

INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY

INSTITUTE OF LEGAL EDUCATION

INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY

APIS: 3920-0013 | ISSN: 2583-7990 | Impact Factor: 7.58

(Open Access Peer-Reviewed Refereed Academic Journal - Institute of Legal Education)

Volume 4 | Issue 2 | Year 2026 **Article #1 | Pages 1 - 23 | Date: 16 Nov 2026**

PUBLISHED ARTICLE BIBLIOGRAPHIC & VERIFICATION RECORD

The Electronic Administrative Decision: Legal Validity, Procedural Guarantees and the Challenges of Digital Transformation

Authors: Farah Abdullah Mohammed Nour Al-Ahmad (WISE)

Keywords: Electronic Administrative Decision; Digital Administration; E-Government; Legal Validity; Electronic Signatures; Procedural Guarantees; Automated Decision-Making; Data Protection.

Recommended Citation (OSCOLA Format)

Farah Abdullah Mohammed Nour Al-Ahmad, "The Electronic Administrative Decision: Legal Validity, Procedural Guarantees and the Challenges of Digital Transformation" (2026) 4(2) INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY 1 - 23; AIT: IJCLP/WNDG-0001; Available at: https://ijclp.iledu.in/IJCLP/WNDG-0001

Open Access - Creative Commons Attribution 4.0 (CC BY 4.0) | https://creativecommons.org/licenses/by/4.0/

JOURNAL & ISSUE LINKS

Journal's Home Page – https://ijclp.iledu.in/

Journal's Editorial Page – https://ijclp.iledu.in/editorial-board/

Volume 4 and Issue 2 of 2026 (Access Full Issue on – https://ijclp.iledu.in/category/volume-4-and-issue-2-o

AIT Sovereign Verification Link – https://ijclp.iledu.in/IJCLP/WNDG-0001

ARTICLE IDENTIFICATION TAG

AIT: IJCLP/WNDG-0001

About AIT Verification:
AIT (Article Identification Tag) is ILE's sovereign identifier. Scan QR or visit link for live article verification & certificates.

PUBLISHER INFORMATION & COPYRIGHT DISCLAIMER

Publisher: Prasanna S, Chairman of Institute of Legal Education

No. 08, Arul Nagar, Seera Thoppu, Maudhanda Kurichi, Srirangam, Tiruchirappalli - 620102

Phone: +91 73059 14348 | Email: info@iledu.in / Chairman@iledu.in

(c) Institute of Legal Education - Copyright Disclaimer:

All rights are reserved with Institute of Legal Education. No part of the material published on this website (Articles or Research Papers including those published in this journal) may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher. For full details refer https://ijclp.iledu.in/terms-and-condition/.

INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY
VOLUME 4 AND ISSUE 2 OF 2026
APIS – 3920-0012 | ISSN - 2583-7990

Published by
Institute of Legal Education
https://iledu.in

THE ELECTRONIC ADMINISTRATIVE DECISION: LEGAL VALIDITY, PROCEDURAL GUARANTEES AND THE CHALLENGES OF DIGITAL TRANSFORMATION

AUTHOR - FARAH ABDULLAH MOHAMMED NOUR AL-AHMAD, INDEPENDENT AUTHOR, WISE, EMAIL - FARAHRSHEED99@GMAIL.COM

BEST CITATION - FARAH ABDULLAH MOHAMMED NOUR AL-AHMAD, THE ELECTRONIC ADMINISTRATIVE DECISION: LEGAL VALIDITY, PROCEDURAL GUARANTEES AND THE CHALLENGES OF DIGITAL TRANSFORMATION, *INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY,* 4 (2) OF 2026, PG. 01-23, APIS – 3920-0012 | ISSN - 2583-7990.

Abstract

The digital transformation of public administration has fundamentally altered the manner in which governmental authorities exercise their powers and interact with individuals. Administrative decisions, traditionally prepared, signed, recorded, and communicated through paper-based procedures, are increasingly being issued and delivered through electronic systems. Although this development offers considerable advantages in terms of administrative efficiency, accessibility, speed, and institutional accountability, it also raises important questions concerning the legal validity of electronic decisions and the protection of individual rights. The transition to digital administration cannot be regarded merely as a technical change in the form through which administrative decisions are expressed. Rather, it requires a reconsideration of the legal and procedural guarantees that govern the exercise of administrative authority.

