

The Legality Control of Automated Administrative Penalties: A Case Study of Excessive Penalties by Traffic "Electronic Police"

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Keywords: Administrative Penalties, Law-Based Administration, Law-Based Supervision and Regulation, Law-Based Government

Abstract: Automated administrative penalties have played a positive role in enhancing administrative efficiency and reducing human interference. However, they have also raised many issues, such as algorithmic opacity, simplification of legal procedures, difficulty in fully safeguarding the procedural rights of the parties involved, and mismatch between penalties and faults. These problems have led people to question whether they are in line with the principle of law-based administration. This article takes the excessive penalties imposed by traffic "electronic police" as an example to explore the legal basis and challenges of automated administrative penalties, analyze the root causes of their legal predicament, and propose paths to improve the legal control of automated administrative penalties. The research suggests that a composite institutional system covering rule design, procedure reconstruction, technological governance, and supervision and checks should be established to achieve a balance between efficiency and justice, innovation and restraint, and promote the realization of the goal of building a digital rule-of-law government.

1. Introduction

The Implementation Outline for the Construction of a Law-based Government (2021-2025) points out: "We should persist in promoting law-based administration by applying technological means such as the Internet, big data and artificial intelligence, strive to achieve in-depth integration of government governance informatization and law-based governance, optimize and innovate government governance processes and methods, and significantly enhance the digitalization level of law-based government construction."^[1] In the field of administrative penalties, the application scope and degree of automated administrative penalties have been continuously expanding and deepening, from the initial electronic police to non-site law enforcement in areas such as market supervision and highway overloading control, and from capturing illegal acts with electronic monitoring equipment to implementing penalties through automated platforms.^[2] Although the automation of administrative penalties has changed the way the government governs and demonstrated significant advantages in improving administrative efficiency and reducing human intervention, it has also triggered a series of issues that infringe upon citizens' rights and interests. These problems have further raised public doubts about whether the automation of administrative penalties complies with the principle of law-based administration and led to a large number of related disputes being brought to court. While the innovative development and application of artificial intelligence liberates and develops social productive forces, it inevitably requires corresponding changes in the governance system and the promotion of the legalization of artificial intelligence governance.

2. The Legality Basis and Challenges of Automated Administrative penalties

2.1. The legal basis of automated administrative penalties

The legal basis for automated administrative penalties is rooted in the inclusive regulations of the current legal system on the application of technology, as well as the adaptive adjustment of administrative rule of law principles in the digital age. Its legitimacy can be developed from two

dimensions: legal normative basis and legal theoretical foundation. It not only needs to respond to the efficiency requirements of technological empowerment but also adhere to the legal bottom line of power restraint and rights protection.

2.1.1. Policy and regulatory basis

The policy support for the construction of digital government provides a basis for automated administrative penalties. The "Guiding Opinions on Strengthening Digital Government Construction" (2022) issued by The State Council proposed to "promote off-site supervision" and "enhance the intelligent level of law enforcement", providing policy legitimacy for automated administrative penalties. Subsequently, the "Guiding Opinions of The State Council on Further Standardizing and Supervising the Setting and Implementation of Fines (Guo Fa [2024] No. 5)" emphasized "continuously standardizing non-site law enforcement", and regulated the electronic technical monitoring equipment and evidence collection for law enforcement. Although such documents are not legal sources in the strict sense, through the "authorization-interpretation" mechanism, the legality expectations of administrative organs for technological innovation can be strengthened.

The Administrative Penalty Law framework authorizes the automation of administrative penalties. Article 41 of the Administrative Penalty Law revised in 2021 clearly stipulates for the first time that administrative organs can use "electronic technology monitoring equipment" to collect and fix the facts of violations, marking the legalization of automated penalties.^[3]

The detailed rules of departmental laws and competent authorities provide legal basis and operational possibilities for the automation of administrative penalties. Article 114 of the Road Traffic Safety Law authorizes traffic management departments to use technical monitoring equipment to record violations and clearly stipulates that "the collected evidence must be reviewed and used as the basis for penalties." Article 15 of the "Regulations on the Handling Procedures for Road Traffic Safety Violations" issued by the Ministry of Public Security stipulates that electronic police equipment must be regularly verified to ensure the legality of technical parameters and prevent "excessive penalties under the guise of technical errors".^[4]

2.1.2. Legal basis

First, an extension of the principle of administrative efficiency. Automated administrative penalties quickly identify illegal acts through algorithms and generate penalty decisions in batches, significantly reducing law enforcement costs and meeting the modern demands of the principle of administrative efficiency. In high-frequency law enforcement scenarios such as traffic management and environmental monitoring, the application of technology can avoid the selective omissions of manual law enforcement, achieve "all-weather and undifferentiated supervision", and is in line with the goal of maximizing public interests.

