THE 'ALGORITHMIC RACE': INSIGHTS FROM THE ROMANIAN PUBLIC SECTOR

Sorin Lodoabă, Calin Rus**, Dacian C. Dragos****

Abstract

The Romanian public administration has undergone significant digital transformation over the last few decades, especially since 2009, when a process of e-service delivery was launched. The process is now continuing with initiatives to consider the integration of algorithmic automation and artificial intelligence in the public sector – the "algorithmic race". However, this rapid development has outpaced the evolution of the Romanian legal framework, which still lacks specific legislation on the use of algorithms in public administration. The current national (Administrative Judicial Review Act of 2004, Administrative Code of 2019) and European Union (GDPR and AI Act) legal frameworks provide some guidance. Still, these are insufficient for the unique challenges posed by AI, such as transparency, accountability, and the protection of citizens' rights.

* Ph.D. candidate and Associate Teaching Assistant at the Babes-Bolyai University of Cluj-Napoca, Romania.

** Ph.D. candidate at the University of Hasselt, Belgium, and Associate Teaching Assistant at the Babes-Bolyai University of Cluj-Napoca, Romania.

*** Jean Monnet Professor of Administrative and European Law at the Babes-Bolyai University, Cluj-Napoca, Romania.

Romania's digitalisation efforts focus on efficiency rather than a user-centred approach, often neglecting essential legal protections. While some digitalisation initiatives introduce principles for interoperability and inclusivity, they lack enforceable guidelines for implementing AI-driven tools. This raises concerns about potential infringements of citizens' rights, such as data protection violations and the limited ability to challenge automated decisions. However, the potential benefits of comprehensive legal reforms, such as establishing clear guidelines and ethical standards for the use of AI in public administration, offer hope for a more user-centred digital environment that safeguards individual rights.

TABLE OF CONTENTS

1. Introduction....736
2. Digital Administrative Bodies....740
3. The Legal Basis for Algorithmic Automation and Artificial Intelligence....742
4. Legal Requirements for Using Algorithmic Automation or Artificial Intelligence in Public Administration....745
5. The National Interoperability Framework and Platform....749
6. The Guidelines for Implementing the NIP....753
7. A Gap Between Official Policies and Unofficial Practices....759
8. Final Considerations....761

1. Introduction

Digital technology applications, AI, and machine learning are ongoing trends that have lead to process disruption in both private industries and the public sector. While the implementation of digital technologies in public administration is still at a nascent stage, the integration of such solutions into administrative law marks a

significant transformation[1], revealing the rise of an algorithmic legal state[2].

The Romanian government has launched a digital transformation initiative to implement these technologies. The aim is to improve service delivery, streamline bureaucratic procedures, and increase transparency. The transformation began in June 2009 with Romanian Government Resolution No. 661/2009[3], a collaborative memorandum between the Romanian Ministry of Information Technology and the South Korean Ministry of Public Administration. This initial initiative laid the foundation for subsequent progress in public services. These technologies offer significant benefits, including improved public services and faster operation.

Romania has taken proactive measures to address the digital revolution, resulting in the establishment of the Romanian Digitalisation Authority (RDA) in 2020. Platforms such as 'aici.gov.ro', 'ghișeul.ro', and the National Interoperability Platform (NIP)[4] have been established to provide e-services to both citizens and businesses.

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[1] See the papers collected in *Eur. Rev. Dig. Admin. & L.*, special issue on *Administrative Law Facing Digital Challenges*, at https://www.erdalreview.eu/pubblicazioni/estratti/10.4399/97888255389602-administrative-law-facing-digital-challenges-estratto.html, last accessed 9 September 2024; G. De Gregorio, *Digital Constitutionalism in Europe: Reframing Rights and Powers in the Algorithmic Society* (2022), 273–317.

[2] R. Williams, *Rethinking Administrative Law for Algorithmic Decision Making*, 42 Ox. J. Leg. Stud. 468 (2022).

[3] Hotărârea Guvernului nr. 661/2009 pentru aprobarea Memorandumului de înțelegere dintre Ministerul Comunicațiilor şi Tehnologiei Informației din România şi Ministerul Administrației Publice şi Securității din Republica Coreea privind cooperarea în domeniul informatizării naționale, publicată în Monitorul Oficial nr. 414 din 17 iunie 2009 [Romanian Government Resolution No. 661/2009, for the approval of the Memorandum of Understanding between the Ministry of Communications and Information Technology of Romania and the Ministry of Public Administration and Security of the Republic of Korea regarding cooperation in the field of national informatisation, published in the Official Journal of Romania No. 414, 17 June 2009].

[4] Legea nr. 242/2022 privind schimbul de date între sisteme informatice și crearea Platformei naționale de interoperabilitate, publicată în Monitorul Oficial nr. 752 din 27 iulie 2022 [Law No. 242/2022 regarding the exchange of data between information systems and the creation of the National Interoperability Platform, published in the Official Journal of Romania No. 752 of 27 July 2022].

This algorithmic shift in public administration has revealed significant shortcomings in Romania's legal framework. The current administrative laws, particularly the Administrative Judicial Review Act of 2004 (AJRA)[5] and the Administrative Code[6], have failed to adapt to technological advances in decision-making procedures. The lack of explicit regulation concerning Algorithmic Automation (AA) and Artificial Intelligence (AI) has created a legal void, leaving citizens' rights and protections inadequately defended against the intricacies posed by these technologies.

The primary challenge in adapting to the algorithmic state is to reconcile the efficiency and innovation introduced by AI and AA with the core tenets of administrative law, including transparency, accountability, fairness, and the protection of individual rights[7]. The existing legal framework lacks explicit guidance or regulation for public bodies on the responsible implementation of AI technologies. This absence raises concerns about potential violations of citizens' rights, including issues related to data privacy, the right to explanation, and the ability to challenge automated administrative decisions[8].

Futhermore, Romania's digitalisation process has predominantly followed a 'digital-by-default' and 'digital-first' approach, focusing on the efficiency of public services rather than a

[5] Legea nr. 554/2004 a contenciosului administrativ, publicată în Monitorul Oficial nr. 1154 din 7 decembrie 2004 [Law on Administrative Judicial Review, No. 554/2004, Official Journal of Romania 1154 of 7 December 2004].

[6] Ordonanța de Urgență a Guvenrului nr. 57/2019 privind Codul administrativ, publicată în Monitorul Oficial nr. 555 din 5 iulie 2019 [Romanian Government, Emergency Ordinance No. 57/2019 regarding the Administrative Code, Official Journal of Romania No. 555 of 5 July 2019].

[7] C. Coglianese, *Law and Empathy in the Automated State*, in M. Zalnieriute & Z. Bednarz (eds.), *Money, Power, and AI: Automated Banks and Automated States* (2023) 173–188; S. Ranchordás, *Empathy in the Digital Administrative State*, 71 Duke L. J. 1341 (2022).

[8] J. Wolswinkel, *Artificial Intelligence and Administrative Law* (2022), at https://www.coe.int/en/web/cdcj/ai-administrative-law, accessed 22 September 2024.

user-friendly, citizen-centred model[9]. While public bodies are obliged to adopt digital solutions, there have been no corresponding legal safeguards to ensure these technologies are used ethically and transparently. The principles outlined in various legislative acts remain largely declaratory, lacking enforceable obligations or detailed implementation guidelines.