This article examines the legal foundations and practical requirements for implementing electronic administrative decisions, with particular attention to their validity, procedural legitimacy, and enforceability. It argues that the legal recognition of an electronic decision does not, in itself, guarantee its legality. An electronic decision must satisfy the substantive and procedural requirements applicable to conventional administrative decisions, including competence, legal basis, proper purpose, procedural fairness, adequate reasoning, and effective notification. In addition, the electronic environment creates specific requirements concerning authentication, electronic signatures, data integrity, secure storage, accessibility, and the preservation of reliable administrative records.

The article adopts a comparative legal approach, focusing primarily on the Indonesian legal framework, particularly Law No. 30 of 2014 on Government Administration, while examining relevant developments in the United States and the European Union. It also considers the implications of automated administrative decision-making and the increasing use of artificial intelligence in public administration. The analysis demonstrates that electronic decision-making must remain subject to the principles of legality, transparency, accountability, equality, and effective judicial protection.

Digital systems should facilitate the lawful exercise of administrative discretion rather than obscure the identity of the decision-maker or weaken the individual's ability to understand and challenge an administrative act.

The article concludes that the successful implementation of electronic administrative decisions requires an integrated legal and institutional framework combining appropriate legislation, secure technological infrastructure, reliable electronic records, trained public officials, accessible digital services, and effective mechanisms of administrative and judicial review. The legitimacy of digital administration ultimately depends not on the sophistication of its technological systems, but on their capacity to strengthen the rule of law and protect the rights of those subject to administrative authority.

Keywords: Electronic Administrative Decision; Digital Administration; E-Government; Legal Validity; Electronic Signatures; Procedural Guarantees; Automated Decision-Making; Data Protection.

1. Introduction

Digital technology has become an increasingly important feature of contemporary public administration. Governments across the world are investing in electronic systems to improve the delivery of public services, simplify administrative procedures, facilitate communication with citizens, and strengthen institutional performance. One of the most significant consequences of this transformation is the gradual replacement of traditional paper-based administrative procedures with electronic processes through which administrative decisions are prepared, approved, issued, recorded, and communicated.

The electronic administrative decision represents an important development in the relationship between administrative authorities and individuals. Decisions concerning licences, permits, public benefits, registrations, taxation, employment, and other administrative matters can now be processed through digital platforms without requiring the physical preparation and delivery of documents. In principle, this development can reduce administrative delays, improve record-keeping, facilitate access to information, and make governmental action more traceable.

Nevertheless, the introduction of electronic decision-making raises questions that extend beyond the technical capacity of administrative institutions. Administrative decisions are legal acts through which public authorities exercise powers that may create, modify, or terminate rights and obligations. Their validity therefore depends upon compliance with the legal requirements governing the exercise of administrative authority. The adoption of electronic procedures does not remove these requirements, nor does the use of advanced technology automatically make an administrative decision lawful.

The distinction between the legal nature of an administrative decision and the medium through which it is expressed is particularly important. An administrative decision issued electronically remains an administrative act and must therefore satisfy the same fundamental legal standards applicable to decisions issued in writing. The authority issuing the decision must possess the necessary jurisdiction, act within the limits of its statutory powers, pursue a legitimate purpose, respect procedural requirements, and provide sufficient reasons where required by law.

At the same time, the electronic environment introduces additional legal and practical considerations. The administration must be capable of establishing the authenticity of the decision, identifying the official responsible for issuing it, verifying the integrity of its contents, determining the date on which it was issued and received, and preserving a reliable record of the procedures followed. These matters are not merely technical details. They may directly affect the enforceability of the decision, the calculation of time limits for administrative objections and judicial appeals, and the ability of courts to review the legality of administrative action.