Second, the limited breakthrough of the principle of legal reservation. The traditional law reservation principle requires that the basis for penalties must be clearly stipulated by law, but the dynamics of automation technology makes it difficult for legislation to fully predict technical details. In practice, legality control is achieved through a composite model of "framework legislation + administrative rules". Among them, the framework legislation is established by the "Administrative Punishment Law" with basic principles, such as equipment public display and evidence review, etc. Administrative rules are filled with specific rules through departmental regulations and technical standards (such as the "General Technical Conditions for Automatic Red Light Running Record System"), forming a legality chain of "legal authorization - technical implementation".

2.2. The legality controversy in the practice of automated administrative penalties

Although automated administrative penalties have achieved remarkable results in improving law enforcement efficiency and reducing human intervention, the tension between their technological dependence and legal lag has triggered multiple disputes over legality in practice. These disputes not only involve the ambiguity of power boundaries at the substantive law level, but also expose the deep-rooted loopholes in procedural justice and rights protection, which urgently need to be responded to through institutional improvement.

2.2.1. Doubts about the legality of technical equipment Settings

In practice, there exists the problem of the alienation of law enforcement purposes in automated administrative penalties. Some administrative organs have alienated automated equipment into "fiscal revenue-generating tools", which violates the principle of "combining punishment with education" established in Article 6 of the Administrative Penalty Law. According to internal data from the traffic management system cited by CCTV in April 2021, on a certain expressway section in Foshan in 2021, due to unreasonable marking design and concealed speed limit signs, 620,000 car owners violated the rules within a year, with fines exceeding 120 million yuan. Such behaviors not only violate the educational function of administrative penalties, but also highlight the risk of power abuse concealed by "technological neutrality". This law enforcement model of "substituting penalties for management" not only fails to achieve the goal of correcting illegal acts and educating citizens to abide by the law voluntarily, but also raises public doubts about the fairness of law enforcement.

2.2.2. The controversy over the transparency and evidential force of algorithmic decision-making

The automated penalty system relies on algorithms to identify illegal acts, such as license plate capture and face recognition, but the logic and parameter thresholds of the algorithms are usually not made public to the public. This phenomenon of "technical black box" weakens the defense right of the parties involved, making it difficult for them to raise effective objections to the penalty decision. For instance, in the administrative reconsideration case against the administrative penalty imposed by a certain traffic police station in Anhui Province, Zhu, a driver from Anhui, failed to use the seat belt as required while driving. At the same intersection, he was captured by the electronic police of the traffic police department 46 times and punished. The driver was dissatisfied. The administrative reconsideration authority found that the mobile phone number bound to the party's vehicle information had long been deactivated. The traffic police department failed to effectively inform the party and did not fulfill the obligation of announcement, resulting in the applicant being subject to the same administrative penalty multiple times at the same location. The administrative reconsideration authority urged the administrative authority to correct the situation on its own. The Ministry of Justice also listed this case as a typical case.^[5] Such cases indicate that the opacity of algorithms not only violates the principle of "openness and fairness" required by the Administrative Punishment Law, but may also infringe upon the legitimate rights and interests of the parties involved.

2.2.3. The void of procedural justice and the insufficiency of rights protection

The formal performance of the obligation to inform. The law requires administrative authorities to inform penalty decisions "through information technology means" (Article 44 of the Administrative Penalty Law), but in practice, text message notifications often only state "the time and place of the violation", without providing key information such as captured images and the process of the violation. Due to information asymmetry, the parties find it difficult to effectively exercise their rights to make statements and defenses, and their participation in the procedure has become a mere formality.

The failure of the manual review mechanism. The "Regulations on the Handling Procedures for Road Traffic Safety Violations" stipulates that electronic police data must be reviewed manually. However, some units, in pursuit of efficiency, outsource the review to technology companies or simplify the process.

