a decision was certain amount of ambiguity as to whether the decision was issued by one or the other authority as both were mentioned.

[24] See the statement of the Slovenian Minister of Public Administration on the 9th Slovenian Public Sector Academy (10 April 2024), at https://www.gov.si/novice/2024-04-10-minister-mag-props-umetna-inteligenca-je-priloznost-za-javni-sektor, accessed 30 September 2024; The Annual Report for the year 2023 of the Agency for Agricultural Markets and Rural Development (2023), at https://www.gov.si/assets/organi-v-sestavi/ARSKTRP/Aktualno/Letno-porocilo-2023.pdf, accessed 30 September 2024.

3. Human Oversight and Decision-Making. The Role of Human Control

The concern with the digitalisation of administrative procedures highlights the potential risks of delegating executive authority to automated decision-making systems. Even if we accept the possibility of automated or AI based decision-making, human control of the decisions is necessary as the AI – at least from the perspective of today – does not actually make decisions based on legal rules, but on patterns recognised from the legal cases on which the algorithm was trained[25]. However, due to the possibility of real-time machine learning, these patterns may change and gradually deviate from the legal regulation. Therefore, it seems essential that the results are subject to independent human judgment – at least periodically[26].

According to this principle of autonomous decision-making (Art. 12(2) ZUP), an administrative body must independently conduct proceedings and make decisions based on laws and regulations. If automated decision-making systems effectively take over decision-making without adequate supervision, it could breach this autonomy, as the automated decision-making systems would, in effect, make decisions on behalf of the authority[27].

4. Daily Use of (generative) AI among Public Administration Employees

A short survey on the use of AI in Slovenian public administration, conducted in 2023 by a student of University of Ljubljana among various Slovenian ministries, revealed that most ministries do not employ AI methods in their daily operations. Ministries for agriculture, environment, justice, health, and culture

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[25] Y. Hermstrüwer, *Artificial Intelligence and Administrative Decisions Under Uncertainty*, in T. Wischmeyer & T. Rademacher (eds.), *Regulating Artificial Intelligence* (2020) 201.

[26] B. Cartwright, *Regulating the Robot: A Toolkit for Public Sector Automated Decision-making*, Ox. U. Undergrad. L. J. 23, 28 (2021).

[27] J. Wolswinkel, *Artificial Intelligence and Administrative Law* (2022) 10, at https://coe.int/documents/22298481/0/CDCJ%282022%2931E+-+FINAL+6.pdf/4cb20e4b-3da9-d4d4-2da0-65c11cd16116?t=1670943260563, accessed 30 September 2024.

report not using AI, while some ministries recognise the potential of new language models, such as ChatGPT, albeit with restrictions related to data security and confidentiality. The Ministry of the Interior and the Ministry of Justice see possibilities for AI use in drafting legislative proposals and generating less complex administrative texts but emphasize that AI must not replace human judgment. All decisions made with the assistance of these models must be carefully reviewed by experts. Ministries also highlighted security challenges related to the use of cloud services and the importance of supervision over systems, where AI plays a supportive role in automation and big data analysis[28].

The safe use of AI is crucial in ensuring that its benefits are maximised while minimising potential risks. AI's integration into public administration can be problematic, particularly in areas such as data protection of individuals, state secrets, and cybersecurity, where unauthorised access or misuse could have detrimental consequences. To address these challenges, it is essential to educate public administration employees on the responsible use of AI, ensuring that they are equipped to handle sensitive information and maintain robust security measures.

To that end, the Ministry of Public Administration established the "Administrative Academy" (*Upravna akademija*), focusing on improving the digital literacy of public employees. In 2019, it thoroughly revamped the digital literacy training programme for public employees. From 2019 to 2022, the Administrative Academy provided digital competency training only for state administration employees, and the training covered only basic digital skills. In 2023, the Administrative Academy started implementing the programme "Enhancing Digital Knowledge and Skills of Public Employees" as part of the EU Recovery and Resilience Plan (RRP). The programme is set to improve the basic and user-level digital skills and awareness of public employees, both in state and local administration. The training programme development used the DigComp2.2 framework and the OECD framework for digital talent and skills in the public sector. The

[28] R. Prek, *Priložnosti in izzivi umetne inteligence v slovenski javni upravi: diplomsko delo* (2023) 35-44, at https://repozitorij.uni-lj.si/IzpisGradiva.php?id=151006, accessed 30 September 2024.

programme *inter alia* included courses on informational security and getting acquainted with newly available technologies such as AI, the Internet of Things, and augmented reality[29].

5. Interoperability Framework for Digital Data Management

On 23 October 2010, Slovenia launched the portal 'NIO'- the national interoperability framework in Slovenia. The project allows different stakeholders to publish standards and guidelines on interoperability that are important at the national level, and that encourages the publishing of open data and applications. The NIO portal provides a centralised infrastructure for managing digital data exchange between administrative bodies. It guarantees interoperability across multiple infrastructures by ensuring the use of open data standards and services. Procedures for data exchange between different bodies are streamlined through common rules, promoting transparency and efficiency. The infrastructure supports the standardised integration of various services and systems, facilitating smooth data sharing across public administrations[30].