The National Interoperability Framework (NIF)[10] and the NIP are attempts to create a more integrated and citizen-centred approach to digital public services. They introduce principles such as user-centricity, inclusion, and accessibility and aim to enhance public service delivery by improving interoperability between institutions. However, these initiatives still fall short of providing a comprehensive legal basis for the use of AA and AI as they are broad, lack specificity, and do not include any explicit directive or regulation to address the unique challenges posed by AI technologies.

This paper explores the impact of the algorithmic race on Romania's public administration, focusing mainly on the legal framework needed to regulate the use of digital services, including AA and AI. It examines the development of digital administrative bodies, the existing legal provisions – or the lack thereof – governing the use of these technologies, and the impact on citizens' rights and public trust. The paper discusses in more detail the Guidelines for Implementing the NIP. These guidelines establish foundational data exchange and interoperability protocols but do not address the ethical, legal, and societal implications of integrating AI into public administration. The lack of provisions for algorithmic transparency, accountability in AI decision-making, and user rights with respect to AI-generated outcomes underscores the urgent need for a more robust legal framework. Based on these challenges, the paper highlights the importance of developing comprehensive legislation that keeps pace

[9] A. von Ungern-Sternberg, *Discriminatory AI and the Law: Legal Standards for Algorithmic Profiling*, in O. Mueller et alii (eds.), *The Cambridge Handbook of Responsible Artificial Intelligence: Interdisciplinary Perspectives* (2022) 252–278.

[10] Hotărârea Guvernului nr. 908/2017 pentru aprobarea Cadrului Național de Interoperabilitate, publicată în Monitorul Oficial nr. 1031 din 28 decembrie 2017 [Romanian Governmental Resolution No. 908/2017 for the approval of the National Interoperability Framework, Official Journal of Romania No. 1031 of 28 December 2017].

with technological advances[11]. This includes establishing precise legal requirements and safeguards for the use of AA and AI, ensuring transparency, accountability, and the protection of citizens' rights[12].

2. Digital Administrative Bodies

The first steps towards public sector digitalisation were taken in June 2009 with the Romanian Government Resolution No. 661/2009[13], a joint memorandum between the Romanian Ministry of Information Technology and the South Korean Ministry of Public Administration. The memorandum aimed to establish cooperation bodies and exchange expertise in order to provide citizens with optimal administrative e-services.

After the joint session, the new Romanian Digitalisation Authority (RDA) was established by the Romanian Government Resolution No. 1439/2009[14], which founded the National Management Centre of the Digital Society (NMCDS) and the Digital Romania National Centre (DRNC). The NMCDS focused on the maintenance and provision of services through the e-government platform, public procurement e-services, and freight transport e-systems. Its role is mainly focused on the development of e-services, with characteristics relating to service continuity, processing capacity, and the implementation of nationally tailored e-services. It also drafted and proposed legislation to the Ministry of Communications and Information Society in the area of the digitalisation of public services. The DRNC's main objective was to manage e-content and information services related to the e-government platform. It supervised and implemented the systems that provide e-services. Interestingly, the

[11] P. Miller, *A New "Machinery of Government"?: The Automation of Administrative Decision-Making*, in M. Zalnieriute & Z. Bednarz (eds.), cit. at 7, 116–135.

[12] A. von Ungern-Sternberg, cit. at 9.

[13] Romanian Government Resolution No. 661/2009, cit. at 3.

[14] Hotărârea Guvernului nr. 1439/2009 privind înființarea Centrului Național de Management pentru Societatea Informațională şi a Centrului Național 'România Digitală', publicată în Monitorul Oficial nr. 857 din 9 decembrie 2009 [Romanian Government Resolution No. 1439/2009 regarding the establishment of the National Centre for Management of the Information Society and the Digital Romania National Centre, Official Journal of Romania No. 857 of 9 December 2009].

NMCDS and DRNC had overlapping responsibilities, the only difference being the platform each centre manages.

In 2013, the Agency for the Implementation of the Romanian Digital Agenda (ARDA)[15] took over the NMCDS, the DRNC, and the National Supercomputing Centre. Its general task was to implement national e-services, including e-government and other sector-specific e-services. ARDA's competences remained unchanged until 2020.

In 2020, the ARDA was replaced by the Digital Romanian Authority (DRA), which was set up by Romanian Government Resolution No. 89/2020[16]. Under the direct supervision of the Ministry of Research, Innovation, and Digitalisation, the DRA plays a leading role in developing, implementing, and monitoring digital services and digital transformation. The DRA has not only retained the previous powers of ARDA but also increased its competence and transparency through a series of reports and communications between the public and the private sectors. For example, the Department for Digital Transformation Programme Implementation (DDTPI)[17], which manages the government's cloud programme, was created under the supervision of the DRA.

This institutional set-up was intended to create a task force focused on the development and delivery of digital solutions applying a top-down approach and, in theory, to ensure a high level of coordination between local and central public authorities. However, it did not create new rules for the use of digital tools. The new obligations

[15] Hotărârea Guvernului nr. 1.132/2013 privind organizarea şi funcţionarea Agenţiei pentru Agenda Digitală a României, precum şi de modificare a Hotărârii Guvernului nr. 548/2013 privind organizarea şi funcţionarea Ministerului pentru Societatea Informaţională, publicată în Monitorul Oficial nr. 32 din 15 ianuarie 2014 [Romanian Government Resolution No. 1132/2013 regarding the organisation and functioning of the Agency for the Digital Agenda of Romania, as well as the amendment of Romanian Government Resolution No. 548/2013 regarding the organisation and functioning of the Ministry for the Information Society, Official Journal of Romania No. 32 of 15 January 2014].

[16] Hotărârea Guvernului nr. 89/2020 privind organizarea și funcționarea Autorității pentru Digitalizarea României, publicată în Monitorul Oficial nr. 113 din 13 februarie 2020 [Romanian Government Resolution No. 89/2020 regarding the organisation and functioning of the Authority for the Digitalisation of Romania, Official Journal of Romania No. 113 of 13 February 2020].

[17] ibid.

made digitalisation mandatory for public authorities without ensuring the necessary safeguards.

3. The Legal Basis for Algorithmic Automation and Artificial Intelligence

The Administrative Code, adopted in 2019[18], represents the primary legislation of substantive administrative law. Romania's main administrative procedural law is the Administrative Judicial Review Act of 2004[19]. The AJRA regulates general administrative procedures, including remedies for illegal administrative acts and contracts. Together with the AJRA, the Freedom of Information Act (FOIA)[20] provides for transparency rights and sets out extensive rights for aggrieved parties, as well as specialised administrative procedures for remedies. Another piece of legislation on public information and access is the Romanian Government Resolution No. 878/2005 (GR 878/2005)[21], which deals with the specific area of environmental information. The FOIA and GR 878/2005 mostly bring a citizen-centred approach to administrative procedures, requiring public authorities to have specialised departments that guide citizens when requesting public information.

