

RESEARCH ARTICLE		Public Law Guarantees for Responsible Administrative Artificial Intelligence
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Abstract		
Artificial intelligence has become a reality that has imposed itself after being a figment of imagination. We now witness the use of these smart applications in many fields, especially in the decision-making process, thanks to AI programs that help find solutions that humans could not know or had no prior experience in facing. The reliance on artificial intelligence raises many questions regarding how the law can address liability problems resulting from the use of these smart systems. Perhaps the most important responsibilities that may arise and have not been sufficiently studied are posed in public law by understanding the guarantees it has enshrined in the field of administrative applications of artificial intelligence, whether related to determining responsibility for artificial intelligence in administrative law or the administrative judiciary's oversight of decisions issued based on artificial intelligence		
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Introduction

Information systems are among the tools of paramount importance in carrying out tasks and operations within institutions, regardless of their type of activity. These systems are now widely used in many fields and areas and are related to everything technological. Artificial intelligence is now widely used by millions of people daily, especially in decision-making assistance in various fields such as transportation, medicine, finance, environment, sustainable development, space, public policies, etc. Thanks to decision-making assistance programs, solutions that humans could not know can be reached, or solutions to new problems for which humans had no experience can be found, or finally, the validity of a solution can be judged, or decisions can be confirmed or justified. The user often relies on the outcome reached by artificial intelligence.

However, relying on artificial intelligence systems raises many questions related to how the law can address liability problems resulting from the use of these systems, which can cause harm to individuals. Although the legal system has made great strides in keeping pace with the changes brought about by modern technology due to its ability to decipher and control its effects, this issue poses a major challenge for the Arab legal system, especially the Algerian legislator, who has regulated some aspects of this responsibility in branches of ordinary law. However, this problem has not yet been sufficiently studied in administrative law.

Based on the foregoing, we chose to address the subject of this research according to three axes:

Axis One: The Conceptual Framework of Artificial Intelligence and its Relationship with Administrative Information Systems.

Axis Two: Responsibility for Artificial Intelligence in Administrative Law.

Axis Three: Administrative Judicial Oversight of Decisions Issued Based on Artificial Intelligence.

Axis One: The Conceptual Framework of Artificial Intelligence and its Relationship with Administrative Information Systems.

Administrative information systems are among the most important tools for carrying out tasks and operations within institutions, regardless of their type of activity. These systems are now used in many fields and areas and are related to everything technological, such as their relationship with artificial intelligence, which has created a major revolution in the field of computers. Through this axis, the concept of administrative information systems and their relationship with artificial intelligence will be explored.

First - Definition of Administrative Information Systems

Administrative information systems are among the most important and widespread types of systems in institutions. A definition can be formulated through a set of definitions from researchers and authors.

Lucas, Murdick, and Ross defined it. Lucas states that it is: "a set of procedures, software, machines, installations, and the science of methodologies necessary for data processing and retrieval, which are essential for managing the institution".

Murdick and Ross, on the other hand, say: "It is a system of people, equipment, procedures, documents, and communications that collect, summarize, process, and store data for use in planning, budgeting, accounting, control, and other administrative operations".

Scott believes that: "Administrative information systems are a comprehensive and coordinated set of sub-information systems that integrate rationally to convert data into information in multiple ways to increase productivity, in accordance with the patterns and characteristics of managers".

Kennevan also states: "It is an organized method for collecting information about the past and present, and information that helps predict the future, related to the internal operations of the institution and other related operations and the external environment, in order to assist management in making planning and control decisions".[1]

From the foregoing, we conclude that administrative information systems are the product of the interaction between computer science, technology, and organization, which works to convert data into information used in the field of administration and business.

Second - Importance and Types of Administrative Information Systems

Administrative information systems are distinguished from other information systems by their special importance and are divided into many types.

1-Importance of Administrative Information Systems

The importance of administrative information systems lies in many points, including:

- Increased knowledge available to managers, which can be used in their decision-making according to advanced scientific knowledge.

- Growth of institutions in size and complexity of their operations, which forces managers to increasingly rely on written information.
- Increased specialization of some institutions and the tendency of most of them to diversify their activities.
- Increased technological complexity of society in general.
- Increased degree of environmental and technological change.