Furthermore, the Ministry of Digital Transformation also develops and manages a business intelligence (BI) system with a data warehouse called *Skrinja* (English: chest, box). It is used by various public authorities where users can interactively view and process data in real time with advanced visualisations, using even mobile devices. This accelerates data processing, analytics, visualisation preparation, and routine tasks, enabling employees to gain new insights from the data and interpret them accordingly. Skrinja is designed as a horizontal solution for users within the state administration. Skrinja provides real-time data on public sector salaries, covering over 180,000 public employees, 2,000 budget users, and 750 different types of payments. It also includes public procurement data, representing more

[29] Report on the Implementation of the Programme "Enhancing Digital Knowledge and Skills of Public Employees" (January 2024), at https://ua.gov.si/media/wxhpulvm/porocilo_noo_2023.pdf, accessed 30 September 2024.
[30] See the Portal "NIO" website, at https://nio.gov.si/en/about/purpose, accessed 30 September 2024.

than 11% of GDP, as well as data from 'Krpan' (the state's digital document system), which displays the number of administrative procedures carried out by state administrative units. Additionally, 12 new data sources from various public authorities are being prepared, reflecting the significant interest in analytical support for decision-making among public bodies. Plans also include making awarded public procurement contracts available to the general public online. Future developments will focus on predictive analytics and algorithmic processing using artificial intelligence[31].

6. The State of Scholarly Debate in Slovenia

Slovenia places strong emphasis on the development and application of AI, notably through the adoption of its NpAI. The country has a rich tradition in AI research, with institutions like the Jožef Stefan Institute (JSI)[32]. Slovenia also hosts the International Research Centre on Artificial Intelligence (IRCAI) under the auspices of UNESCO, which focuses on ethical AI solutions addressing global challenges such as sustainability, health, and education[33]. Additionally, the Slovenian Artificial Intelligence Society (SLAIS) promotes AI research and technology transfer, fostering collaborations between academia and industry, and contributing significantly to European AI development[34].

In terms of debate on legal aspects of algorithmic decision-making and AI, a comprehensive work exploring digital transformation within public administration entitled "The Digital Transformation of Public Administration in Theory and Practice" was

[31] See the website of the Product "Skrinja" at https://nio.gov.si/products/skrinja%2B20%2Bsistem%2Bposlovne%2Banalitike, accessed 30 September 2024.
[32] See the Jožef Stefan Institute (JSI) website at https://www.ijs.si/ijsw, accessed 30 September 2024.
[33] See the International Research Centre on Artificial Intelligence website under the auspices of UNESCO (IRCAI) at https://ircai.org, accessed 30 September 2024.
[34] See the Slovenian Artificial Intelligence Society (SLAIS) website at https://slais.ijs.si, accessed 30 September 2024.

recently published[35]. The volume also contains a contribution on the development possibilities and limitations of emotional AI in social processes[36].

Further scholarly debate on the legal aspects on the above issues, for the most part, transcends national borders as it deals with several legal aspects of artificial intelligence. Research on the topic of artificial intelligence law in Slovenia extensively deals with algorithmic justice, e.g. how big data, algorithmic analytics, and machine learning are transforming criminal justice by creating new frameworks for understanding crime and their impact on human rights[37].

Legal publications in Slovenian legal journals also deal with questions relating to promoting non-discrimination in the use of AI in accordance with human rights[38]. Further topics that were analysed are the relationship of AI with the intellectual property law[39], the impact of AI on the daily work of attorneys, and the related legal and ethical dilemmas[40], the liability of state for the use of AI[41], and the civil liability of the AI operator/developer as enshrined in the new EU legislative initiatives[42] and the position of a potential future robot-judge[43]. There are also numerous short papers in the Slovenian weekly legal

[35] A. Aristovnik, P. Kovač, T. Jukić (eds.), *Digitalna preobrazba javne uprave v teoriji in praksi* (2024).
[36] P. Kovač & M. Babšek, *Umetna inteligenca v socialnih postopkih - možnosti razvoja in omejitve skozi prizmo empatije*, in A. Aristovnik, P. Kovač, T. Jukić (eds.), cit. at 36.
[37] See e.g. A. Završnik, *Algorithmic Justice: Algorithms and Big Data in Criminal Justice Settings*, 18(5) Eur. J. Crimin. 623–642 (2021); see also the volume in Slovene language, A. Završnik & K. Simončič (eds.), *Pravo in umetna inteligenca: vprašanja etike, človekovih pravic in družbene škode* (2021).
[38] V. Sancin, *Kalejdoskopski pogled na umetno inteligenco in pravo človekovih pravic*, 49(6/7) Podjetje in delo 1005–1015 (2023).
[39] M. Damjan, *Umetna inteligenca in pravice iz ustvarjalnosti*, 49(6/7) Podjetje in delo 1027–1037 (2023).
[40] D. Premelč, *Umetna inteligenca in prihodnost odvetniškega poklica*, 49(6/7) Podjetje in delo 1038–1050 (2023).
[41] M. Kovič Dine, *Odgovornost države za neuporabo oziroma neustrezno uporabo umetne inteligence pri preprečevanju poplav in vplivi na človekove pravice*, 49(6/7) Podjetje in delo 1051–1064 (2023).
[42] P. Weingerl, "Novosti glede odškodninske odgovornosti za umetno inteligenco" 46(6/7) Podjetje in delo 1195–1205 (2020).
[43] V. Trstenjak "Umetna inteligenca in pravo" (2022) 48(6/7) Podjetje in delo 902–910.

