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Articles

Studia Iuridica Lublinensia vol. 34, 5, 2025
DOI: 10.17951/sil.2025.34.5.269-282

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Algorithm in the Structure of Administrative Decision-Making: A Model of Explainability and Burden of Proof for an Effective Legal Remedy within Discretionary Power in Public Administration

Algorytm w strukturze decyzyjnej administracji publicznej. Model wyjaśnialności oraz ciężaru dowodu na potrzeby skutecznego środka odwoławczego w ramach uznania administracyjnego

ABSTRACT

The introduction of artificial intelligence (AI) systems into public administration decision-making processes poses fundamental challenges to procedural guarantees, particularly the right to an effective legal remedy. This article examines how the use of algorithms, especially those of a "black box" nature, affects the transparency of proceedings and the possibility of judicial review. Based on a dogmatic analysis, rooted in the concept of a rationalized administrative decision, and a comparative case study analysis (Poland, the Netherlands, Estonia, Finland), the author argues that the lack of explainability in AI systems paralyzes the right to appeal. In response to the diagnosed problems, the article proposes a model for a minimum standard of "algorithmic justification", which can be implemented within the legal system. This model aims to restore transparency, reverse the unfavorable burden of proof for the individual, and adapt the judicial cognition model to the new technological reality, taking into account ESG frameworks as a standard of due diligence for public authorities.

Keywords: artificial intelligence; administrative decision; right to appeal; algorithmic justification; judicial review; rationalized administrative decision

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INTRODUCTION

Ongoing digitalization presents one of the greatest challenges for contemporary public administration, which is essentially an organization established to pursue the common good under complex and dynamically changing conditions.[1] The introduction of artificial intelligence (AI) systems into decision-making processes, though promising in terms of efficiency, raises fundamental questions about upholding transparency, verifiability, and procedural guarantees. The use of "black box" algorithms,[2] whose internal logic is inaccessible to oversight, stands in direct contradiction to the model of a rationalized administrative decision,[3] which requires a verifiable and justifiable thought process on the part of the authority. Early practice already shows that this risk is not merely theoretical but can lead to real violations of civil rights on a massive scale.[4]

The main objective of this article is to examine how the use of AI systems in the process of issuing administrative decisions within the Polish legal order affects the right to an effective legal remedy and judicial-administrative review, and to propose a minimum standard for "algorithmic justification". The original contribution of this work lies in synthesizing established concepts in the theory of law, such as the rationalized decision and discretionary space, with an analysis of the latest legal frameworks (GDPR, AI Act[5]) and conclusions from a comparative

[1] A. Szot, *Swoboda decyzyjna w stosowaniu prawa przez administrację publiczną*, Lublin 2016, pp. 27–33; idem, *Stosowanie prawa przez administrację publiczną – między prawem a polityką*, [in:] *Zagadnienia stosowania prawa. Perspektywa teoretyczna i dogmatyczna*, eds. W. Dziedziak, B. Liżewski, Lublin 2015.

[2] A "black box" can be defined as a powerful computational system whose workings are opaque, and whose assessments and decisions have a significant impact on people's lives while not being easily verifiable. See F. Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information*, Cambridge 2015.

[3] The concept of a rationalized administrative decision defines it as an optimal resolution that is not only legal but also purposeful, factually adequate, coherent with the legal order, and developed through a discourse, making it verifiable. For a broader discussion, see A. Szot, *Swoboda decyzyjna…*, pp. 333–346.

[4] For example, see Parliamentary Inquiry into Child Benefit, Ongekend Onrecht (Unprecedented Injustice), 2020, https://www.tweedekamer.nl/sites/default/files/atoms/files/20201217_eindverslag_parlementaire_ondragingscommissie_kinderopvangtoeslag.pdf (access: 29.12.2025).

[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) (OJ L 119/1, 4.5.2016); 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) (OJ L 2024/1689, 12.7.2024). See also S. Wachter, B. Mittelstadt, *A Right to Reasonable Infer-*

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analysis of administrative practices.[6] At the center of the analysis is the research question: How can the effectiveness of a legal remedy against an administrative decision supported by an AI system be ensured within the existing legal order?