2-Types of Administrative Information Systems

Administrative information systems have many types, including:

- **a- Manual Information Systems:** These are systems in which all input, processing, and output operations are performed manually, using simple tools such as pens, papers, and home calculators.
- **b- Semi-Automated Information Systems:** These are systems in which input, processing, and output are performed both manually and automatically through the use of individuals and machines together, such as a typewriter.
- **c- Automated Information Systems:** These are systems in which input, processing, and output operations are performed using electronic computers and information networks. Automated information systems in the field of administration are called administrative information systems.[2]

Third - Relationship between Artificial Intelligence and Information Systems

The relationship between artificial intelligence and information systems is an interconnected relationship between the programs and technologies that artificial intelligence provides to machines and computers, and the various operations that take place at the level of information systems, from data input and processing to output in the form of information that benefits the user.

Its relationship with administrative information systems, which operate within an organized and coordinated context to support management operations and activities, is due to their reliance on highly advanced devices and sophisticated computer programs for performing these various operations, which in reality have been achieved through artificial intelligence applications.[3]

Through what we have reached in this axis, we have been able to understand that information systems are the various operations that take place within computers, from data input and processing to output in the form of information that serves the interest of the institution. As for artificial intelligence, it is the experiences and skills that humans possess, which they put into computers in the form of programs, where these programs perform many tasks with speed, accuracy, and objectivity in providing information to the beneficiary.

From here, after defining the concept of artificial intelligence and its relationship with administrative information systems, our question remains about the administrative responsibility that may result from the use of these technologies in issuing administrative decisions, and this is what we will address in the second axis.

Axis Two: Responsibility for Artificial Intelligence in Administrative Law

Administrative authorities resort to using artificial intelligence either when making administrative decisions or when carrying out their daily material operations. In both cases, the issue of their responsibility for compensating damages resulting from this use may arise.

First - Administrative Responsibility for Automatically Processed Administrative Decisions:

In cases where the administration makes an automatically processed decision, its responsibility arises if this decision is flawed by illegality. We have seen that the few applications of responsibility for using artificial intelligence to make decisions in labor law are in cases where the criteria used to examine or analyze information by the artificial intelligence system are illegal. These applications can frequently occur in the field of decisions issued by administrative authorities.

Compensation can also be sought for automatically processed decisions in cases where this type of decision is not permissible, or in violation of a person's right not to have a decision processed entirely or automatically in violation of a person's right not to be subject to an automatically processed decision only.[4]

Since liability for administrative decisions is primarily based on proven fault, i.e., fault that must be proven, asserting the illegality of the criteria requires understanding their content. Hence, the importance of applying the principle of transparency becomes apparent, otherwise the plaintiff in a liability lawsuit will face a problem in proving it. Nevertheless, the administrative judge has the right to intervene by obliging the administration to present these criteria, in application of the role he plays in administrative judicial procedures, which are always described as guided.

The judiciary in Italy provides an important application of liability for automatically processed decisions. According to Italian law, the opening of a pharmacy is subject to a license, for which an application must be submitted on an electronic platform affiliated with the Ministry of Health. The application must be submitted for a specific region, and if the application is rejected twice in two consecutive regions, no further application is permissible. One person submitted two applications for two consecutive regions, but they were rejected, on the grounds that they did not include, as required by law, an email statement. The person concerned then submitted a third application the following year, including the required statement, but it was also rejected, this time on the grounds that he had previously submitted two applications, which was not permissible. The Administrative Court in Trento ordered the state to pay compensation after the plaintiff proved the error made by the electronic system, which confused the rejection of the license application for a formal reason with the rejection of the application for a substantive reason [5].

Compensation may also be awarded for the regulatory decision governing the use of artificial intelligence. Accordingly, the Council of State recently ruled to partially annul and compensate for a decision by the Prime Minister regarding authorizing the Minister of Interior to automatically process personal information through a special application, insofar as it stipulated that the automatic processing of personal information aims to facilitate, collect, and preserve it for later exploitation in other information processing, especially through the prior information system. This is because the decision did not include any reference to the nature and subject of these processes, nor the conditions for exploiting this information in those processes.

Therefore, this purpose does not meet the requirements stipulated by law for the purpose of processing, which are that it must be specific, clear, and legitimate[6].

The illegality that can threaten an automatically processed decision always constitutes a public service fault, because it is attributed to the public service itself. This idea does not seem to be contradicted by administrative judicial rulings.