The issue becomes more complex when electronic systems are used not only to transmit and record decisions but also to support or determine their substantive content. A distinction must therefore be drawn between an electronic administrative decision, in which technology serves as the medium for expressing an administrative decision, and an automated administrative decision, in which a computerised system or algorithm performs part or all of the assessment leading to the outcome. Although these concepts are closely related, they raise different legal questions. The former primarily concerns the legal recognition and integrity of electronic administrative acts, whereas the latter raises additional issues concerning administrative discretion, algorithmic transparency, human responsibility, and the possibility of challenging decisions generated through automated processes.

This distinction is increasingly relevant as public authorities employ data-driven systems in areas such as taxation, social welfare, immigration, licensing, public procurement, and the allocation of public services. The Council of Europe has recognised that the growing use of automated decision-making and artificial intelligence in public administration requires additional safeguards to protect transparency, accountability, and individual rights.

The Indonesian legal framework provides a particularly useful starting point for examining these developments. Law No. 30 of 2014 on Government Administration expressly recognises electronic administrative decisions. Article 38 establishes that government officials and bodies may issue decisions in electronic form and provides that such decisions have the same legal force as written decisions, taking effect upon receipt by the relevant party. The provision also addresses discrepancies between electronic and written versions and requires decisions imposing a financial burden on the state to be made in written form.

The significance of this provision lies in its recognition that electronic administrative decisions are not simply informal communications or technological substitutes for official documents. They are legally recognised forms of administrative action, subject to specific statutory conditions.

Nevertheless, legal recognition alone is insufficient. The effective implementation of electronic administrative decisions requires a broader regulatory framework addressing electronic transactions, digital authentication, information security, data protection, administrative records, and the procedural rights of individuals. Indonesia's Law No. 11 of 2008 on Electronic Information and Transactions, as subsequently amended, Government Regulation No. 71 of 2019 on the Operation of Electronic Systems and Transactions, and Presidential Regulation No. 95 of 2018 on the Electronic-Based Government System form important elements of this framework. The Personal Data Protection

Law No. 27 of 2022 further strengthens the legal context in which electronic administrative systems operate.

This article argues that the transition to electronic administrative decision-making should be understood as a legal and institutional transformation rather than a mere technological modernisation. The legitimacy of electronic decisions depends upon preserving the fundamental principles of administrative law while adapting procedural guarantees to the requirements of digital systems.

The article addresses five principal questions:

1. What is the legal nature of an electronic administrative decision, and how does it differ from an automated administrative decision?
2. What legal requirements must be satisfied for an electronic administrative decision to be valid and enforceable?
3. How can procedural guarantees, including notification, reasoning, access to information, and the right to challenge administrative action, be protected in a digital environment?
4. What technological and institutional conditions are necessary to ensure the authenticity, integrity, security, and accessibility of electronic administrative decisions?
5. How should administrative law respond to the increasing use of automated systems and artificial intelligence in governmental decision-making?

The study adopts a doctrinal and comparative legal methodology. It examines the Indonesian legislative framework as the principal case study and draws comparative insights from selected aspects of United States and European Union law. The international principles developed by the United Nations Commission on International Trade Law (UNCITRAL) are also considered in relation to the legal recognition of electronic records and signatures.

The article is organised into seven sections. Following this introduction, Section Two examines the concept and legal nature of electronic administrative decisions. Section Three analyses the relevant legal and regulatory framework. Section Four identifies the substantive and procedural conditions governing their validity. Section Five addresses the technical and institutional requirements for implementation. Section Six examines implementation challenges and comparative developments, including automated decision-making. The final section presents the principal findings and recommendations.

2. The Concept and Legal Nature of the Electronic Administrative Decision

2.1. Defining the Electronic Administrative Decision

An administrative decision is a legal expression of the will of an administrative authority, issued in the exercise of its legally conferred powers, with the intention of producing legal effects. Depending on its subject matter, such a decision may grant a right, impose an obligation, recognise a legal status, refuse an application, or otherwise affect the legal position of an individual or legal entity.

