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Legal Recognition of Electronic Personhood and Administrative Liability for its Activity

Dr. DJEDIDI Nahla*

*Member of the Public Policy and Public Service Improvement Laboratory,Faculty of Law and Political Science, University of El Oued (Algeria)

Email: djedidi-nahla@univ-eloued.dz

Dr. NOUGTI Abdelaziz †

† Faculty of Law and Political Science, University of El Oued (Algeria)

Email: Nougti-abdelaziz@univ-eloued.dz

Dr. DERRADJI Mekki‡

‡Head of the Public Policy and Public Service Improvement Laboratory, Faculty of Law and Political Science, University of El Oued (Algeria)

Email: derradji-mekki@univ-eloued.dz

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Abstract

This article examines the dimensions of recognizing electronic personhood and the degree of its autonomy; while highlighting the jurisprudential discussions regarding the establishment of administrative liability for damages it may cause to individuals. A descriptive methodology was adopted to answer this question: To what extent has the use of Artificial Intelligence expanded within public administration, and how does this relate to its potential to possess legal personality, autonomy in decision-making, and the capacity to bear liability? The study confirmed the penetration of AI systems into the activity of public administration and asserts that these electronic entities impose a new legal reality necessitating regulation commensurate with their level of autonomy. The study proposes the application of the presumed fault doctrine in the current context to hold the public body liable for damages caused to third parties and to compensate the injured party through a system of mandatory insurance for smart systems.

Keywords: Administrative Law, Technological Development, Legal Capacity, Administrative Liability, Robot Autonomy.

Introduction

The world is witnessing a major revolution in the field of technology and digital transformation, which has led to the emergence of new technologies, including Artificial Intelligence (AI) technologies, which have become the foundation of the information revolution and are now used in several domains. In light of the profound digital transformations, particularly in the field of electronic administration, the concept of electronic personality has emerged as a new actor seeking to position itself within the administrative landscape by performing autonomous tasks, participating in decision-making, and providing public services efficiently.[1]

Artificial Intelligence is considered a branch of computer science and one of the fundamental pillars upon which the technology industry currently rests. The term Artificial Intelligence first appeared in 1950, when the founder of computer science and AI software, Alan Turing, in an article discussing the consciousness of machines titled "Computing Machinery and Intelligence». Due to its novelty and continuous development, computer scientists have differed in establishing a unified definition for it.[2]

The computer scientist John McCarthy defined it in 1956 as "the science and engineering of making intelligent machines".[3] This definition is considered one of the earliest formal definitions of AI, through which the scholar focused on the applied aspect of AI—"making intelligent machines"—reflecting the ambition of the early period to develop systems that emulate human intelligence.

As for the computer scientist Alan Turing, he defined it as: "The capacity to act as if a human were acting, by attempting to deceive the interrogator and appearing as if a human were providing the answers to the questions posed by the interrogator». [4] This definition focuses on external behaviour rather than the internal working method of the system, and it distinguishes between intelligent and non-intelligent mechanisms through their ability to deceive a human; meaning, if the interrogator cannot distinguish between the human and the machine, the machine is intelligent.

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[1] Zuiderwijk, A., Janssen, M., & Dwivedi, Y. K. *'Artificial intelligence in government services: A systematic literature review'*. (2019). Government Information Quarterly, 36(2), p 218–225.

[2] A. M. TURING,' *Computing Machinery and Intelligence*,' (1950). Mind, Volume LIX, Issue 236, October, P. 433–460,

[3] McCarthy, J., Minsky, M., Rochester, N., & Shannon, CA Proposal for the Dartmouth Summer Research Project on Artificial Intelligence. (1955). Retrieved from http://raysolomonoff.com/dartmouth/boxa/dart564props.pdf

[4] A. M. TURING, ibid.

The High-Level Expert Group established by the European Commission proposed a definition of AI as: "Software systems designed by humans that act in the physical or digital dimension by perceiving their environment through data collection, interpreting collected data, whether structured or unstructured, then processing and reflecting on the information extracted from this data, and subsequently making decisions about the best actions necessary to achieve the specified goal. AI systems can rely on symbolic rules or learn, and their behaviour can be modified based on the analysis of the impact of their previous actions on the environment" [5].