Second - Administrative Responsibility for Material Acts in Implementation of an Artificial Intelligence System:

An administrative liability lawsuit for non-regulatory administrative acts is filed against the public authority that uses the artificial intelligence system, not the person who produced it. [7]

The question arises about the basis of administrative responsibility for damages resulting from the use of artificial intelligence systems, meaning whether it is based on fault, presumed fault, or without fault?

1-Exclusion of Liability Based on Proven Fault:

In the case of using artificial intelligence systems to perform activities of a material nature, such as medical acts or transportation, the injured party will face a great obstacle in determining the fault and identifying the responsible party: Is it the operator, i.e., the public person using the system, or the producer, or even the employee? This is because a

smart robot system or an autonomous vehicle assumes multiple responsible parties. Therefore, we can say that administrative responsibility based on proven fault for the use of artificial intelligence systems in non-regulatory acts should be excluded, as the injured party cannot identify the responsible party for the fault, because this identification seems to be a technical and precise matter that he will often not be able to prove.

It is known that the law excludes liability based on proven fault in cases where there appear to be multiple responsible parties on the one hand, and difficulty in identifying them by the injured party on the other hand. This is the case for liability for aircraft accidents and liability for nuclear damages.

2-Scope of Application of the Liability System Based on Presumed Fault and Strict Liability:

It seems possible to resort to liability based on presumed fault or a presumption of fault, which is the logic of the liability system for the act of a thing, especially in the field of liability of medical facilities that use products and devices similar to those used by private hospitals,. However, public law jurisprudence seems reserved about applying this type of liability to public medical facilities, and limits the applications of this liability to public establishments, public works, and dangerous weapons, especially due to the lack of a clear definition of the meaning of "thing" .

Nevertheless, the application of civil law rules to the liability of medical facilities has recently been achieved through the application of liability for defective products. In a ruling by the French Council of State, it was considered that the presumption of fault in the organization and operation of the medical facility is unable to accommodate the act of a thing or products, and therefore the defendant's presentation of counter-evidence aimed at overturning the presumption of fault was rejected. The Council of State rules that the public medical facility is responsible, even without fault on its part, for damages suffered by its beneficiaries due to the inadequacy of medical products and devices, and without the patient's previous condition mitigating that responsibility .[8]

This jurisprudence is based on an important principle to which the medical facility is subject, which is the obligation to ensure patient safety. In addition, liability under the European Directive of 1985 and the 1998 law on liability for defective products is strict liability. Indeed, the Court of Cassation in France ruled before the issuance of the non-contractual law that every producer is responsible for the damage caused by his product, regardless of whether the injured party was a party to a contract or a third party. The Council confirmed this jurisprudence in a subsequent ruling.[9]

Finally, the Council mentions that although the liability of the public medical facility is without fault, this does not prejudice its right to recourse to actions it can exercise against the producer.

This jurisprudence is naturally applicable to the use of artificial intelligence systems by public medical facilities in medical acts, particularly diagnosis and surgery, because the basis of liability is the same, which is liability for defective products.

Therefore, we can conclude that liability for the use of artificial intelligence systems, regardless of their field of application, is based on liability for defective products, which is the same prevailing basis according to civil law jurists.

This analysis can also be applied before the administrative judiciary in Algeria, given that Algerian law has also stipulated the producer's liability for defective products.

Axis Three: Administrative Judicial Oversight of Decisions Issued Based on Artificial Intelligence.

The term "electronically processed decision" has become common today in French law. As the National Commission for Information and Freedoms states, it refers to a decision taken against a person through algorithms, i.e., automated processing applied to their personal data without any human intervention in the process. This type of decision can intervene in many areas of activities such as financial activities, taxes, and marketing, and has legal effects, or significantly affects the persons concerned. An example is a decision to refuse credit, the sole basis of which may be the use of algorithms that automatically apply certain criteria to the financial position of the credit applicant without any human intervention.

This definition of an automatically processed decision brings about a major transformation in the true meaning of an administrative decision, because it means that the decision, in its essence, is not an expression of the administration's will alone, but rather an expression of the artificial intelligence system, even if the decision remains theoretically attributed to the administration that adopted it as its decision.