3. Tracing the Legality Dilemma of Automated Administrative Penalties

The legitimacy dilemma of automated administrative penalties stems from the deep-seated conflict between technical logic and legal logic. It not only exposes the lag of the current legal system, but also reflects the tension between the expansion impulse of administrative power empowered by technology and the protection of citizens' rights. The following systematically traces the legitimacy predicament of automated administrative penalties from four dimensions: substantive law deficiencies, procedural law loopholes, failure of supervision mechanisms, and conflicts in technical

ethics.

3.1. Substantive law defect: The disconnection between legal authorization and technological application

3.1.1. The ambiguity and lag of legal authorization

Although Article 41 of the Administrative Penalty Law authorizes administrative organs to use "electronic technology monitoring equipment", this provision does not specify specific matters such as the type of equipment, installation standards, and penalty thresholds. For instance, in traffic law enforcement, issues such as whether "running a yellow light" should be punished and how to set the tolerance value for speeding are all determined by local authorities themselves, resulting in frequent occurrences of "different penalties for the same case". The ambiguity of this scope of authorization enables administrative authorities to have excessive discretionary power in the application of technology, deviating from the clarity and specificity required by the principle of legal reservation.

The current laws are presupposition based on traditional law enforcement scenarios and are difficult to adapt to the application of new technologies such as algorithmic decision-making and big data analysis. For instance, AI recognition technology can simultaneously capture multiple behaviors such as "not wearing a seat belt" and "making or receiving phone calls", but the law does not clearly define the legal boundaries of such combined penalties. This contradiction between technological updates and lagging laws has led administrative agencies to face the predicament of insufficient legal basis in actual law enforcement, and at the same time, it has weakened citizens' trust in the fairness of law enforcement.

3.1.2. The conflict between algorithmic decision-making and the principle of legal reservation

The principle of legal reservation is an important cornerstone of modern administrative law. Its core requirement is that the administrative acts of administrative organs must be based on explicit legal authorization to safeguard citizens' basic rights from arbitrary infringement by administrative power. However, in the field of automated penalties, the wide application of algorithmic decision-making poses new challenges to the principle of legal reservation. Specifically, the algorithmic decision-making of automated penalties relies on a large number of technical parameters, such as snapshot sensitivity and image recognition threshold, which are mostly set by technology companies and lack legal authorization and public supervision.

From the theoretical basis of the principle of legal reservation, this phenomenon violates the core value of the principle of legal reservation - the protection of basic rights. The principle of legal reservation requires that any administrative act involving citizens' basic rights must have a clear legal basis, while the setting of technical parameters in algorithmic decision-making often deviates from legal authorization. Furthermore, this phenomenon is also contrary to the concept of "increasing legal reservations" implied in the GDPR (General Data Protection Regulation). According to the GDPR, algorithmic decisions made by public institutions must be based on legal authorization, and the purpose of legal authorization can only be for specific goals such as public interest, risk prevention and control, or the security and reliability of services.^[6]

3.2. Loopholes in procedural law: The erosion of procedural justice by technical rationality

3.2.1. The formalization of the obligation to inform

The notification content of automated penalties is often limited to "time + location", without providing key information such as captured images and the process of the violation. For example, in a certain place, only a text message was sent to notify "You have violated the traffic rules", without specifying the specific behavior. This phenomenon of information asymmetry violates the provisions of the Administrative Penalty Law regarding the obligation to inform, depriving the administrative counterpart of the right to have a comprehensive understanding of the facts of the violation. Administrative authorities often simplify the notification procedures in automated penalties and only notify the parties concerned through electronic delivery, resulting in incomplete and lack of specificity in the notification content. This practice not only affects the right of the counterpart to

make statements and defend themselves, but also weakens the public's trust in automated penalties.

3.2.2. The right to make statements and defenses is void

Automated penalty systems generally lack a "manual review in advance" mechanism, making it difficult for parties to raise objections before the penalty decision is generated. For instance, in a certain area, a car owner was mistakenly photographed because their license plate was covered by snow. However, the system automatically generated a ticket before initiating a manual review. This model violates the requirements of the "Administrative Punishment Law" regarding the protection of procedural rights such as notification, hearing, and presentation of opinions. In automated administrative penalties, the discretion decision-making system conducts discretion centered on "events", and cannot impose penalties centered on "people" as in manual administrative penalties. As a result, many administrative procedure structures centered on "people" lose their tension in the intelligent penalty discretion decision-making system.

4. The path to improve the legality control of automated administrative penalties

The issue of legality control in automated administrative penalties is essentially a difficult problem of the integration of technological governance and administrative rule of law. The solution path needs to break through the traditional "legislative patching" thinking and instead construct a composite institutional system covering rule design, program reconfiguration, technical governance, supervision and checks and balances, in order to achieve a balance between efficiency and justice, innovation and constraints.