Traditionally, administrative decisions have been expressed through written documents bearing the signature of the competent official and communicated to the person concerned through established

administrative procedures. The development of electronic administration has changed the medium through which these decisions are prepared and communicated, without necessarily changing their underlying legal character.

For the purposes of this article, an electronic administrative decision may be defined as an administrative act issued, authenticated, recorded, or communicated through an electronic system by a competent public authority in the exercise of its legally established powers, with the intention of producing legal effects in relation to an individual or legal entity.

This definition highlights several essential elements.

First, the decision must originate from a competent administrative authority. The use of an electronic platform does not confer administrative jurisdiction upon an institution or official who otherwise lacks the necessary legal authority.

Secondly, the decision must express an administrative determination intended to produce legal consequences. Not every electronic message, notification, application status, or automated response constitutes an administrative decision. The distinction depends upon its legal function and the intention to create or affect rights and obligations.

Thirdly, the decision must be capable of being attributed to the competent authority. This requires reliable methods of authentication and identification of the official or institution responsible for its issuance.

Finally, the decision must satisfy the substantive and procedural requirements established by the applicable administrative law framework.

An electronic administrative decision is therefore not a separate category of administrative power. It is a technologically mediated form through which existing administrative powers are exercised.

2.2. Distinguishing Electronic Decisions from Automated Administrative Decisions

The increasing use of technology in public administration requires a distinction between electronic decision-making and automated decision-making.

An electronic administrative decision may be prepared and issued by a public official through a digital platform. The official examines the relevant facts, applies the applicable law, exercises any necessary discretion, and approves the final decision electronically. In this situation, technology primarily provides the means through which the administrative process is conducted and documented.

Automated administrative decision-making involves a different arrangement. It occurs where a computerised system performs substantive assessment or applies predetermined rules, data models, or algorithms to determine an administrative outcome, either independently or with varying degrees of human involvement.

The distinction is important because the legal risks are not identical.

In an ordinary electronic decision, the principal concerns relate to authentication, integrity, notification, record preservation, and the proper exercise of administrative competence.

In an automated decision, additional concerns arise regarding the accuracy and relevance of the data used, the transparency of the criteria applied, the possibility of discriminatory outcomes, the exercise of administrative discretion, and the availability of meaningful human review.

For example, an electronic system that records and transmits a decision granting a licence after approval by an authorised official involves electronic administration. A system that automatically refuses an application because an algorithm identifies the applicant as failing a specified eligibility criterion involves automated decision-making.

Both processes require legal safeguards, but the second requires particular attention to the reasoning behind the automated outcome and the ability of the affected person to challenge the system's assessment.

The distinction should be maintained throughout the development of digital administration. Otherwise, the legal recognition of electronic documents may incorrectly be treated as authorisation for the unrestricted use of automated systems in the exercise of public power.

2.3. The Legal Nature of Electronic Administrative Decisions

The legal nature of an electronic administrative decision remains fundamentally administrative.

Its validity derives from the legal authority of the issuing institution, the applicable rules governing administrative action, and compliance with the relevant procedural requirements. The electronic form does not transform the decision into a private electronic transaction or remove it from the scope of administrative law.

This conclusion has several implications.

First, the principles governing administrative competence continue to apply. An electronic system cannot lawfully issue a decision on behalf of an authority that lacks jurisdiction over the relevant subject matter.

Secondly, the principle of legality remains applicable. The authority must identify and comply with the legal basis for its action, irrespective of whether the decision is issued electronically or on paper.

Thirdly, procedural fairness must be preserved. Where the applicable law requires prior notice, an opportunity to respond, consultation, or a hearing, these requirements cannot be disregarded merely because the administrative procedure has been digitised.

Fourthly, the decision must remain attributable to the competent administrative institution. Technical service providers may support the operation of the system, but the legal responsibility for the exercise of administrative powers must remain with the authority to which those powers have been assigned.

Finally, the decision remains subject to the relevant administrative remedies and judicial supervision. Electronic issuance cannot be used to prevent individuals from obtaining an effective review of decisions that adversely affect their rights.

2.4. The Significance of Electronic Administrative Decisions

The adoption of electronic administrative decisions offers several potential advantages.