The administrative judge, within the limits of his jurisdiction, exercises legality oversight over administrative decisions, whether decisions according to ordinary procedures or according to electronic procedures. Regarding the latter, he exercises oversight not only at the end of the procedures (en aval), i.e., at the time of signing or referral, but also at the beginning (en amont) with the support or assistance provided by algorithms that play an undeniable role in some countries.[10]

For example, artificial intelligence can be assigned a role in decision-making, which may lead to illegal decisions, or refuse to grant rights, or prevent access to a service, or analyze the personality of job candidates similar to what happens in the field of private projects. This analysis may lead to choices that involve discrimination.[11]

Discrimination may be intentional by setting a discriminatory criterion in an electronic program. [12]

An Italian court considered it discriminatory for algorithms to treat absence resulting from participation in a strike exactly like other cases where the applicant does not perform the service, in order to determine groups of applicants used by the absence platform, and therefore ruled against the platform for compensation.[13]

In Italy, it is used to implement exceptional plans for appointing and transferring teachers. In both cases, the program sets automated procedures, while their difficulty lies in the increasing numbers and diversity of applications to be dealt with and the criteria to be applied .[14]

The codification of the relationship between individuals and the administration in France enshrined the possibility of making an individual decision based on computational processing. Article 12-3-311 of this codification stipulated that: An individual decision taken in light of computational processing must include an explicit reference, and the person concerned must be informed. The rules that define this processing, and the main characteristics of its implementation by the administration, must also be communicated to the person concerned upon request .[15]

First - Transformations in Judicial Oversight of Decisions Issued Based on Artificial Intelligence:

There is no dispute about the possibility of appealing decisions issued with the assistance of an artificial intelligence system or computational processing, as mentioned in the codification of the relationship between individuals and the administration, just as any other decision can be appealed.[16]

However, as some authors note, the methods relied upon by the judiciary to monitor the legality of administrative decisions may not find a place if the decisions are based on the support of artificial intelligence systems. For example, oversight of proportionality and obvious error in judgment do not find a place; because these methods and others are consistent with the traditional method of making administrative decisions, and have only limited importance in decisions issued according to artificial intelligence systems that rely on purely accounting criteria.[17]

This is because these methods presuppose the exercise of discretionary power by the administration, while making decisions according to artificial intelligence systems is done automatically, devoid of discretionary power.

In addition, decision-making assistance systems involve the generalization of the application of data and information available to them, which means not applying case-by-case examination, and consequently limiting the discretionary power of the administration, which is a power that the judiciary has approved for the administration to exercise and not abandon.

Given the standardization of the criteria under which information or data is automatically processed, it seems difficult, if not impossible, to claim that the decision is flawed by abuse of power.

The question naturally arises about the extent of the administrative judge's oversight of the information or criteria on which the administrative decision was based.

Naturally, the administrative judge exercises oversight over these criteria when appealing the decision issued based on them, because they constitute the basis of the decision itself.

But is it permissible to appeal these information and criteria for annulment? We see no impediment to appealing them directly for annulment within the time limit, by analogy with the acceptance of annulment lawsuits for binding publications. Indeed, they actually constitute regulatory decisions.

Accordingly, the Council of State ruled to accept the appeal for annulment of a recommendation by the National Commission for Information and Freedom regarding the consideration of the statement of the nationality of the loan applicant as one of the elements for assessing collection risks. The Council, contrary to this recommendation, which is in fact a decision, considered that the nationality element is productive and not discriminatory in light of the electronic processing operation. [18]

It is also permissible to argue the illegality of the criteria or information on which individual decisions are made in annulment lawsuits of these decisions, similar to arguing the illegality of regulatory decisions in general.

Second - Oversight of the Administrative Judiciary in Italy on the Regulatory Decision Imposing the Use of Artificial Intelligence Systems in Issuing Individual Decisions:

In Italy, the administrative judge monitors the legality of the regulatory decision imposing the use of automated processes, especially when the processing criteria are unknown. This solution seems indispensable to ensure full and effective judicial protection, otherwise individual decisions will be merely an automatic result of electronic operations imposed by the regulatory decision. According to Italian jurisprudence, if objective criteria are applied without any margin of discretion from the administrative authority, automated procedures are technologically and constitutionally necessary.

The electronic program, in the opinion of judges, embodies the procedures, contains the legal rules, as well as the choices made by the administration within its freedom of discretion.