Law No. 52/2003 on transparency in decision-making within public administration[22] states that public authorities, while drafting a new normative law, must announce the existence of this procedure on its website in a place accessible to the public, and send it to the national

[18] Romanian Government, Emergency Ordinance No. 57/2019, cit. at 6.
[19] Law on Administrative Judicial Review, No. 554/2004, cit. at 5.
[20] Legea nr. 544/2001 privind liberul acces la informațiile de interes public, publicată în Monitorul Oficial nr. 663 din 23 octombrie 2001 [Law No. 544/2001 on Freedom of Information Act, Official Journal of Romania No. 663 of 23 October 2001].
[21] Hotărârea Guvernului nr. 878/2005 privind accesul publicului la informația privind mediul, publicată în Monitorul Oficial nr. 760 din 22 august 2005 [Romanian Government Resolution No. 878/2005, regarding public access to environmental information, Official Journal of Romania No. 760 of 22 August 2005].
[22] Legea nr. 52/2003 (republicată) privind transparența decizională în administrația publică, publicată în Monitorul Oficial nr. 749 din 3 decembrie 2013 [Law No. 52/2003 regarding decision-making transparency in public administration, Official Journal of Romania No. 749 of 3 December 2013].

or local press. However, there are no provisions on what constitutes *a place accessible to the public*.

On the other end of the spectrum is Law No. 182/2002 regarding classified information[23], which deals with information excluded from the application of the FOIA and establishes rules for its dissemination or denial of access. This law is the first act that explicitly obliges the public administration to balance the effects of the disclosure of public information, by prohibiting the use of its classified status to hide breaches of law or administrative errors and by limiting access to public information or any other conduct that would unlawfully restrict people's rights.

However, none of these laws were designed to address the complexities introduced by AI and AA. As a result, the current legal system lacks the necessary provisions to deal effectively with the introduction of these technologies, creating a gap that puts citizens' rights at risk.

The DRA is the leading actor in regulating digitalisation in public administration. The primary sectoral legislation is framed around the platforms implemented by the DRA: '*aici.gov.ro*' (a system for registering petitions, documents and other requests to public institutions, the Public Procurement Electronic System – PPES), '*ghișeul.ro*' (a one-stop-shop e-payment service for public duties), the IT System for Electronic Allocation in Transport (ISEAT), the Single Point of Contact (SPOC) (an e-government portal that allows service providers to obtain the information they need and complete administrative procedures online), e-Gov (the National Electronic System (SEN) that provides forms and digital interaction between citizens and public authorities) and the ROeID (supporting the digital identity framework).

The main issue the legislation addresses is not the creation of a legal basis for the use of AA and/or AI but rather the creation of a general obligation for the administration to continue and move towards digitalisation. There are few or no definitions of specific

[23] Legea nr. 182/2002 privind protecția informațiilor clasificate, publicată în Monitorul Oficial nr. 248 din 12 aprilie 2002 [Law No. 182/2002 regarding Classified Information, Official Journal of Romania No. 248 of 12 April 2002].

terms, with automatic data processing being defined as any form of processing by an IT solution[24].

This legislative process has promoted a digital-by-default and digital-first approach, focusing more on service efficiency than creating user-friendly, citizen-centred services with adequate safeguards. The new legislation did not implement safeguards and security measures tailored to automated processes or AI. The level of protection explicitly required by the law is rudimentary: checksum and message integrity (HMAC-SHA1)[25], timestamps for requests, SOAP Fault Error Handling[26], and simple UTF-8 Encoding[27]. This level of security provides only basic protections such as message integrity and structured error handling[28]. The system lacks encryption, input validation, logging and authorisation, and rate limiting, making the

[24] Art. 35 para. 1 of Legea nr. 161/2003 privind unele măsuri pentru asigurarea transparenței în exercitarea demnităților publice, a funcțiilor publice și în mediul de afaceri, prevenirea și sancționarea corupției, publicată în Monitorul Oficial nr. 279 din 21 aprilie 2003 [Law No. 161/2003 regarding certain measures to ensure transparency in the exercise of public offices, public functions, and in the business environment, as well as the prevention and sanctioning of corruption, Official Journal of Romania No. 279 of 21 April 2003].

[25] F. Schuhmacher, *Canonical DPA Attack on HMAC-SHA1/SHA2*, in J. Balasch & C. O'Flynn (eds.), *Constructive Side-Channel Analysis and Secure Design* (2022) 193–211; D. Divya Priya & A. Mahalakshmi, *Data Security in Mobile Cloud Computing Using TOTP Generated By HMAC-SHA1 Algorithm*, 6(1) Int'l J. Comp. Sci. Trends & Tech. 93–98 (2018); D. Ravilla & C.S.R. Putta, *Implementation of HMAC-SHA256 algorithm for hybrid routing protocols in MANETs*, in *2015 International Conference on Electronic Design, Computer Networks & Automated Verification (EDCAV)* (2015) 154–159; N. Ayofe Azeez & O.J. Chinazo, *Achieving Data Authentication with HMAC-SHA256 Algorithm*, 54(2) GESJ: Comp. Sci. & Telecomm. J. 34–43 (2018).

[26] C.-L. Fang, D. Liang, F. Lin, C.-C. Lin, *Fault tolerant Web Services*, 53(1) J. Systems Architecture 21–38 (2007).

[27] M. Crane, A. Trotman, R. O'Keefe, *Malformed UTF-8 and spam*, in *Proceedings of the 18th Australasian Document Computing Symposium (ADCS '13). Association for Computing Machinery* (2013) 101–104; R.D. Cameron, *u8u16: A High-Speed UTF-8 to UTF-16 Transcoder Using Parallel Bit Streams*, Technical Report 2007-18 School of Computing Science, Simon Fraser University (2007).

[28] A. Shahana et alii, *AI-Driven Cybersecurity: Balancing Advancements and Safeguards*, 6(2) J. Comp. Sci. & Techn. Stud. 76–85 (2024); N.R. Zack, C.D. Jaeger, W.J. Hunteman, *Integrated safeguards and security for a highly automated process* (1993), at <https://www.osti.gov/servlets/purl/10182004>, accessed 22 September 2024.

service vulnerable to a wide range of attacks, including injection attacks, unauthorised access, and DDoS attacks[29].

This problem is exacerbated by the fact that national legislation does not limit public administrations' reliance on AA or AI, nor does it provide guidelines on how such technologies should be used to avoid infringing on citizens' rights. The only rules that can be considered directly applicable are those provided by the General Data Protection Regulation (GDPR), which should restrict the use of AA or AI[30].

As mentioned above, there is no general legal basis for the use of AA or AI by the public administration, and no explicit directives allowing them to experiment with such technologies. As the main body overseeing digitalisation, the DRA does not provide specific guidance on the development and implementation of public digital services, regardless of the use of AI or automation.

4. Legal Requirements for Using Algorithmic Automation or Artificial Intelligence in Public Administration

The principles governing the provision of administrative services are based on the Administrative Code and other sectoral legislation[31]. These general administrative principles are not specifically tailored to digital service delivery.