The following working hypotheses will be tested:

H1: The lack of transparency and explainability in AI systems limits the real possibility of an appeal (Article 78 of the Polish Constitution,[7] Administrative Procedure Code[8]) and reduces the reviewability of decisions by administrative courts.

H2: It is possible to formulate a minimum standard of algorithmic justification, which can be embedded within the Administrative Procedure Code and supported by the frameworks of the GDPR and the AI Act, that stabilizes the distribution of the burden of proof in cases with an "AI element".

H3: ESG (Environmental, Social, and Governance) / DEIB (Diversity, Equity, Inclusion, and Belonging) frameworks can serve as a normative vector for the due diligence of the administration in the design and use of AI.

The subject scope of the article is limited to administrative law within the Polish and EU legal orders, excluding the private sector. The analysis is legal in nature and intentionally omits the deeply technical aspects of AI system development, focusing instead on their procedural and substantive legal consequences.

Fulfilling the stated research objective required an integrated methodological approach. The primary method is dogmatic analysis, which was used to examine the binding legal frameworks and to situate the issue within the established body of the theory of law. Within this method, the key was to use the concepts of the rationalized administrative decision and discretionary space, which serve as a prism for evaluating new technological phenomena.

A complementary method is the comparative analysis of case studies. This was used to examine the real-world implications of implementing AI systems in the administrations of Poland, the Netherlands, Estonia, and Finland. This analysis was not purely descriptive; its goal was to confront practice with the theoretical model, which allowed for the identification of universal risks (e.g. erosion of the

ences: Re-Thinking Data Protection Law in the Age of Big Data and AI, "Columbia Business Law Review" 2019, no. 2.

[6] Najwyższa Izba Kontroli, *Wykorzystanie przez administrację rządową zaawansowanych narzędzi analitycznych*, 2023, https://www.nik.gov.pl/kontrole/P/23/027 (access: 29.12.2025); Netherlands Algorithm Register, https://algoritmeregister.nl/en (access: 29.12.2025); Estonian Government, *Estonia's National Artificial Intelligence Strategy 2019–2021*, 2019, https://www.kratid.ee/en/news/estonias-national-artificial-intelligence-strategy-2019-2021 (access: 29.12.2025); Ministry of Finance of Finland, *Ethical Principles for the AuroraAI Programme*, 2020, https://vm.fi/en/auroraai-ethical-principles (access: 29.12.2025).

[7] Constitution of the Republic of Poland of 2 April 1997 (Journal of Laws 1997, no. 78, item 483, as amended).

[8] Act of 14 June 1960 – Administrative Procedure Code (consolidated text, Journal of Laws 2025, item 1691, as amended), hereinafter: APC.

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right to appeal) and best practices (e.g. proactive governance frameworks). The final stage is a synthesis of the findings from both methods to construct *de lege ferenda* postulates and recommendations for public authorities and courts.

THEORETICAL AND LEGAL FRAMEWORK

The starting point for analyzing the impact of AI systems on the administrative decision-making process is the model of a rationalized administrative decision. It constitutes a normative ideal of a resolution that is not only fully legal but also optimal in specific circumstances, purposeful, adequate to the facts, and, crucially, developed through discourse and amenable to verification. The process of arriving at such a decision must be transparent and replicable, culminating in a communicatively effective justification that allows for the review of the authority's reasoning. The digitalization of public administration and the implementation of algorithmic components into its structures pose a fundamental challenge to this model, as "black box" systems obscure the traditional, traceable cause-and-effect chain. This necessitates the search for new, institutional control mechanisms, such as Algorithmic Impact Assessments (AIAs), which serve to ensure *ex ante* accountability.[9]

Traditionally, the decision-making process in administration takes place within a discretionary space, which is the factual possibility for an administering entity to choose one of the alternative, legally permissible contents of the partial decisions in that process. This discretionary power, whose sources can be both intended by the legislator (e.g. administrative discretion, general clauses) and independent of the legislator's will (e.g. vagueness of language, the dynamics of social change), is an inherent element of applying the law, yet it does not imply arbitrariness.[10] Its boundaries are defined by binding legal norms, general principles, and the established facts of the case. The introduction of AI into this process does not eliminate discretionary space but rather shifts part of it into the realm of algorithm design and operation. In the absence of appropriate regulations, this radically complicates its control and creates a risk of arbitrary decision-making, a stark example of which is the Dutch childcare benefits scandal (*Toeslagenaffaire*).[11]

The key instrument for rationalizing the choice made within the discretionary space is the justification of the decision. Its role is to transparently present the motives behind the resolution, which enables the verification of its legality and cor-

[9] A. Szot, *Swoboda decyzyjna…*, pp. 24, 341; A.D. Selbst, *An Institutional View of Algorithmic Impact Assessments*, "Harvard Journal of Law & Technology" 2021, vol. 35(1).