This definition is considered one of the most comprehensive and modern, reflecting a precise regulatory vision for AI systems. It focuses on the human origin of AI systems, specifies their material and digital dimensions, and refers to their ability to interact with the external environment and emulate human perception via cameras, sensors, or a digital interface to collect data and analyse it logically to make appropriate decisions, relying on pre-defined logical rules or self-learning, with the capacity to modify behaviour based on the effect.

It can be said that AI consists of complex automated behaviours similar to human behaviour, whose cognitive capabilities vary and which take on a material and a digital dimension. They are formed based on multiple scientific knowledge with the aim of automating tasks performed by humans in record time and with high accuracy that equals or surpasses human intelligence. Despite the difference in their definition and the inability of legal scholarship to keep pace with their continuous development, public administration is witnessing a noticeable expansion in the use of AI systems, which raises profound legal issues.

The accelerating developments in the field of AI impose new legal challenges, especially with the emergence of systems capable of making autonomous decisions. This calls for a reconsideration of the concepts of legal liability, electronic personhood, and its digital security. We will attempt to explore the legal framework through which the electronic person can be recognized and partial or full administrative liability can be established for the damages it causes to humans.

Study Importance

The importance of this study lies in its addressing one of the most significant contemporary legal topics that raises practical and scientific problems—Artificial Intelligence—and the

[5] The European Commission's High-Level Expert Group on Artificial Intelligence, Definition of AI: Main Capabilities and Disciplines, Brussels, 18/12/2018, p5.

extent to which current legislation is capable of surrounding it with the necessary legal regulation and protection.

Study Problem

The study discusses the penetration of AI systems into the activity of public administration and the legal issues that accompany the recognition of electronic personhood for these systems, the extent of their autonomy in decision-making from the manufacturing entity, and the legal liability resulting from their administrative activity. This is framed by the following central problem: To what extent has the use of Artificial Intelligence expanded within public administration, and how does this relate to its potential to possess legal personality, autonomy in decision-making, and the capacity to bear liability?

Study Objectives

The study aims to achieve several goals, the most important of which are:

- Clarifying the concept of granting AI systems electronic personhood.
- Discussing the legal implications of granting electronic personhood to AI systems.

Study Methodology

We relied on the descriptive methodology, which aims to study and objectively describe the phenomenon in order to reach conclusions that contribute to answering the posed problem. We also used the analytical methodology to discuss and analyse the status of AI systems in public administration, and to review the different jurisprudential opinions related to the recognition of electronic personhood and administrative liability for the errors of these systems.

Study Division

The study is divided into two sections: The first addresses the recognition of the existence and autonomy of the electronic person, and the second involves establishing administrative liability for the electronic person:

Section I: Recognition of the Existence and Autonomy of the Electronic Person

Legal personhood is the status granted by law to an entity, representing a specific social value, which enables it to acquire the capacity to possess rights and bear obligations, and grants it the right to litigate in case its rights are infringed upon or its obligations are breached. It also endows it with a separate financial estate.[6]

[6] Al-Harbi, H. ' *Legal Personality and its Susceptibility to Development*.' (2024). Zaytoonah University International Journal for Scientific Publishing, (28). (Halab, Syria), p 180-200.

By referring to the general rules of law, legislation only recognizes the existence of two legal persons: the natural person and the juridical person (or corporate body). The jurisprudential debate remains ongoing regarding the granting of legal personhood to AI and its legal classification. It is not a natural person due to its lack of human attributes, nor is it a juridical person, unlike the latter, due to its tangible material nature.

The scholar Lawrence B. Solum is considered the first to research the issue of conferring legal personhood upon AI systems in 1992 in his study, "Legal Personhood for Artificial Intelligences. [7] This study discusses the possibility of considering AI a legally responsible entity, such as being a legal guardian or possessing constitutional rights. It addresses the idea of legal intent in AI and whether smart systems are capable of making decisions that carry an "intentional" character for which they can be held liable.

The recognition of legal personhood for AI systems would allow them to interact with the legal system in a more autonomous manner. Three main viewpoints have crystallized regarding the electronic person's enjoyment of legal personhood: the denialist approach adopted the idea of "non-qualification," treating AI as mere objects within legal frameworks. Another approach advocated for the "full qualification" of the electronic person, meaning the enjoyment of full legal personhood. A third approach advocated for the idea of "limited qualification," which recognizes some legal statuses.