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[29] H. Mustapha & A.M. Alghamdi, *DDoS attacks on the Internet of Things and their prevention methods*, in *Proceedings of the 2nd International Conference on Future Networks and Distributed Systems (ICFNDS '18)* (2018), Article 4, 1–5; S. Singhal et alii, *Detection of application layer DDoS attacks using big data technologies*, 23(2) J. Discrete Math. Sci. & Cryptography 563–571 (2020); J. Mariam Biju, N. Gopal, A.J Prakash, *Cyber Attacks and its Different Types*, 6(3) Int'l Res. J. Eng. & Tech. 4849–4852 (2019).

[30] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 September 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).

[31] Article 580 of the Administrative Code establishes seven ground principles for delivering public services: transparency, equal treatment in the provision of public services, continuity of the provision of public services, adaptability, accessibility, responsibility, and providing high-quality public services. These principles are only briefly defined and enumerated, and their meaning is not explained further throughout the rest of the Administrative Code.

Romania still has the opportunity to regulate the use of digital means, and more specifically, algorithms in public administration through the adoption of the Code of Administrative Procedures, which is currently under public consultation. The draft, however, only briefly refers to digital administrative procedures without setting minimum standards or safeguards[32].

Currently, the main rule applicable to AA and AI stems from Articles 21 and 22 of the GDPR[33] and concerns the right of the data subject to object to any form of automatic data processing or profiling. The GDPR provides several safeguards against arbitrary algorithm use and establishes a baseline regarding personal data use[34]. These rules, along with the general administrative principles and the forthcoming rules of the EU AI Act[35], provide a minimum of regulation for using algorithms by the public administration. However, as already mentioned, these regulations are not tailored to the specific challenges AI poses.

The Administrative Code lays down the first set of principles that can be applied *mutatis mutandis* to public e-procedures[36]. The first issue that can be raised is the possible violation of the transparency principle. The public administration is required to inform the public

[32] The current draft for the Procedural Administrative Code (LP/14 February 2024) establishes rules only regarding public authorities' obligation to simplify their processes through digitalisation. It does not provide any rule or principle that creates safeguards for individuals, with the sole exception of the rights already imposed by the GDPR.

[33] Art. 21 GDPR: "The data subject shall have the right to object, on grounds relating to his or her particular situation, at any time to processing of personal data concerning him or her which is based on point (e) or (f) of Article 6(1), including profiling based on those provisions. The controller shall no longer process the personal data unless the controller demonstrates compelling legitimate grounds for the processing which override the interests, rights and freedoms of the data subject or for the establishment, exercise or defence of legal claims".

[34] K. Wiedemann, *Profiling and (automated) decision-making under the GDPR: A two-step approach*, 45 Comp. L. & Sec. Rev. 105662 (2022).

[35] Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No. 300/2008, (EU) No. 167/2013, (EU) No. 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).

[36] Wiedemann, cit. at 34.

about the methods used to determine its activities and objectives, regardless of the means of delivery. This principle also applies to the resolution of complaints and disputes. The problem with digital services is that the public may sometimes not be unaware that they are subject to automatic procedures as no specific national legislation obliges the public authority to disclose such information. Moreover, some national e-services are developed in partnership with the Romanian Intelligence Agency[37], whose actions are classified as a state secret and protected under national legislation[38].

This has implications for accessibility and fairness, as there is often a lack of appropriate guidelines for using public e-services. The problem is further exacerbated by the lack of minimum requirements when building a platform, and each application is built by different entities, usually outsourced. One of the most recent examples is the National Trade Registers' Office Online Services Portal (e-NTRO), which aims to bring digital services to entrepreneurs and registered businesses. In the first two months since the launch of the e-NTRO, a security breach occurred, impacting over one million limited liability companies and over 3000 users[39]. The e-NTRO implementation also doubled the time needed to solve requests, cut register productivity in half, and increased overtime[40].

Moreover, there are no new provisions to ensure equal treatment and accountability in the delivery of public e-services. The same rules that apply to traditional public procedures apply to e-

[37] See https://www.RDA.gov.ro/demararea-proiectului-aferent-investitiei-1-implementarea-infrastructurii-de-cloud-guvernamental-finantat-prin-pnrr-componenta-7-transformare-digitala/, accessed 10 September 2024.

[38] Legea nr. 182/2002 privind protecția informațiilor clasificate, publicată în Monitorul Oficial nr. 248 din 12 aprilie 2002 [Law No. 182/2002 regarding the protection of classified information, published in the Official Journal of Romania No. 248 of 12 April 2002]; Legea nr. 14/1992 privind organizarea și funcționarea Serviciului Român de Informații, publicată în Monitorul Oficial nr. 33 din 3 martie 1992 [Law No. 14/1992 regarding the organisation and functioning of the Romanian Intelligence Service, published in the Official Journal of Romania No. 33 of 3 March 1992].

[39] See https://www.incorpo.ro/ro-ro/press/bresa-de-date-vulnerabilitate-registrul-comertului-onrc/, accessed 15 September 2024.

[40] See https://www.incorpo.ro/ro-ro/press/scrisoare-deschisa-onrc-v2-0/#alte-statistici-interesante, accessed 15 September 2024.

administration but with fewer safeguards for user interaction. In contrast to traditional bureaucracies, when using e-services, the user is not aware of the steps involved in the delivery of the service. In order to challenge a digital decision, whether automated or not, the user must first understand how the programme works. There are no published source codes or pseudo-codes to help us understand the technology behind these processes or how they resolve administrative claims and requests.

These aspects have an impact on the possibility of challenging electronic administrative acts since the time limit for providing the necessary information (e.g. the software used, types of processing, fault-checks implemented or even the reasons underlying the decision) is the same as the time limit imposed for challenging the administrative act[41]. Furthermore, the administrative complaint must address all the issues that could be further discussed before the court in the event of a negative response from the administration. This creates a digital barrier for the injured persons as, in most cases, they do not know what to challenge and where the fault lies.

The NIF and the NIP represent further efforts to create a more integrated and citizen-centred approach to digital public services. Building on previous initiatives, the NIP aims to provide a common legal and technical foundation to improve the delivery of public services.

To address these shortcomings and the lack of a specific legal framework for digital services, we will examine the rules introduced by the NIF and the NIP over time. Though these initiatives aim to establish a common legal and technical foundation for interoperability,

[41] As no national legislation requires public authorities to disclose the use of automatic decision-making programmes or profiling systems, the citizen should first try to find out whether this is the case with regard to their request. The legal response time (often overlooked by public authorities) ranges from 10 to 30 days, depending on the complexity of the public interest issue posed. At the same time, the time limit for formulating an administrative complaint is also 30 days. Another problem is that the argumentation of the administrative complaint sometimes cannot be presented before a court, so that the arguments that can be presented are only those mentioned in the initial administrative complaint. However, it is clear that the claimant cannot (rightfully) invoke unlawful data processing if they were not aware of the existence of such a case.

they can be extrapolated to other administrative digital services. The following sections will explore how the NIF and NIP provisions could fill the legal gaps and enhance the digitalisation of public administration.

5. The National Interoperability Framework and Platform

The National Interoperability Framework[42] is the first act to translate the administration's digitalisation into a direct impact on citizens and end-users. The NIF established the general framework for digital interoperability, drawing inspiration from the European Digital Agenda[43]. The main objective was improving public service delivery in Romania by improving interoperability across institutions, sectors, and borders.