[10] A. Szot, *Discretionary Powers of the Public Administration in Law Application Processes and Its Judicial Control*, [in:] *Discretionary Power of Public Administration: Its Scope and Control*, eds. L. Leszczyński, A. Szot, Frankfurt am Main 2017.

[11] Parliamentary Inquiry into Child Benefit, *op. cit*.

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rectness. The introduction of automated decision-making systems, including those based on AI, directly undermines this function. Article 22 GDPR, which guarantees the right not to be subject to decisions based solely on automated processing, has sparked a broad doctrinal debate on the so-called "right to explanation". However, critics point to its illusory nature, arguing that the focus should instead be on "a right to reasonable inferences", that is, on ensuring the ability to scrutinize the quality of input data and the logic underlying the algorithmic decision.[12]

In response to these challenges, the European legislator, in the AI Act, has introduced specific obligations for high-risk AI systems, which include systems used in public administration for granting benefits or assessing creditworthiness. This regulation requires providers and authorities using such systems to create detailed technical documentation, maintain event logs, and ensure appropriate human oversight. These new legal requirements can be seen as an attempt to create a normative framework for "algorithmic justification", intended to fill the transparency gap, thereby restoring the possibility of effective review of AI-assisted decisions.[13] In this way, the EU legal framework directly supports the theoretical postulate of verifiability, which is the foundation of a rationalized administrative decision.

The effectiveness of the right to appeal and judicial review thus depends on the ability to verify the authority's decision-making process. Administrative courts, acting as the "guardian" of the legal order, do not, as a rule, assess the expediency or fairness of a discretionary decision but examine its legality. This review includes checking whether the authority has exceeded the limits of its granted discretion and whether the entire decision-making process has been conducted with respect for procedural and substantive norms. The justification is a key tool here, without which the court is unable to reconstruct the authority's motives and assess whether its action was arbitrary. The introduction of opaque AI systems fundamentally disrupts this relationship, creating an information asymmetry that paralyzes the court's ability to conduct an effective review and shifts a burden of proof onto the individual that is practically impossible to meet without access to the system's logic.[14]

In this context, ESG and DEIB frameworks, although originating in the private sector, can serve as a normative vector for the due diligence of public administration when implementing AI systems. These principles, which emphasize governance, social impact, ethics, and non-discrimination, align with the fundamental duty of the administration to act for the common good. Applying these frameworks *ex ante* – at the design, procurement, and implementation stages of algorithms – allows

[12] S. Wachter, B. Mittelstadt, *op. cit*.

[13] B. Casey, A. Farhangi, R. Vogl, *Rethinking Explainable Machines: The GDPR's "Right to Explanation" Debate and the Rise of Algorithmic Audits in Enterprise*, "Berkeley Technology Law Journal" 2019, vol. 34(1).

[14] *Ibidem*.

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for embedding transparency and accountability mechanisms into AI systems. An example of this line of thinking can be found in international recommendations, such as those from the OECD, which promote user-centric and accountable principles in digital public services, treating them as a standard of good governance.[15]

ADMINISTRATIVE PRACTICE (MINI-CASE STUDIES)

The analysis of the theoretical and legal framework requires a confrontation with administrative practice to verify the proposed theses. The following case studies, evaluated through the prism of the rationalized decision concept and the right to an effective legal remedy, aim to examine how the use of algorithmic tools affects the transparency and reviewability of public authorities' actions. The reference point for this evaluation is the model of a rationalized decision, which must be the result of a verifiable process and have a communicatively effective justification that allows for its review. Any action that obscures or prevents the reconstruction of the authority's line of reasoning undermines this model and weakens the right to a defense.[16]

In Poland, there is a growing use of advanced analytical tools; however, their implementation is not accompanied by the development of adequate managerial and procedural frameworks. A 2023 report by the Supreme Audit Office (Pol. Najwyższa Izba Kontroli) revealed that the audited government administration units lacked comprehensive risk management procedures, full technical documentation of the algorithms used, and mechanisms to verify their operational correctness.[17] Such a situation leads to a factual break in the "chain of actions" leading to a decision, which makes its full rationalization impossible.