First: Denial of Legal Personhood for Artificial Intelligence

Proponents of this approach advocate for the necessity of not granting legal personhood to AI because it lacks the fundamental elements of legal personhood. Even the most advanced robots do not possess consciousness, perception, or moral responsibility, nor the capacity for learning, development, and consequently, autonomy in producing legal effects. Therefore, they cannot be treated as persons or recognized as entities with rights and legal obligations.[8] They argue that AI derives its capacity for thought and learning from its connection to its legitimate owner,

[7] Lawrence B. Solum, '*Legal Personhood for Artificial Intelligences*,' (1992). 70 N.C. L. Rev. p.1231 Available at: https://scholarship.law.unc.edu/nclr/vol70/iss4/4

[8] Никитин, А. А. '*On the Discussion of the Legal Personality of Artificial Intelligence*.'(2024). P. 178–190. https://doi.org/10.29039/conferencearticle_66c47270f0a4b9.48822837

Саттаров, В. Д. 'Legal Personality of Artificial Intelligence : Theoretical and Legal Problems.' (2023). *Ius Publicum et Privatum*.

the human, [9]and that granting legal personhood to AI contributes to the creation of a parallel society to the human society, which poses a danger to humanity.

A segment of legal scholarship added that recognizing legal personhood for robots would be of no benefit unless they possess a financial estate and are covered by liability insurance, and are legally represented by a natural person, such as the manufacturer, owner, or user. If this is the case, why should this natural person not be the one responsible, instead of circumventing the issue and establishing the robot's liability.[10]

In an attempt to halt the progress of recognizing electronic personhood, 285 legal and AI experts from 14 European countries sent a strongly worded letter of objection to the European Commission to stop the discussion about recognizing AI systems as legal entities. These experts considered this concept an attempt by manufacturers to avoid liability for their products and demanded the assurance of a safe and ethical way to develop AI and the establishment of a legal framework that focuses on protecting humans, not on granting robots legal rights or responsibilities.[11]

Second: Recognition of Legal Personhood for Artificial Intelligence

Proponents of this approach argue for the necessity of recognizing electronic personhood, considering them existing legal entities. They argue that granting legal personhood to AI can enhance accountability, support innovation, and protect the interests of AI systems.[12] This is especially true since accidents involving the electronic person actually occur, such as the case of Kenji Urada, who died due to a robot in Japan in 1981[13], and medical errors resulting from the activity of smart surgeons. Therefore, to protect society from the damages that robots can cause, they must be endowed with legal personhood to hold them liable for their activity. Furthermore, completing the elements of compensation to redress the damage necessitates the

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[9] Zhornokui, Yu. M. *'Comparative Analysis of Legal Personality of a Legal Entity and Artificial Intelligence within the Impact on Corporate Governance'*. . (2024). *Civìlìstična Platforma.*, *3*(3), p.98–112. https://doi.org/10.69724/2786-8834-2024-3-3-98-112

[10] Mahrous, O. A. *'Administrative Liability Towards Artificial Intelligence Applications*.' (2024). The Legal Journal, 22(1), p.107.

[11] (Open letter to the European Commission Artificial Intelligence Robotics, 26/08/2024, 09:26, http://www,robotics-openletter,eu)

[12] Al Dajeh, B. M. '*Recognition of the Legal Personality of Artificial Intelligence*.' (2024). International Journal of Religion.

[13] Robert Whymant, Robot Kills Factory Worker, 07/07/2025, 10:15, https://www.theguardian.com/theguardian/2014/dec/09/robot-kills-factory-worker

recognition of the electronic person, as insurance companies rely on the element of damage to establish compensation without waiting for proof of fault.

Supporters of recognizing electronic personhood rely on the idea that "all humans are persons, but not all persons are human." One author expressed that "the robot is neither human nor animal, but a new kind, and the new kind means a new legal category». [14] Moreover, the concept of a person does not refer only to natural persons, as granting legal personhood to juridical persons is evidence that the concept of personhood is abstract. This is because the basis of legal personhood is not perception, will, or human personality, but rather social values.