The NIF created the first specific principles in the area of digital administrative services, stating that public administration should be user-centred. These principles state that electronic public services should be user-friendly, secure, and have a flexible interface that allows for customisation. Emphasis is placed on user data, expressing the need for safeguards against excessive data sharing and respect for privacy rights[44].

In terms of inclusion and accessibility, the NIF provides the first clear principles, stating that the aim is to use information technology to create equal opportunities for citizens and the business environment. This is particularly important as the rights of citizens and businesses may generally be treated differently in their relationships with the public administration. For example, this would be the case

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[42] Hotărârea Guvernului nr. 908/2017 pentru aprobarea Cadrului Național de Interoperabilitate, publicată în Monitorul Oficial nr. 1031 din 28 decembrie 2017 [Romanian Government Resolution No. 908/2017 for the approval of the National Interoperability Framework, published in the Official Journal of Romania No. 1031 of 28 December 2017].

[43] See https://www.europarl.europa.eu/factsheets/en/sheet/64/digital-agenda-for-europe, accessed 15 September 2024.

[44] Hotărârea Guvernului nr. 908/2017 pentru aprobarea Cadrului Național de Interoperabilitate, publicată în Monitorul Oficial nr. 1031 din 28 decembrie 2017 [Romanian Government Resolution No. 908/2017 for the approval of the National Interoperability Framework, published in the Official Journal of Romania No. 1031 of 28 December 2017, point 2.5].

when communicating with the Anti-Fraud National Agency (AFNA), where companies are forced to use digital authentication to send financial documents[45]. A key principle here is that the need for multi-channel communication is recognised; as a general rule, it is also established that the traditional way of delivering public services, face-to-face or on paper, must coexist with the electronic delivery system to give citizens a choice as to how they access services.

However, these statements contradict the principles of administrative simplification, which prioritise 'digital-by-default' and 'digital-first'. This approach shifts the focus to the efficiency and user-friendliness of public services without taking into account the rights of citizens to access public services in good conditions.

Law No. 242/2022 furthered the path towards administrative interoperability and digitalisation by creating the National Interoperability Platform. The platform aims to create a unified informatics framework that promotes interconnectivity between the databases of different public authorities. However, it is not yet operational. The NIP defines the digital legal environment and establishes applicable digital principles.

Unfortunately, the same situation occurred with the NIF, where the digital-first principle was prioritised above all else. Moreover, in this iteration of the law, the principle of administrative simplification (which includes the digital-first principle) mentions nothing about the fallback of paper-based bureaucracy[46].

[45] Legea nr. 296/2023 privind unele măsuri fiscal-bugetare pentru asigurarea sustenabilității financiare a României pe termen lung, publicată în Monitorul Oficial nr. 977 din 27 octombrie 2023 [Law No. 296/2023 regarding certain fiscal-budgetary measures to ensure the long-term financial sustainability of Romania, published in the Official Journal of Romania No. 977 of 27 October 2023].

[46] Article 5, para 1, letter c), Law No. 242/2022 (Administrative simplification principle): "(i) The public authorities and institutions design or adapt their public services for an electronic working environment, streamlining and simplifying the administrative processes underlying the provision of those public services; (ii) The public authorities and institutions continuously aim to reduce the waiting time for responses to users' requests and the administrative burden on public authorities and institutions, private entities, and individuals".

This was a shift from the 2016 perspective, which used digitalisation as a support system towards complete digitalisation[47]. The shift is made clear from the wording of the principles of non-discrimination, neutrality, and user-centredness[48]. In the NIF, these principles consider information technology as the primary way to deliver public services, and traditional bureaucracy seems to be the exception that guarantees non-discrimination.

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[47] Ordonanța de Urgență nr. 41/2016 privind stabilirea unor măsuri de simplificare la nivelul administrației publice centrale, administrației publice locale și al instituțiilor publice și pentru modificarea și completarea unor acte normative, publicată în Monitorul Oficial nr. 490 din 30 iunie 2016 [Romanian Government Emergency Ordinance No. 41/2016 regarding the establishment of certain simplification measures at the level of central public administration, local public administration, and public institutions, and for amending and completing certain normative acts, published in the Official Journal of Romania No. 490 of 30 June 2016].

[48] Article 5, para 1, letter i), LawNo. 242/2022: "Public authorities and institutions will take measures to make electronic services available to people who rarely or never use the online environment, providing them with additional ways to access public services without additional costs". Article 5, para 1, letter j), LawNo. 242/2022: "(i) When defining an electronic public service, public authorities and institutions will consider functional requirements and avoid imposing any technology or product on partners, to be able to adapt to the continuously evolving technological environment". Article 5, para 1, letter k), Law No. 242/2022: "Public service providers will consider offering services with a friendly, secure, and flexible interface allowing personalisation, delivering services through multiple distribution channels to ensure access in any way, anywhere, and anytime; providing a single point of contact even when various sectors of public administration need to collaborate to deliver the service; and requiring the citizen to provide only the minimum necessary information to obtain the public service". Article 5, para 1, letter l), LawNo. 242/2022: "(i) Public authorities and institutions will use information technology to create equal opportunities for citizens and the business environment through publicly presented and accessible electronic public services without discrimination; (ii) Inclusion involves the right of every person to fully benefit from the opportunities offered by new technologies to overcome social and economic disadvantages and exclusion; (iii) Public authorities and institutions must ensure that electronic public services are accessible to all citizens, including people with disabilities or the elderly". The main theme of these principles is not the creation of an administrative service framework around people's needs but rather the complete digitalisation of the services and the assurance of training and the inclusion of people in the use of e-services. In our opinion, this approach is somewhat risky and could lead to higher levels of discrimination than paper-based bureaucracy, as public authorities are not known for their adaptability and willingness to provide free services to citizens.

A relevant example is the wording of the user-centred principle, where the main debate is around the fact that service providers should have a 'friendly, secure and flexible interface that allows for customisation and should request a minimum of information through this platform'. We also note that human interaction is absent from these public acts, with inclusion implying that *everyone should benefit from the advantages of digitalisation*.

The NIP commits the public authorities to these principles, but the unfortunate wording of these obligations creates a distinction between the provision of these services and the creation of IT systems. Thus, these minimum obligations exist only in relation to the development of tools for the provision of electronic public services and do not go beyond these parameters[49].

Although the National Interoperability Platform Act is the sole legal act outlining general principles for digital administrative procedures and service delivery, it notably does not contain any specific obligation for public bodies. Instead, it offers general recommendations that cannot be translated into sector-specific rules. For instance, there are no clear definitions of efficiency or a user-centred approach, and there are no established remedies or sanctions for the violation of these principles. This absence of specific rules does not incentivise public institutions to develop and implement digital solutions.

The NIF and the NIP Act fail to implement general administrative principles, such as the right to explanation and human involvement[50]. It is important to note that the principles discussed above, such as the right to explanation and transparency obligations, only apply to the creation of the interoperability system. They do not

[49] Chapter 4 of Law No. 242/2022.