The lack of transparency and formal documentation procedures, as indicated in the Supreme Audit Office report, directly impacts the right to an effective legal remedy. If a party, and subsequently an administrative court, does not have access to information about the logic and data on which a decision was based, a review of its legality becomes illusory. The decision-making process becomes an opaque "black box", which contradicts the principle of persuasion (Article 11 APC) and the principle of deepening citizens' trust in state authorities (Article 8 APC), which are the foundation of discourse in the process of applying the law.

The case of the Netherlands serves as a contrasting study and a warning about the consequences of algorithmic opacity. The childcare benefits scandal (*Toe-*

[15] OECD, *OECD Recommendation of the Council on the Governance of Digital Identity*, 2021, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0466 (access: 29.12.2025).

[16] A. Szot, *Judicial Review of Administrative Discretion – Court as a "Guard" and "Navigator"*, Frankfurt am Main 2018, pp. 110–111.

[17] Najwyższa Izba Kontroli, *op. cit*.

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slagenaffaire) revealed the catastrophic effects of using an opaque, self-learning algorithm for risk profiling in the child benefits system. This system, based on undisclosed criteria, automatically and often discriminatorily flagged thousands of families as potential fraudsters, leading to a cascade of erroneous decisions and the financial ruin of many citizens.[18] These decisions were the antithesis of the rationalized decision model, as the process of their creation was entirely hidden, preventing any verification and flagrantly violating the "legitimate interest of citizens".

This scandal dramatically confirmed thesis H1, showing that the lack of explainability is not merely a theoretical problem but leads to the real annihilation of the right to an effective legal remedy. Without insight into the algorithm's logic, citizens and courts were powerless, and a review of the decisions' legality was impossible, which undermined the foundations of trust in the state. In response to this crisis, the Dutch government took steps to radically increase transparency, an example of which is the creation of a public Algorithm Register (*Algoritmeregister*). This register contains information about algorithms used by the administration, including their purpose, the data they use, and a general description of their logic.

The Dutch Algorithm Register can be interpreted as a practical attempt to restore the conditions necessary for making rationalized decisions in the digital era. It is an institutional tool aimed at rebuilding transparency, which is a prerequisite for creating a substantive justification and, consequently, for enabling an effective appeal and real judicial review. This example shows that formulating minimum standards for "algorithmic justification" is not only theoretically possible but is becoming a political and legal necessity in response to documented experiences.

In opposition to the reactive approach are the Baltic states, such as Estonia and Finland, which are implementing AI in the public sector in a proactive and systemic manner. Estonia's KrattAI strategy involves creating a decentralized network of interoperable AI applications intended to make public services more efficient and "invisible" (operating in the background, proactively, and automatically) to the citizen.[19] What is key in this model, however, is that technological development is accompanied from the outset by the construction of legal and ethical frameworks (governance) designed to ensure transparency and control over the operation of the individual *kratts*.[20] Similarly, Finland's AuroraAI program, aimed at providing proactive public services based on "life events", was founded on clearly defined ethical principles that emphasize a human-centric approach, transparency, and accountability.[21]

The Estonian and Finnish models can be seen as a practical attempt to create systems that are "rationalized" from the design stage. The deliberate establishment

[18] Parliamentary Inquiry into Child Benefit, *op. cit*.
[19] Estonian Government, *op. cit*.
[20] *Ibidem*.
[21] Ministry of Finance of Finland, *op. cit*.

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of managerial and ethical frameworks *ex ante* is an expression of the administration's due diligence, which aligns with its duty to act for the common good. By embedding principles of transparency and accountability into the architecture of the systems, these countries are trying to prevent the pathologies that emerged in the Netherlands and to ensure that technological innovations do not undermine fundamental civil rights. These proactive strategies, in contrast to the Polish practice of implementing tools on an *ad hoc* basis, show that the development of AI in administration can and should go hand in hand with strengthening procedural guarantees.