Some countries have moved towards recognizing legal personhood for AI by granting rights to AI. The Committee on Legal Affairs of the European Parliament played a pioneering role in formulating the concept of the "electronic person," envisioning a future legal status for strong AI. It presented proposals for the gradual recognition of the electronic person, especially in cases of advanced AI that exceeds the limits of traditional programming.[15] South Korea also borrowed the concept of the "electronic person" from the European Union in its "Basic Robot Act" of 2024, which defines robot ethics and the fundamental principles of liability. Through this, the South Korean government seeks to achieve a balance between innovation and the legal framework, ensuring that legislation does not impede technological progress while guaranteeing the protection of society from potential risks.[16]

In the state of Nevada in the United States of America, robots were registered in a special register created for this purpose, implicitly granting them some powers of a juridical person. They were also granted a financial estate with mandatory insurance, allowing them to respond to claims related to compensation for damages they cause to others.[17]

Third: Limited Recognition of Legal Personhood for Artificial Intelligence

The approach of limited recognition seeks to balance the traditional legal system with developments in the field of AI by recognizing its advanced capabilities while establishing clear frameworks for liability and accountability.

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[14] Dhalam, A. K. M. '*Recognition of the Legal Personality of Artificial Intelligence: Necessity or Exaggeration?'* (2025). Journal of Legal and Economic Research, 8(1), p 214.

[15] Talimonchik, V. P. *'The Prospects for the Recognition of the International Legal Personality of Artificial Intelligence'*. (2021). Laws, *10*(4), p 85.

[16] Talimonchik, V. P. ibid.

[17] Ben Taria, M., & Shahid, K. (2018). '*Damages Caused by Robots and Artificial Intelligence Technologies: A New Challenge to the Current Civil Liability Law*'. Annales de l'Université d'Alger 1, (7).

This perspective acknowledges that AI can possess a form of legal personhood, distinguishing it from being a mere object, but it does not grant it full personhood. That is, it represents a middle ground between full recognition and no recognition at all. [18]This is because the deep learning capabilities of AI allow it to transition from the simple "state of an object" to becoming a "smart agent." This reinforces the idea of granting AI functional or technical capacity, with the condition of mandatory insurance and restricting its use, as a first stage, to technically qualified companies capable of bearing the financial and technical consequences that may result from AI activity.[19]

In this context, Dr. Humam Al Qussi, in his 2019 study "The Theory of Virtual Personhood for the Robot," argues that the more accurate designation is virtual personhood instead of electronic personhood, because virtual personhood represents a legal fiction and is, in his opinion, more precise than electronic personhood, which carries a technical meaning. [20]He argues that the purpose of discussing virtual personhood is to redress damage, and therefore, obtaining compensation does not necessarily require establishing liability or granting personhood to AI, as long as the performance of insurance companies covers the compensation. In his foundational study, he concluded that recognition of virtual personhood should be avoided unless accompanied by legislative restrictions that prohibit the development of the robot to a level exceeding that of a "non-discerning person" or the "non-discerning moral status" which enjoys rights and has a separate financial estate but is linked to a human representative who bears liability for the damages caused by the robot, with the possibility of recourse against the robot's financial estate. This is analogous to a minor who possesses legal personhood and a financial estate but does not have the right to manage their funds or the right to litigate.

However, Dr. Al Qussi's study relates to the civil liability of AI, which can be discussed by applying the rules of civil law to the robot's capacity—whether it can be considered equivalent to a non-discerning minor, a discerning minor, or an adult. The matter is entirely different in public law, as the administrative juridical person acquires full capacity upon legal recognition,

[18] Wang, C., & Wang, J. *'The Construction of Artificial Intelligence Private Legal Personality System'*(2023). *Юридическая Наука в Китае и России*.
[19] Al-Duhayyat, I.A *'Towards Regulating a Law for Artificial Intelligence in our Lives: The Problem of the Relationship between Humans and Machines'*. (2019). Idjtihad Review for Legal and Economic Studies, Tamanrasset University, 8 (5), p 20, 21.
[20] Al Qussi, H. *'The Theory of Virtual Personhood for the Robot according to the Human Approach'*. (2019). Jil Journal of In-Depth Legal Research, (35), p 11.

which entails compensatory administrative liability. What can be discussed in this framework is: Does the human representative bear liability for the damages resulting from AI activity, or the robot itself, or the human representative with the possibility of recourse against the robot's financial estate?

Section II: Establishing Administrative Liability for the Electronic Person's Activity

The existence of entities that are neither natural nor juridical persons, which perform a number of actions and tasks that can commit errors causing damage to third parties, raises the issue of determining their liability and the legal basis for claiming compensation.