newspaper on various AI-related legal topics. They include the problem of stating reasons for administrative decisions in the AI environment[44], the help of AI in preventing natural catastrophes[45] and its use for humanitarian purposes[46], the legal position of autonomous drones used in international warfare[47], the use of automated decision-making in judicial procedures[48], the use of AI in the field of criminal law[49], and the general impact of AI on the legal profession[50].

Furthermore, the Open Data and Intellectual Property Institute (ODIPI), a research, educational and advisory institution working in the fields of Internet law and society operates in Slovenia. ODIPI is a non-profit organisation that specializes in providing legal information and advice in the field of copyrights related to science, research, and education. Its focus is mainly in the field of open science, open data, and data governance for AI, especially in relation to copyright law[51]. Together with Faculty of Law and Faculty of Computer and Information Science of University of Ljubljana, ODIPI co-organised the interdisciplinary School of Generative AI and Law which took part in November 2023 at the Faculty of Law of University of Ljubljana. The school focused on main ethical dilemmas that AI tools pose for humanity, individuals, states, and various organisations. Lectures and panel discussions centred on legal challenges posed by the rising use

[44] J. Fornazarič, "*Obrazložitev upravne odločbe v okolju UI*, 28 Pravna praksa 9–11 (2024).
[45] E. Plut, *Pomoč umetne inteligence pri preprečevanju naravnih katastrof*, 28 Pravna praksa 11–12 (2024).
[46] M. T. Veber, *Z umetno inteligenco podprta humanitarna pomoč in odgovornost zaščititi*, 25 Pravna praksa 14–15 (2023).
[47] A. Mediževec, *Avtonomni oborožitveni sistemi in umetna inteligenca*, 22-23 Pravna praksa 8–10 (2024).
[48] M. Hajd, *Avtomatizirano sprejemanje sodnih odločitev: med tehničnimi možnostmi in pravnimi omejitvami*, 14-15 Pravna praksa 11–13 (2024).
[49] A. Ferlinc, *Umetna inteligenca z vidika uporabe kazenskega prava*, 13 Pravna praksa 23 (2024).
[50] J. Kranjc, *Pomeni umetna inteligenca konec pravniškega poklica?*, 49/50 Pravna praksa 6–8 (2023).
[51] See the Open Data and Intellectual Property Institute (ODIPI) website at https://www.odipi.si/en/about-us, accessed 30 September 2024.

of AI in the areas of criminal law, human rights, personal data, and copyrights[52].

In June 2024, the Global Conference on AI and Human Rights took place at the Faculty of Law, University of Ljubljana, and was organised by Professor Vasilka Sancin. The conference aimed to explore the development and use of AI in relation to the state's obligations to safeguard the right to life. Topics discussed included AI's influence on human rights, especially the right to life, through both positive and negative state obligations.

The Slovenian Information Commissioner also plays an important role in public debate, providing guidance on how AI and algorithmic decision-making should align with privacy laws, particularly under the GDPR and ZVOP-2[53].

7. Conclusion

The integration of AI and algorithmic automation into Slovenian public administration is gradually advancing, but significant legal and ethical challenges remain. While existing laws such as ZUP and GDPR and ZVOP-2 offer some oversight, there is a clear need for a more comprehensive, AI-specific legal framework. The Slovenian government's NpAI provides a foundation for aligning AI development with societal norms and European Union values, focusing on transparency, fairness, and accountability.

AI in Slovenian public administration has shown potential in sectors like tax management, agriculture, and public procurement, where its use has improved efficiency and decision-making. However, concerns about privacy, human oversight, and the risks of delegating executive authority to automated systems must be addressed. Human oversight remains a crucial component to ensure that AI serves as a supportive tool rather than a replacement for human judgment.

[52] See the School of Generative AI and Law website at https://www.odipi.si/en/school-of-generative-ai-and-law, accessed 30 September 2024.

[53] See the website of the Slovenian Information Commissioner, at https://www.ip-rs.si/mnenja-zvop-2, accessed 30 September 2024.

Moving forward, Slovenia must ensure that the legal framework keeps pace with AI advancements, promoting innovation while safeguarding democratic principles, human rights, and data privacy. This will be essential for maintaining public trust in the growing role of AI within public administration.