The conclusions from the comparative analysis are clear. The Polish case reveals the risk associated with a lack of a systemic approach, leading to the factual uncontrollability of analytical tools.[22] The Dutch experience serves as a warning against the destructive effects of opaque algorithms, while also pointing to transparency as a key remedial element.[23] In turn, Estonia and Finland provide positive models, proving that the proactive embedding of ethical and managerial frameworks is the most effective method of reconciling innovation with the rule of law.[24] All these cases taken together confirm the necessity of formulating and implementing a minimum standard of "algorithmic justification", without which the right to an effective legal remedy in cases with an AI component becomes a fiction.

MINIMUM MODEL: JUSTIFICATION AND CONTROL

The conclusions drawn from the theoretical analysis and case studies indicate an urgent need to develop a minimum procedural standard that will restore the transparency and reviewability of AI-assisted administrative decisions. The foundation of the proposed model is the introduction of a new, standardized document into the administrative case file – the "Algorithm Card". This concept, inspired by the technologically proven "Model Cards for Model Reporting", aims to document the key features of an algorithmic system in a concise and understandable manner for both the individual and the reviewing bodies. Such a card should contain at least: the purpose and scope of the algorithm's application, a description of the input data used, a general outline of the decision-making logic, the system version number, and basic metrics of its quality and performance (e.g. accuracy, error rate).[25]

The introduction of the "Algorithm Card" into the Polish legal order does not require revolutionary legislative changes but can be embedded within the existing

[22] Najwyższa Izba Kontroli, *op. cit*.

[23] Netherlands Algorithm Register, *op. cit.*; Parliamentary Inquiry into Child Benefit, *op. cit*.

[24] Estonian Government, *op. cit.*; Ministry of Finance of Finland, *op. cit*.

[25] M. Mitchell, S. Wu, N. Gessner, A. Zaldivar, P. Barnes, A. Vasserman, B. Hutchinson, E. Spitzer, I.D. Raji, T. Gebru, *Model Cards for Model Reporting*, [in:] *Proceedings of the Conference on Fairness, Accountability, and Transparency*, New York 2019.

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framework of the APC. This document could be treated as an essential part of the evidentiary material, necessary for the authority to comply with the principle of objective truth (Article 7 APC) and the obligation to exhaustively collect and consider all evidence (Article 77 § 1 APC). If the output of an algorithm constitutes a factual premise for the decision, its specification in the form of an "Algorithm Card" is necessary for this evidence to be subject to free assessment, as referred to in Article 80 APC. Without this knowledge, neither the authority nor the individual can verify the correctness and reliability of this crucial part of the factual basis.

Such an "Algorithm Card" could be a *sine qua non* for the decision's justification to be considered "properly" prepared (Article 107 § 3 APC) and for fulfilling the principle of persuasion (Article 11 APC). The justification must reflect the motives that guided the authority, and in the case of an AI-assisted decision, the algorithm's logic is one of the key motives. Making it available in a standardized form restores the justification's ability to perform its primary function – to be a tool for discourse and the basis for effective review, which is the essence of a rationalized decision in the application of law.

Another tool could be a "Transparency and Explainability Checklist", created based on the "Algorithm Card", which operationalizes the transparency requirement for the various participants in the proceedings. Such a list, inspired by the guidelines of supervisory authorities and technical standards,[26] should define the minimum scope of information to be provided *ex ante* (before the decision is issued) and *ex post* (in the content of the justification and during the appeal stage). For the individual and their legal representative, the key information is that which allows them to understand the logic of the decision and to formulate objections (e.g. which factors had the greatest impact on the decision). For the administrative court, access to broader data is necessary, including quality metrics and information on potential biases in the model, which is essential to assess whether the authority, in using the AI tool, exercised due diligence and did not overstep the boundaries of its discretionary space.

The introduction of these tools is of fundamental importance for the burden and standard of proof in cases with an AI component. In the current state of opacity, the burden of proof is implicitly and unfairly shifted to the individual, who must demonstrate the decision's defectiveness without having access to key information about the process by which it was made.[27] This situation contradicts the principle of objective truth, which imposes on the authority the obligation to comprehensively

[26] UK Information Commissioner's Office (ICO), *Guidance on AI and Data Protection*, https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/artificial-intelligence/guidance-on-ai-and-data-protection (access: 29.12.2025); National Institute of Standards and Technology, *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*, January 2023.