[50] M. Pieterse, *Urbanizing Human Rights Law: Cities, Local Governance and Corporate Power*, 23 German L. J. 1212–1225 (2022); B. Custers, *New Digital Rights: Imagining Additional Fundamental Rights for the Digital Era*, 44 Comp. L. & Sec. Rev. 1–13 (2022); D. Freeman Engstrom (ed.), *Legal Tech and the Future of Civil Justice* (2023); M. Lesch & N. Reiners, *Informal Human Rights Law-Making: How Treaty Bodies Use "General Comments" to Develop International Law*, 12 Glob. Const. 378–401 (2023); Y. Shany, *Digital Rights and the Outer Limits of International Human Rights Law*, 24 German L. J. 461–472 (2023); R. Poscher, *Artificial Intelligence and the Right to Data Protection*, in Mueller et alii (eds), cit. at 9.

apply directly to other digital services that fall under general digital administrative services.

6. The Guidelines for Implementing the NIP

The National Interoperability Platform establishes a legal and technical foundation for digital public services. In order to operationalise this framework, the Guidelines for Implementing the NIP set specific rules and standards to ensure its successful implementation. These guidelines are the only provisions that establish specific rules for the delivery of digital administrative services. Although they are directly linked to the National Interoperability Platform and its implementation, we believe that general administrative principles and safeguards for digital governance can be extrapolated from this act.

The Interoperability in the Information Technology and Communication Area (IITCA) guidelines[51] outline several legal requirements related to data exchange and interoperability that could apply to any reliance on A A or AI in public administration. There is a strong emphasis on privacy and data protection, requiring compliance with the GDPR when processing personal data[52].

Regarding cybersecurity measures, participants must implement appropriate security protocols to protect data and information systems. This includes the use of established security protocols such as OAuth 2.0 and JSON Web Tokens (JWT) for authentication and authorisation. OAuth 2.0 is an open standard used for delegated access rights that allows applications to securely access server resources on behalf of a resource owner using an access token[53]. JWT provides a compact and self-contained way to securely transfer

[51] Ordinul nr. 21.286/2023 privind aprobarea Normelor de referință pentru realizarea interoperabilității în domeniul tehnologiei informației și al comunicațiilor (NRRI), publicat în Monitorul Oficial nr. 1000 din 3 noiembrie 2023 [Order No. 21,286/2023 regarding the approval of the Reference Standards for achieving interoperability in the field of information technology and communications (RSI), published in the Official Journal of Romania No. 1000 of 3 November 2023].

[52] Chapter 3 NRRI.

[53] Chapter 2, letter o) and Chapter 5 para 4 NRRI.

information between parties as a JSON object that is digitally signed for verification[54].

The quality and integrity of datasets and records are also critical, with a focus on ensuring data validity, consistency, accuracy, and coherence. Measures to ensure data validity and consistency are critical for reliable data exchange and interoperability[55]. Regarding transparency obligations, users have the right to be informed or notified when their data are accessed through the Media and Notification Platform, ensuring that every citizen is aware of when their data are used[56]. In addition, the right to access information is guaranteed through the Single Contact Point (PDUro), which provides citizens with access to their personal data[57].

Public authorities must comply with the technical and semantic standards defined by the NRRI to ensure interoperability and consistent data exchange. This alignment aims to harmonise with the European architecture that is dedicated to interoperability[58]. The standards emphasise the use of REST APIs for technical interoperability, with recommendations to use the OData protocol to ensure consistency in data exchange[59]. Semantic standards such as RDF (Resource Description Framework) and OWL (Web Ontology Language) enable standardised, interoperable information descriptions and links[60]. The National Semantic Catalogue (semantic.gov.ro) is a system for configuring, managing, and recording semantic resources used by entities and institutions in Romania. It ensures semantic interoperability by providing updated information on available assets and relevant metadata[61].

The need for mandatory human involvement and accountability is addressed by requiring administrators to ensure that their staff is adequately trained and understands their responsibilities.

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[54] Chapter 2, letter p) NRRI.
[55] Chapter 1 para 1 letter f) and para 2 NRRI.
[56] Chapter 1 para 1 letter h) and para 2 NRRI.
[57] Chapter 1 para 1 letter g) and para 2 NRRI.
[58] Chapter 5 para 1 NRRI.
[59] Chapter 5 para 4 NRRI.
[60] Chapter 2 letter j) and k) NRRI.
[61] Chapter 4 para 5 NRRI.

This includes training on the use of security protocols, data exchange standards, and compliance with European regulations[62].

Furthermore, there are provisions for the right to obtain a remedy, with procedures established for users to suggest improvements and address issues, allowing for suggestions to improve processes and the platform itself[63]. While these requirements are framed in the context of data exchange and interoperability, they collectively establish a legal framework for AA and AI, explicitly addressing privacy, security, data quality, transparency, and user rights concerns.

The legal requirements derive from both pre-existing norms and new technology-oriented rules. Pre-existing legal provisions include the GDPR, which provides the foundational framework for data protection and privacy[64]. Law no. 242/2022 introduces technology-oriented rules, establishing a new legal framework for data exchange between IT systems and creating the NIP. Additionally, the Reference Norms for Achieving Interoperability (NRRI) introduce new standards and procedures designed to improve interoperability, setting the conditions and terms of compliance through a joint technical and semantic core[65].

Moreover, new rules define technical and semantic standards specific to digital transformation and data interoperability. These standards can be discussed with software developers, demonstrating an adaptive approach to evolving technological needs (Technical Interoperability Standards)[66]. The alignment with European interoperability frameworks ensures that national standards are consistent with European architectural standards, including digital identity and electronic services[67].

The Romanian Digital Authority manages the NIP, primarily developing and administering data exchange and interoperability technologies[68]. The RDA's roles and responsibilities include

[62] Chapter 3 para 1 point 1 and 2 NRRI.
[63] Chapter 3 para 1 point 1 and 15 NRRI.
[64] Chapter 3 para 3 point 2 NRRI.
[65] Chapter 1 NRRI.
[66] Chapter 5 para 5 NRRI.
[67] Chapter 1 para 3 NRRI.
[68] Chapter 3 para 1 NRRI.

developing and maintaining the components of the NIP, administrating the National Registry (NR), establishing and maintaining security requirements, and providing support and training for participants[69].

Additionally, the RDA is responsible for developing Application Programming Interfaces (APIs) necessary for public institutions to connect to the NIP, especially if they need more technical capacity to develop them independently. The RDA will develop APIs free of charge on request for data consumers within the NIP, including central and local public institutions[70]. These APIs are designed according to best practices in API design, testing, and management, taking into account aspects such as semantics, security, and consistency[71]. Monitoring and testing are emphasised to ensure the API's reliability, security, and optimal performance[72].

The development of these technologies is primarily managed by a public entity – the RDA. The guidelines do not explicitly mention the involvement of private or hybrid entities in the development of algorithmic technologies within the context of public administration.

The guidelines require training measures for staff members and employees involved in utilising these technologies. The NIP (RDA) administrator must ensure that staff have the necessary knowledge and are able to use the tools associated with their duties efficiently[73]. This includes training on security protocols like OAuth 2.0 and JWT, data exchange standards such as REST APIs and OData, and compliance with regulations such as GDPR and eIDAS[74].