One of the most notable real-world examples of incidents involving smart vehicles occurred in early 2016, when a self-driving car produced by the American company Tesla was involved in a fatal crash. The driver died after the car collided with a highway barrier in California while operating entirely under “autopilot.” Similarly, a 49-year-old woman was killed while crossing the street when she was struck during a field test of a self-driving vehicle operated by Uber in a city in Arizona, USA. [21]These incidents illustrate that liability for errors made by intelligent machines is a complex issue, intertwining legal and ethical dimensions. As artificial intelligence systems increasingly operate autonomously, assigning responsibility becomes even more challenging.

While some countries have implicitly recognized a legal status for robots—for example, Saudi Arabia, which granted citizenship to a robot named Sophia, and Japan, which issued a residence permit to the robot Shibuya Mirai—this raises the possibility of treating such robots as citizens. Consequently, they could potentially be held accountable in a manner similar to a human citizen, possessing legal capacities such as the ability to assume obligations, engage in contracts, participate in litigation, and hold financial assets.

The recognition of electronic personhood for the robot will deepen the problem of determining the legally responsible party for its actions, especially since its capacity for learning and self-management is still linked to the personality of its owner and users. Does the manufacturing company bear liability for the machine's errors, or the consumer, or the machine itself?[22]

If the machine's liability for its actions is recognized, this might encourage individuals to use robots in violation of the law without facing punishment. Conversely, holding the

[21] Al-Duhayyat, I.A, Ibid, p19.

[22] Al Khatib, M. I. *Civil Liability and Artificial Intelligence. The Possibility of Accountability: An In-Depth Analytical Study of the Rules of Civil Liability in French Civil Law.* (2020). Journal of Kuwait International Law School, 8(29).

user/consumer fully liable, and considering them the owner of the object, similar to the ownership of pets, could lead to significant losses for consumers, especially with the possibility of exposure to risks beyond the user's control, such as exposure to viruses or errors in manufacturing by the producing company, or programming errors by developers. [23]

Therefore, the European legislator sought to establish a legal framework that focuses on balanced liability, serving the ultimate interest of humanity.[24] From this standpoint, the European Parliament adopted the human representative theory, which holds the human—whether the manufacturer, operator, or user—liable for damages the robot may cause to third parties. This theory is considered a natural evolution of the system of the guardian of things, after the machine became capable of applying human logic and transitioning from being described as an object to being described as an electronic representative.[25] However, it did not stop there but opened the door for the future possibility of holding the robot fully liable when it can learn, think, and make decisions autonomously from humans.[26]

For its part, the French Conseil d'État (Council of State), in its annual study of 2014, affirmed the acceptance of automated administrative decisions, provided that human intervention is effective in their issuance, not merely procedural. This is considered a limited recognition of legal personhood for AI.

The Administrative Court in Turin, Italy, ruled for compensation to a plaintiff who was harmed by an error in the electronic system that automatically processed a decision denying him a license to open a pharmacy after his application was rejected twice. Knowing that Italian law stipulates denial of the license if the application is rejected twice consecutively, the plaintiff proved that the electronic system confused the rejection of the license application for a formal reason with the rejection for a substantive reason.[27]

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[23] Jalahussein, A., Mohammad, A., Fadelmansour, A., & Jalal, B. K. *Legal Liability Arising from Artificial Intelligence Activities.* (2024). *Journal of Ecohumanism*, *3*(6), p338–346.

[24] Sumantri, V. K. *Legal Responsibility on Errors of the Artificial Intelligence-based Robots*. (2019). Journal of Law and Human Rights *6*(2), p 331.

[25] Al Qussi, H. *The Problem of the Person Responsible for Operating the Robot (The Impact of the Theory of the Humanitarian Representative on the Feasibility of the Law in the Future*, (2018) Jil Journal of Legal Depth Research, 25, p 77.

[26] Al-Droubi, A. M. M., & Al-Harithi, A. A. *'The Dialectic of the Legal Personality of Artificial Intelligence'*.(2025). Journal of Law and Political Science, 12(1), p 8.

[27] Abdel Latif, M. M. Liability for Artificial Intelligence between Private Law and Public Law. In Legal and Economic Aspects of Artificial Intelligence and Information Technology. (Faculty of Law, Mansoura University, 2020).

If the human remains, to this day, the primary party responsible for the risks of using AI, considering them the sole beneficiary of its administrative services, how can the established rules of administrative liability be applied to obtain compensation for damages caused by AI to humans? In other words, what is the basis for establishing liability?