4.1. Substantive law reinforcement: Clarify the power boundaries of technology application

4.1.1. Establish an "Algorithm Legality review List"

In terms of the negative list for algorithm application, the penalty behaviors prohibited from being implemented through algorithms should be clearly listed. For instance, it is not allowed to split a "single violation" into multiple penalties by adjusting the frequency of snapshots. Such behavior not only violates the principle of fairness in administrative penalties but may also lead to improper aggravation of penalties for the administrative counterpart. In addition, the negative list should also cover other behaviors that may lead to the abuse of algorithms, such as using algorithms to manipulate law enforcement results and engaging in unfair competition.

4.1.2. Strengthen the technical adaptation of the "principle of legal reservation"

For technical parameters involving citizens' basic rights (such as the scope of biometric information collection and the retention period of data), they must be clearly stipulated by laws or administrative regulations. Authorization through rules or normative documents is prohibited. It is also necessary to refer to the EU's "Artificial Intelligence Act", classify administrative law enforcement algorithms as "high-risk systems", and implement mandatory filing and dynamic assessment.

4.2. Procedural Law Reconstruction: From Formal Compliance to Substantive Participation

First of all, ensure full element notification. The penalty decision document should state the complete chain of evidence for the illegal facts, including the captured images, a brief explanation of the algorithm determination logic (desensitization processing), and the data verification results. For instance, Zhejiang Province has launched a "Scan code to Check for violations" service. Parties involved can scan the QR code on the penalty decision document to access the captured video. Secondly, it is also necessary to achieve scene-based public display. The public notice of equipment Settings needs to be detailed down to the specific types of illegal acts and the criteria for determination. The Technical guidelines for the design of urban road traffic management facilities in Guangzhou City mention that at the installation locations of speed detection electronic police, it is recommended to install LED screens for speed warning. These LED screens can display traffic information, including speed limit values and speeding warnings, etc.

Build an online objection platform: Develop a unified national "Administrative Law Enforcement Objection Acceptance System", supporting parties to upload evidence (such as dashcam videos) and conduct online cross-examination. The system will automatically generate a comparison report on the evidence chain. The right to request algorithm interpretation is guaranteed, and the party concerned is granted the right to request the administrative organ to explain the basis of the algorithm decision in an "understandable way". If the party refuses to provide it, the penalty decision shall be invalid.

4.3. Innovation of Supervision Mechanism: Breaking the "Technical black box" and "responsibility Vacuum"

In modern administrative litigation, with the rapid development of technology and the advancement of digital governance, administrative agencies are increasingly relying on algorithms and data for decision-making. However, the complexity of the algorithm and the massive amount of data make the traditional judicial review mechanism face many challenges when dealing with such cases. Therefore, constructing a technical juror system that meets the demands of the new era and introducing computer experts and data scientists as jurors to assist courts in reviewing the logic of algorithms and the authenticity of data has significant theoretical and practical significance.

The introduction of the technical juror system aims to make up for the deficiency of judges in technical knowledge and ensure the scientificity and accuracy of judicial review. In technical cases, especially administrative litigation involving algorithms and data, the clarification of technical facts often becomes the key to case hearings. By appointing experts with professional backgrounds such as computer science and data science as jurors, it can effectively assist judges in reviewing the rationality of algorithm logic, the legality of data sources, and the authenticity of data processing. This system can not only improve the efficiency of trials, but also enhance the credibility of judicial decisions.

5. Conclusions

With the advancement of the construction of a digital law-based government, while automated administrative penalties have enhanced administrative efficiency, they have also raised numerous legality issues, such as algorithmic black boxes, procedural reduction, and insufficient protection of the rights of the parties involved. Taking the excessive penalties imposed by the "electronic police" in traffic as an example, this article deeply explores the legitimacy dilemma of automated administrative penalties and its root causes. The research holds that constructing a composite institutional system covering rule design, program reconfiguration, technical governance, and supervision and checks and balances is the key to improving the legality control of automated administrative penalties. Only through scientific and reasonable institutional design can a balance between efficiency and fairness, innovation and restraint be achieved, promoting the implementation of the goal of building a digital law-based government, ensuring the healthy operation of automated administrative penalties within the framework of the rule of law, and providing solid theoretical and practical support for the construction of a digital law-based government.

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