The RDA is tasked with providing appropriate oversight to ensure compliance with information-related regulations, norms, and instructions[75]. Administrators of base registries are required to appoint a responsible person for each registry and to organise professional training programmes. This ensures that both staff and third parties

[69] Chapter 3 para 1, Responsibilities NRRI.
[70] Chapter 5 para 4 NRRI.
[71] Chapter 5 para 4 NRRI.
[72] Chapter 5 para 4 NRRI.
[73] Chapter 3 para 3 NRRI.
[74] See https://digital-strategy.ec.europa.eu/en/policies/eidas-regulation, accessed 15 September 2024.
[75] Chapter 3 para 1 NRRI.

acting on behalf of the administrators have adequate knowledge of the rules, regulations, and instructions relating to information management processes[76].

Therefore, both the RDA and the base registry administrators must implement training measures to ensure their staff are adequately prepared to use the technologies related to data exchange and interoperability.

The provisions outlined in the IITCA guidelines establish a comprehensive framework for data exchange, interoperability, security, and compliance within the Romanian public administration. These standards are adequate in scope and depth to support a large, complex digital interoperability plan such as the NIP. They cover essential aspects such as compliance with European regulations, security protocols, data exchange mechanisms, semantic interoperability, and governance structures. By adhering to these standards, the public administration is well-placed to implement a robust and effective interoperability platform.

However, while the existing provisions provide a strong foundation, they are not sufficient for the full integration of AI technologies. The current guidelines provide some guidance in areas such as data protection and privacy compliance, cybersecurity measures, data quality and integrity, and the establishment of technical and semantic standards. These elements are critical for AI systems that rely on large data sets and require secure, interoperable environments for data exchange. The NIP provides a centralised infrastructure that supports the aggregation and dissemination of data necessary for AI applications. The mandatory training also ensures that personnel are adequately prepared to work with advanced technologies, including AI. These aspects can be effectively adapted to support AI and automation in public administration.

The provisions lack specifics on AI ethics, transparency, accountability, and governance. Ethical guidelines and standards for AI development, including strategies for bias mitigation and fairness assessments, need to be established to prevent discrimination and ensure equitable AI applications.

[76] Chapter 3 para 2 NRRI.

Furthermore, transparency and explainability requirements for AI systems used in public administration should be mandated in order to enhance accountability and build public trust[77]. Requiring thorough impact assessments before AI systems are deployed and establishing oversight bodies to monitor their societal impact are essential steps to address potential legal and ethical challenges. Strengthening user rights, including the ability to understand and contest decisions made by AI systems, ensures that individuals are not adversely affected without recourse[78]. Implementing strict guidelines for the quality and governance of datasets used to train AI models is also critical to prevent biases and errors within AI systems.

By supplementing existing regulations with these AI-specific measures, the public administration can reap the benefits of AA and AI while safeguarding against potential risks. Ongoing evaluation and adaptation are essential to address any challenge that may arise in the implementation of such technologies. Effective implementation, inter-agency collaboration, and a sustained commitment to maintaining and updating the systems and standards are crucial for the long-term success of integrating AI into public services.

The current standards provide a solid foundation for digital interoperability and can be adapted to support the implementation of AI in several areas. However, to fully embrace AI and automation, it is imperative to develop additional legal frameworks and guidelines that specifically address the unique challenges posed by AI technologies. This approach would ensure that AI implementation aligns with ethical standards, legal obligations, and public expectations, ultimately contributing to more efficient, transparent, and trustworthy public administration.

[77] C. Coglianese, cit. at 7; S. Ranchordás, cit. at 7; A. van Deursen & W.J. Pieterson, *The Internet as a Service Channel in the Public Sector* (2006), presented at the 56th Annual Conference of the International Communication Association (2006), at https://ris.utwente.nl/ws/portalfiles/portal/5950101/Deursen06internet.pdf, accessed 15 September 2024.
[78] J. Wolswinkel, cit. at 8.

7. A Gap Between Official Policies and Unofficial Practices

To test the implementation of digital policies in real world administration, we prepared thirty-seven questionnaires to determine whether specific administrative procedures or services rely on AA or AI. These questionnaires were sent to the National Digital Authority and the most significant Romanian municipalities, covering the entire geographical area. Romania is divided into seven central regions. We selected twenty-two representative county seats from each region[79], and ten public institutions, the Romanian Digital Authority and public service providers in the capital city (such as the transport, parking, and energy sectors).

We asked the municipalities if they had implemented such technologies and for which services, requesting information about the specific infrastructure or algorithms used. We also inquired whether there were internal provisions regarding self-imposed limitations, bans, or boundaries concerning citizens' rights and the public interest. The questionnaire further asked whether specific training had been pursued and whether the development was in-house or outsourced.

We received twenty-eight responses, seven notifications of response delay (one from Bucharest's first district and all requests from the Romanian Digital Authority), and two unanswered questionnaires. The authorities' general response was that the public body has "*no projects involving algorithm automation or artificial intelligence neither in progress nor in the planning phase*".

The only exception was the Bucharest Investment Authority, which informed us that two projects had been started regarding Smart & Green Mobility for the Bucharest-Ilfov area that might involve AA and AI. The project aims to alleviate congestion at some of the most crowded crossroads between Bucharest and Ilfov using smart traffic lights and automatic traffic management through digital solutions. The authority did not specify that automation and AI would be used, stating that "*the technical solutions that will be used in project implementation will be determined later*".

[79] Two from the West Region, three from the Northwest Region, three from the Northeast Region, three from the Southeast Region, seven from the South Region (including the capital city), one from the Southwest Region and three from the Central Region.

We followed these findings with anonymous interviews with public servants from both local and central administrations. To ensure that responses would be sincere and the respondents unidentifiable (as public servants can be punished by law if they do not adhere to specific criteria in drafting documents), we did not record any information about the respondents other than their responses and the type of public body where they worked. We gathered nine responses based on the initial findings. No public projects involved AA or AI at any of the public authorities where they worked.

However, 90% of the public servants mentioned that they or their colleagues had used generative chatbots (such as ChatGPT) to create internal reports and operational guidelines. Two respondents acknowledged using ChatGPT to respond to citizens' requests or to help them formulate such responses.

A central issue identified in our discussions with the interviewees was that almost none informed anyone about the use of these technologies (only one person told a superior), and none of these public servants informed the public regarding the use of these technologies. Another aspect is that employers provide no specific training concerning digital technologies, and it almost seems a taboo subject in day-to-day public administration.

Our investigation reveals a significant gap between the Romanian public authorities' official stance and individual public servants' actual practices regarding AA and AI. While formal responses uniformly deny any implementation or planning of such technologies, our anonymous interviews indicate that most public servants are independently using generative AI tools like ChatGPT for internal reports, operational guidelines, and even in communications with citizens without informing their superiors or the public. This clandestine use of AI technologies raises concerns about transparency, accountability, and the protection of citizens' rights. The absence of official policies, training, and open discussion on digital technologies within public administration hinders the responsible adoption of AI. It creates a culture of secrecy and reluctance to innovate. The fact that public servants feel unable to disclose their use of AI tools – even to their superiors – highlights a need for organisational change.

To bridge this divide between policy and practice, public authorities must develop clear guidelines and provide training on AI

and automation. By fostering transparency and openly embracing digital innovation, authorities can ensure that AI technologies are used ethically and effectively, benefiting the public sector and the citizens it serves.