[27] B. Casey, A. Farhangi, R. Vogl, *op. cit*.

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clarify the case and prove the facts. The lack of algorithmic transparency prevents the authority from fulfilling this duty, while simultaneously paralyzing the right to an effective legal remedy.[28]

The proposed model reverses this unfavorable situation for the individual by restoring and strengthening the burden of proof that rests on the authority. It is the public entity that, upon deciding to use an algorithm, must be able to demonstrate – by means of the "Algorithm Card" and the "Transparency and Explainability Checklist" – that its application was legal, adequate to the factual circumstances, and that the system itself operates in a correct, reliable, and non-discriminatory manner. The level of detail in the provided documentation simultaneously sets the standard of proof that the authority must meet. The more automated and complex the process, the higher the standard of proof and the more complete the justification must be for the decision to be considered rationalized and subject to review.

The proposed transparency model also necessitates an evolution of the cognition model of administrative courts. The court's role is not to independently verify the algorithm's code but to review the legality and rationality of its application by the authority in a specific case. With the "Algorithm Card" and materials from the "Transparency and Explainability Checklist" at its disposal, the court can and should assess whether the authority's decision to use a given tool was justified, whether the input data was correct and complete, and whether the authority logically and lawfully connected the system's output with the final resolution, especially within the framework of administrative discretion. The judicial review thus shifts from an impossible technical analysis to a possible and necessary assessment of the procedural and substantive correctness of using technology as one of the tools in the process of applying the law.

The entire proposed model – from the *ex ante* requirement to create an "Algorithm Card", through the transparency checklist and the restoration of the proper burden of proof, to the *ex post* possibility of a judicial audit – constitutes a coherent system for restoring procedural guarantees. It is also a practical implementation of the postulates arising from the ESG/DEIB frameworks, which should be treated as a standard of due diligence in a digitalizing administration. An authority that implements AI systems without ensuring their transparency and verifiability not only violates procedural regulations but also fails in its fundamental duty to act in a manner that inspires trust and serves the common good, which is the essence of the concept of a rationalized administrative decision.

[28] M. Oswald, *The Case for a 'Right to Effective Challenge' to Automated Decisions*, "Journal of the Royal Society of New Zealand" 2021.

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DISCUSSION AND *DE LEGE FERENDA* POSTULATES

The theoretical and practical analysis leads to the conclusion that effectively guaranteeing the right to appeal in the digital era requires the adaptation of existing legal and procedural frameworks. The following postulates constitute a proposal for a coherent approach aimed at implementing the principles of explainability and accountability in AI-assisted administrative application of law. The overarching goal is to restore the conditions for making rationalized decisions and to ensure real oversight of the administration's actions.

A *de lege ferenda* postulate is to amend the Administrative Procedure Code by introducing a legal norm that would directly address decisions made with the significant involvement of AI systems. It is proposed to add a provision that would impose an obligation on the authority to include an "Algorithm Card" in the case file whenever a decision is based on the output of a system classified as high-risk within the meaning of the AI Act. Such a legislative change would formally anchor the duty of transparency, strengthening the implementation of fundamental procedural principles: objective truth (Article 7 APC), active participation of the party (Article 10 APC), and persuasion (Article 11 APC) in the new technological context.

Regardless of changes to the Administrative Procedure Code, key recommendations are for the administrative authorities themselves, which, as part of good governance practices, should implement internal procedures for AI oversight. Authorities, in fulfilling their duty to act for the common good, should adopt the role of a "learning organization" that approaches the implementation of new technologies with due diligence. It is recommended to conduct mandatory, internal AIAs before deploying any new system, modeled on proven methodologies. Furthermore, authorities should create and maintain internal registers of the algorithms they use, similar to the Dutch model, and apply recognized risk management frameworks, such as the one proposed by the National Institute of Standards and Technology,[29] which would be a practical expression of implementing ESG standards in the public sector.[30]

Equally important are recommendations for administrative courts, which in the new technological reality must redefine their role as the system's "guardian" and "navigator". Firstly, courts should proactively and consistently enforce the duty of transparency on public authorities. The filing of an appeal against a decision where the case file lacks an "Algorithm Card" or other adequate documentation should be treated as a significant procedural flaw that prevents the court from conducting a substantive review of its legality. Such a judicial practice would, over time, com-

[29] National Institute of Standards and Technology, *op. cit*.
[30] OECD, *op. cit*.