For decades, jurisprudence has settled on establishing administrative liability on the basis of fault (known as tortious liability). Given its insufficiency to cover all risks, the French administrative judge established alongside it liability without fault (strict liability), under which the administration bears liability for damages caused by its decisions (First) and liability for damages resulting from its activity (Second).

First: Administrative Liability for Decisions Issued by Artificial Intelligence

Liability based on fault relies on three essential elements: fault, damage, and the causal link. Given the technical nature of AI devices, the injured party may find it extremely difficult to prove the fault and its type—whether it is personal fault or public service fault (faute de service)—and the nature of the responsible person: is it the user (the public body), the manufacturer, the administrative head of the robot, or the smart robot?

In the case where the person responsible for designing and developing the algorithmic processing system is a public employee, and the fault is characterized by gross negligence (e.g., the smart program includes a discriminatory system or performs secret data transfer), it is classified as a personal fault. If the fault is simple, it is classified as a public service fault.[28]

If the person responsible for designing and developing the algorithmic processing system is an external contractor, the fault is classified as a contractual or tortious fault against the administration, depending on the case. For example, the contractor may breach their contractual obligations by violating the requirements specified in the terms of reference, or by failing to maintain or improve the system, or if the program contains hidden defects. The contractor may also bear liability in relation to the injured party if the fault takes the form of fraud or gross negligence, such as planting harmful viruses in the program, or generally breaching the general obligation not to harm others, according to the rules of producer liability.[29]

Another segment of legal scholarship argues that relying on the established fault doctrine to claim compensation cannot be applied to errors resulting from algorithmic decisions. This is

[28] Al Abdullah, H. Liability for Damages Caused by Artificial Intelligence (Master's thesis). (Faculty of Law, Qatar University, 2025). , p 83.
[29] Al Abdullah, H, Ibid, p 88.

because the party harmed by the decision cannot precisely identify the fault and the responsible party, as determining the fault in the issuance of automatically processed decisions is a technical and precise matter that they will often be unable to prove. This is especially true in the case of the unlawfulness of the criteria used by AI to examine and analyze information.[30] Iudicial review does not stop at the internal and external legality of these decisions but extends to a prior stage: the data input stage that leads to the issuance of the decisions.

Therefore, it may be more appropriate to rely on the presumed fault doctrine, which is based on the presumption of fault on the part of the administration merely upon the occurrence of damage, without the need for the injured party to prove the fault. The French Conseil d'État's adoption of the presumed fault doctrine contributed to shifting the burden of proof from the injured party to the administration, which must then prove that no fault occurred on its part. For example, if the public administration uses AI to make automated decisions to process social support applications, and this results in damage to citizens, a fault is presumed in the system or its method of use, unless the administration proves otherwise.

Second: Administrative Liability for the Material Acts of AI Systems

Given the specific rules governing administrative law, which distinguish it from civil law, legal scholarship has settled that the administrative liability claim for smart administrative acts is filed against the public body that uses the AI system. A question arises regarding the basis of the public body's liability: is it based on established fault, presumed fault, or the risk theory?

Legal scholarship has advocated for the exclusion of liability based on established fault for the activity of AI systems due to the multiplicity of actors involved in operating AI systems and the difficulty of determining the party responsible for the damage: is it the user (the public body), the manufacturer, or the administrative head (the employee)? [31]

By analogy with the "liability for the act of things" system, the administration's liability can be established on the basis of presumed fault to compensate for damages resulting from the activities of public establishments and hospitals that utilize AI systems in their operations.

The jurisprudence of the French Conseil d'État has established that the public medical service is liable, even without fault on its part, for damages suffered by its beneficiaries due to the

[30] Abdel Latif, M. M. Ibid, p 40.
[31] Abdel Latif, M. M, Ibid, p 41.

inadequacy of medical products and devices. This is particularly relevant when dealing with robots, considering them to be dangerous activities of an exceptional and complex nature.[32]

An example of this is the use of a surgical robot by a hospital service in surgical operations. If the robot causes physical harm to the patient during the operation, a fault is presumed in the programming or operation, and liability falls on the hospital or the manufacturer, unless it is proven that the damage resulted from an external cause or force majeure. The patient can claim compensation without needing to precisely prove the fault.