8. Final Considerations

Building on our earlier discussion, some observations are worth mentioning. We highlight that a distinction must be made between automated administrative decisions (ADM) – which provide outcomes solely through automated algorithms – and automated document provision (ADP), which involves no discretion. While ADM should be able to mimic the public servants' decision-making process, the latter represents the use of technology for simple, often repetitive, tasks where the program assesses nothing but simply checks the existence of specific data and provides a preprepared (template) document based on that, which, from the Romanian law standpoint is more an administrative operation than an administrative act/administrative decision. The ADP may still use private or sensitive data, but it does not make judgement calls, ultimately returning the same result for all iterations. It is simply an automated box-checking machine and a form-filler, replacing the clerk who would usually do this tedious task.

Since 2009, Romania has embarked on an 'algorithmic race', significantly transforming the delivery and regulation of governmental services. The establishment of public e-services portals led to the creation of the Romanian Digitalisation Authority and platforms like the National Interoperability Platform, aiming to improve public service efficiency and foster interconnectivity among governmental databases. Following the previous clarifications, we can state that various sectors use automation algorithms, particularly in document provision services.

To use these services, the individual must have an account and input their identification data, and they will automatically receive documents such as their tax record, good conduct certificate, or criminal record. Furthermore, something similar exists for legal persons in matters of reserving a name for a business or an NGO.

For instance, in urbanism and building permits, applications for Urbanism Certificates or notifications regarding the commencement of

works can be submitted via e-governance platforms like eDirect (PCUe)[80]. These services automate the issuance of necessary permits once all required information is provided, processing applications that do not require discretionary decision-making. Similarly, businesses can efficiently obtain operating licences for retail and wholesale trade activities, with automation relying solely on verifying that all necessary documents are submitted[81]. Funeral and cemetery services also benefit from automation, simplifying processes for individuals seeking concession contracts for burial plots or certificates of burial plot concession. Construction and infrastructure approvals are managed through automated systems that issue approvals without legal analysis or discretionary judgement, provided the application is complete.

In some cities, automation extends to the use of text messages for payments. For instance, individuals may send a specific text message to pay for public transport tickets or parking, receiving a receipt in return, with the charge applied to their phone bill. Similar services are available through web platforms for paying fines, road access fees (Vignette), court fees (judicial stamp duties), and other taxes.

Despite these advances, the legal framework is not yet ready to integrate AA and AI. The primary administrative laws, including the Administrative Judicial Review Act and the Administrative Code, lack specific provisions on the use of AI and algorithmic processes in public administration. Existing legislation imposes general obligations for

[80] Services related to urban planning are accessible through the e-governance platform (eDirect – PCUe), such as the Application for Urbanism Certificate, Application for Extension of Urbanism Certificate, Application for Extension of Building Permit, and Notification Regarding the Commencement of Works Execution. These services automate certificate and permit issuance for construction and development. They streamline the process by checking for the completeness of submitted information with no discretionary decision-making.

[81] Businesses can obtain various operating permits through automated services: Operating Permits for Retail Trade Activities (including cash and carry trade, ambulant trade, and service provision activities other than vehicle maintenance and repair), Operating Permits for Wholesale Trade Activities, Notification of Clearance Sales, Notification of Liquidation Sales. These services facilitate commercial activities by automating the issuance of necessary permits based solely on verifying that all required documents are provided.

digitalisation but fails to provide guidelines or safeguards specific to AI technologies, leaving a gap in legal protection and citizens' rights.

The NIF and NIP introduced principles to promote interoperability, user-centred services, and inclusivity. However, these principles are often broad and need more enforceable commitments or detailed implementation guidelines. The focus has shifted towards a 'digital-by-default' and 'digital-first' approach, sometimes at the expense of accessibility and fairness. Traditional service delivery means are not adequately preserved, potentially excluding people who lack digital access or skills.

The Guidelines for Implementing IITCA offer more specific measures related to data exchange, cybersecurity, and compliance with European regulations such as the General Data Protection Regulation (GDPR) and eIDAS. They establish the basic protocols and standards necessary for a robust digital infrastructure, including the use of security protocols such as OAuth 2.0 and JWT, data exchange standards like REST APIs and OData, and semantic standards such as RDF and OWL.

While these guidelines provide a strong foundation for digital interoperability, they are not sufficient to fully integrate AI technologies into the public administration. Critical areas such as AI ethics, algorithmic transparency, accountability in AI decision-making, and user rights concerning AI-generated outcomes remain unaddressed. There is a lack of specific legal frameworks that mandate transparency in AI systems, require impact assessments, or establish legal accountability for AI-driven decisions. In addition, there are no provisions for the rights of users to understand or contest decisions made by automated systems, which is crucial for maintaining trust and fairness.

When examining the public debate on using artificial intelligence and automated decision-making in Romania, we find that discussions are predominantly technical, focusing mainly on STEM fields. There is little academic discourse on these technologies within administrative law. The few scholarly debates that exist are primarily

concerned with criminal law[82] or the impact of AI on labour law[83], seldom addressing the use of algorithms in interactions between public administration and citizens.

Our research, supported by surveys, highlights a lack of comprehensive digitalisation training for public servants and no specific training on using automated decision-making systems or AI. This absence clearly leads towards risks. According to our survey, some public servants use AI tools like ChatGPT in their personal tasks and even in their professional duties without disclosing this to the public or, often, to their superiors. This hidden use raises concerns about transparency, accountability, and the protection of citizens' rights.

In the judicial sector, there is no automation or use of AI in the decision-making processes of judges or clerks. The only notable instance of automation is the random assignment of cases to judges through an algorithm that considers the complexity of each case. However, there is a risk that judges or court clerks might use AI tools in their work without disclosure or proper training, introducing additional risks, as we observed in the scenario of public servants.

In order to fully harness the benefits of AA and AI, it is imperative to develop additional legal frameworks and guidelines that specifically address these technologies. This includes establishing ethical standards for AI development, implementing strategies for bias mitigation and fairness assessments, and mandating transparency and explainability in AI systems. Conducting thorough impact assessments before deploying AI solutions and enhancing user rights to contest and understand AI decisions are essential to building public trust and ensuring accountability.

The ongoing research involving public information requests to various government bodies underscores the necessity for greater transparency and understanding AI role in public administration. Preliminary findings suggest that citizens may not be aware of the

[82] L. Stănilă, *Inteligența artificială: o provocare pentru dreptul penal*, Revista Română de drept penal al afacerilor 75 (2018).
[83] L. Georgescu, *Revista Romana de Dreptul Muncii*, 6 *Revista Romana de Dreptul Muncii* 35–40 (2019).

extent to which algorithmic processes influence administrative decisions, highlighting the importance of disclosure and education.

In conclusion, while Romania has made significant progress in digitalising its public administration, the legal framework still needs to be adapted adequately to the challenges posed by 'algorithmisation'. The existing standards provide a solid foundation for digital interoperability but must be expanded to encompass the complexities of AI and AA. By developing a comprehensive legal framework and adopting best practices for AI implementation, Romania can ensure that technological advances align with ethical standards, legal obligations, and public expectations. This approach will contribute to more transparent, accountable, and user-centric public services, ultimately strengthening the relationship between the government and its citizens in the administrative digital age.