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pel administrative authorities to implement documentation standards, even in the absence of immediate changes to the Administrative Procedure Code.

In summary, the presented postulates for the legislator, public authorities, and courts create a coherent, three-tiered system for adapting administrative law to the challenges of AI. Changes to the Administrative Procedure Code, internal procedures of authorities (best practices), and a proactive line of judicial decisions (the practice of applying the law) jointly create a mechanism that realizes the article's research theses. They introduce a minimum standard of algorithmic justification (H2), based on the principles of due diligence (H3), thereby restoring the real possibility of reviewing decisions and guaranteeing the effectiveness of the right to a legal remedy (H1).

CONCLUSIONS

The theoretical, legal, and comparative analysis allows for the formulation of the following final conclusions.

Opaque AI systems fundamentally violate the right to an effective legal remedy. The use of "black box" algorithms in the decision-making process is incompatible with the model of a rationalized administrative decision, as it prevents the reconstruction and verification of the authority's reasoning. This leads to an erosion of procedural guarantees and a paralysis of judicial-administrative review, which in extreme cases, as shown by the *Toeslagenaffaire*, can have catastrophic social consequences.

It is possible to formulate and implement a minimum standard of "algorithmic justification". The model proposed in this article, based on the "Algorithm Card" inspired by proven standards, does not require a revolution, but rather an evolution of the existing framework of the Administrative Procedure Code. Its purpose is to restore transparency and reverse the unfavorable burden of proof for the individual, which is consistent with the principle of objective truth and the authority's obligation to comprehensively clarify the case.

ESG/DEIB standards should be treated as a benchmark for the administration's due diligence. The proactive approach to AI governance, visible in Estonia and Finland, shows that embedding principles of ethics, non-discrimination, and transparency at the system design stage is the most effective way to reconcile innovation with the duty to act for the common good. These frameworks provide a practical tool for implementing due diligence by public entities.

A coherent adaptation is necessary on three levels: legislative, organizational, and judicial. The effective protection of individual rights requires a synergy of actions: clarification of the Administrative Procedure Code by the legislator, implementation of internal management procedures by public authorities, and the development by courts of a new, active model of cognition that will compel the administration to be transparent.

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The ultimate goal is to protect the discursive nature of the application of law. The challenge posed by AI is not purely technical but concerns the foundations of the rule of law. Ensuring the explainability and reviewability of algorithmic decisions is a prerequisite for maintaining citizens' trust in a digitalizing administration and preserving its legitimacy.

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ABSTRAKT

Wprowadzenie systemów sztucznej inteligencji (AI) do procesów decyzyjnych administracji publicznej generuje fundamentalne wyzwania dla gwarancji proceduralnych, w szczególności dla prawa do skutecznego środka odwoławczego. W artykule zbadano, w jaki sposób wykorzystanie algorytmów, zwłaszcza tych o charakterze „czarnych skrzynek", wpływa na transparentność postępowań i możliwość kontroli sądowoadministracyjnej. W oparciu o analizę dogmatyczną, osadzoną w koncepcji zracjonalizowanej decyzji administracyjnej, oraz komparatystyczną analizę studiów przypadku (Polska, Niderlandy, Estonia, Finlandia), postawiono tezę, że brak wyjaśnialności systemów AI paraliżuje prawo do odwołania. W odpowiedzi na zdiagnozowane problemy zaproponowano model minimalnego standardu „uzasadnienia algorytmicznego", który można zaimplementować w ramach systemu prawnego. Model ten ma na celu przywrócenie transparentności, odwrócenie niekorzystnego dla strony ciężaru dowodu oraz adaptację wzorca kognicji sądowej do nowej rzeczywistości technologicznej, biorąc pod uwagę ramy ESG jako standard należytej staranności dla organów publicznych.

Słowa kluczowe: sztuczna inteligencja; decyzja administracyjna; prawo do odwołania; uzasadnienie algorytmiczne; kontrola sądowoadministracyjna; zracjonalizowana decyzja administracyjna