Similarly, in the event of a malfunction in the electronic agent's programming due to a virus, leading to a temporary service disruption or its incorrect provision, the administration's liability for all damages caused by the electronic agent can be established based on presumed liability, considering the electronic agent as an object that must be guarded. The administration can only be relieved of this liability by proving the external cause that led to the damage.

To be relieved of liability, the administration can invoke the defective products liability doctrine, which holds the producing company liable for manufacturing defects. The European Directive of 1985 and the 1998 Law on Liability for Defective Products establish the producer's liability for damage resulting from their product if it is proven that the damage was caused by a manufacturing defect for which the user public body had no involvement. [33]

The European Parliament has affirmed that compensation for damages is borne by the owner of the system or the party financially benefiting from its operation, and is covered by the mandatory insurance system for AI systems.[34]

Therefore, liability for damages resulting from the activity of AI systems can be established against the public body based on the presumed fault doctrine. The public body must then prove that the damage was beyond its control to be relieved of liability, such as proving that the cause was a manufacturing defect (in which case the producer's liability is established under defective products liability), or proving the fault of the injured party, the fault of a third party, or force majeure.

However, the presumed fault doctrine may not be suitable in the context of the continuous development of AI systems. If robots become autonomous in their activities, independent of

[32] Al Abdullah, H, Ibid, p 93
[33] Abdel Latif, M. M,.Ibid, p 42.
[34] EUR-Lex. (n.d.). Retrieved from https://eur-lex.europa.eu/legal

human intervention, will the public body remain liable for damages resulting from the robots' autonomous activities? And on what basis can the administration's liability be established

A distinction must be made between the case where the robot is granted legal personhood and the case where it is not. In the case of non-recognition of legal personhood and a separate financial estate for the robot, the risk theory may seem the most appropriate to apply, as it establishes liability on the public body without the need to prove or even presume fault, as long as the public body benefits from the robot's activity.

Examples include traffic accidents caused by self-driving cars due to an unexpected sensor malfunction, or if an administrative robot causes injury to a beneficiary of the public service. In these cases, the public body bears liability for the damages that may befall third parties because it is the beneficiary of the technology and must bear its risks.

However, if the robot enjoys legal personhood and a separate financial estate, and systems evolve from "Artificial Intelligence" to "Artificial Cognition," the legislator will be compelled to establish rules for the full administrative liability of robots, considering them a "virtual juridical person."

Conclusion

Amidst the acceleration of digital transformations and the positioning of Artificial Intelligence at the core of public administration, it becomes imperative to reconsider the traditional concepts of legal personhood and the rules of administrative liability. Machines are no longer mere technical tools but have transformed into active electronic entities with a degree of autonomy and participation in decision-making. This necessitates the establishment of a clear legal framework that recognizes electronic personhood, precisely defines its responsibilities, and flexibly interacts with continuous technological development while preserving human security and rights. Between the dialectic of equivalence and dependency, administrative liability remains the decisive point that requires a strict legal conception to ensure the attribution of liability and the redress of damage.

The study concluded the following points:

- Artificial Intelligence has become a major actor in public administration, not only in executing tasks but also in making administrative decisions.
- The existence of electronic entities in public administration imposes a new legal reality that requires precise regulation commensurate with their level of autonomy.

- The administrative liability resulting from the actions of smart systems remains a subject of significant jurisprudential debate and lacks a decisive legal framework to determine the responsible party.
- The presumed fault doctrine is the most appropriate to apply for holding the public body liable for damages caused to third parties and compensating the injured party through a mandatory insurance system for AI.
- In the event of the development of the cognitive capabilities of the robot without the corresponding grant of legal personhood, the risk theory may be the most appropriate to apply for holding the public body liable for damages caused to third parties.
- If the robot becomes autonomous from human intervention and enjoys legal personhood and a separate financial estate, the rules of administrative liability will require comprehensive legal regulation.

Based on the above, we propose the following recommendations:

- The necessity of enacting new laws and legislation that define electronic personhood and delineate the scope of its administrative responsibilities.
- The establishment of a specialized regulatory body to monitor and evaluate the performance of smart systems in public administration and ensure their adherence to ethical and legal controls.
- The integration of specialized educational materials on AI into training programs for public administration employees to enhance awareness of how to deal with these technologies.
- The adoption of the principle of transparency in the operation of smart systems requires them to display the logic of decision-making when intervening in administrative affairs.
- Conducting in-depth legal and philosophical research on the limits of the electronic person's autonomy and the extent of its judicial accountability.

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