The Italian judiciary has been keen to highlight the following two results:

The first result is that the administration responsible for the procedures must balance all concerned interests from the beginning, i.e., before implementing the program. This also requires introducing modifications and updates, and conducting regular tests of algorithms, especially if the latter are machine learning or deep learning algorithms.

The second result is that the litigiousness of algorithms presupposes that they are understood by judges and citizens. This requires that all their aspects be known, such as their authors, preparation procedures, and decision system.[19]

CONCLUSION

The continuous evolution of Artificial Intelligence (AI) necessitates a swift and adaptable legal response to ensure a balance between innovation and the protection of individual rights. This unequivocally demands concerted efforts from legislators, judges, and researchers alike. The accelerating development of AI poses significant challenges to legal systems, particularly in the realm of administrative applications, thereby requiring active legislative and judicial intervention to safeguard individual rights and uphold the principles of public law. Indeed, AI has become a driving force in administrative decision-making processes, transforming them from mere expressions of human will into outputs of complex algorithmic systems.

This study has yielded several fundamental findings, highlighting the transformations currently unfolding within administrative law in light of these developments:

- **Transformation of the Concept of Administrative Decision** :Administrative decisions are no longer solely dependent on human volition; instead, they are shaped by AI systems that intervene in their formulation and adoption. This necessitates a redefinition of the administrative decision concept within the context of modern technologies.
- **Complexity in Determining Administrative Liability** :Reliance on AI raises critical issues regarding the determination of liability for damages resulting from the use of these systems, especially in material actions, where proving fault and identifying the responsible party becomes challenging.
- **Prevalence of Liability for Defective Products** :In the face of difficulties in proving fault within the AI context, liability for defective products emerges as a plausible legal basis for determining responsibility for damages arising from the use of AI technologies, particularly in sensitive areas such as medicine. This basis finds support in administrative jurisprudence, as is the case in France, and can be applied within Algerian law, which also stipulates producer liability for defective products.
- **Challenges to Administrative Judicial Review** :Although administrative judiciary exercises control over decisions made with the assistance of AI, traditional review methods may prove insufficient for automated decisions characterized by mathematical precision and lacking discretionary power.
- **Importance of Algorithmic Transparency** :Transparency in the algorithmic criteria underlying administrative decisions is of paramount importance to ensure the legality of these decisions and enable individuals to challenge them. The administrative judge must intervene to compel administrations to disclose these criteria.
- **Requirements for Algorithmic Litigability** :To ensure the effectiveness of judicial oversight, the algorithms used in administrative decision-making must be comprehensible to judges and citizens alike, including knowledge of their authors, development procedures, and the decision-making system upon which they are based.

Based on these findings, the study recommends the following:

- **Enactment of Comprehensive Legislation** :Legislators must urgently intervene to establish comprehensive legal frameworks governing the use of AI in administration. Such frameworks should include clear provisions for liability and procedural safeguards to protect individual rights, while taking into account the specificities of each administrative sector.
- **Development of Judicial Review Mechanisms** :The administrative judiciary is urged to develop innovative oversight mechanisms that are compatible with automated decisions. This should focus on reviewing the legality of the criteria and data upon which these decisions are based, and intervening to compel administrations to disclose them.
- **Enhancement of Transparency and Disclosure** :A legal obligation should be imposed on public administrations to disclose the algorithms and criteria used in automated administrative decisions, thereby ensuring individuals' right to understand the basis of decisions issued against them and to exercise their right to challenge.
- **Qualification of Judicial and Legal Professionals** :It is essential to invest in training judges, legal researchers, and AI specialists to deepen their understanding of the complexities of intelligent systems and how to apply legal principles to them.
- **Activation of International Cooperation** :Encouraging cooperation and the exchange of experiences between countries in regulating AI in public administration is crucial to benefit from global best practices and legal solutions.
- **Establishment of Ethical Standards** :Clear and binding ethical standards must be established for the development and use of AI in administration, ensuring fairness, equity, non-discrimination, and the preservation of societal values.

The challenges posed by Artificial Intelligence necessitate a swift and precise legal response to guarantee a balance between technological innovation and the effective protection of individual rights and freedoms. This requires concerted efforts from legislators, judges, researchers, and civil society to establish a sustainable legal system that keeps pace with rapid developments and upholds the principles of justice and transparency.

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