Administrative efficiency. Electronic systems can reduce the time required to prepare, approve, and communicate decisions. They may also reduce repetitive administrative work and facilitate coordination between public institutions.

Transparency and traceability. Properly designed systems can create records showing when a decision was prepared, reviewed, approved, amended, and communicated. These records may improve institutional accountability and assist in identifying procedural irregularities.

Accessibility of administrative services. Electronic platforms can enable individuals to submit applications, receive decisions, and obtain information without repeatedly attending government offices.

Improved record management. Electronic storage can facilitate the retrieval and preservation of administrative decisions, particularly where institutions deal with large volumes of records.

Consistency in administrative procedures. Standardised electronic workflows may reduce unnecessary procedural differences between administrative units, provided that standardisation does not eliminate legally required discretion.

These advantages, however, should not be overstated. Digital systems may also introduce new forms of exclusion, technical dependence, cybersecurity risks, and procedural errors. Their effectiveness must therefore be assessed in terms of both administrative performance and the protection of legal rights.

3. The Legal and Regulatory Framework Governing Electronic Administrative Decisions

3.1. The Indonesian Legal Framework

Indonesia provides an important legislative example of the formal recognition of electronic administrative decisions.

Law No. 30 of 2014 on Government Administration establishes a general framework governing the exercise of administrative powers and the adoption of administrative decisions and actions.

Article 38 is particularly significant because it expressly recognises decisions in electronic form.

The provision establishes that government bodies and officials may issue electronic decisions. It further provides that an electronic decision has the same legal force as a written decision and takes effect upon its receipt by the person concerned.

Article 38 also addresses the relationship between electronic and written versions of a decision. Where the written decision has not been communicated, the electronic version may apply. However, where discrepancies arise between the electronic and written versions, the written decision prevails. The provision additionally requires decisions that impose a financial burden on the state to be issued in written form.

This legislative approach is significant for two reasons.

First, it removes uncertainty concerning the legal recognition of administrative decisions issued through electronic systems.

Secondly, it demonstrates that the legislator does not treat digital administration as entirely detached from the established legal requirements governing administrative action. The provision recognises electronic form while retaining specific rules concerning legal effect and the protection of public financial interests.

However, Article 38 should not be read in isolation. The validity of an electronic administrative decision must also be examined in light of the broader requirements of Law No. 30 of 2014, including the provisions governing administrative authority, the principles of good governance, and the legal requirements applicable to administrative decisions.

3.2. Electronic Information and Transactions Legislation

The Indonesian legal framework also includes Law No. 11 of 2008 on Electronic Information and Transactions, as amended by Law No. 19 of 2016 and subsequently by Law No. 1 of 2024.

This legislation provides a broader legal framework for electronic information, electronic transactions, and electronic signatures.

Its relevance to electronic administrative decisions lies in the recognition of electronic information and the legal significance of electronic records and authentication mechanisms.

The importance of these rules should not be underestimated. An electronic administrative decision must be capable of being identified as an official act and distinguished from an unauthorised communication or an altered document.

Electronic signatures and authentication procedures can assist in establishing the identity of the issuing official and the integrity of the decision. However, the use of an electronic signature does not, by itself, establish that the decision is substantively lawful. The signature authenticates the act; it does not replace the legal requirements governing its issuance.

Government Regulation No. 71 of 2019 on the Operation of Electronic Systems and Transactions further develops the regulatory framework governing electronic systems, including matters relating to system reliability, security, and the responsibilities associated with operating electronic systems.

These provisions are particularly relevant where administrative decisions are issued and stored through government platforms or systems operated by external service providers.

3.3. The Electronic-Based Government System

Presidential Regulation No. 95 of 2018 on the Electronic-Based Government System (Sistem Pemerintahan Berbasis Elektronik – SPBE) represents an important element of Indonesia's digital government policy.

The regulation provides an institutional framework for the development and integration of electronic government systems. Its significance extends beyond the digitisation of individual administrative

procedures. It reflects a broader policy of integrating information systems and improving the coordination of public administration through technology.

The implementation of electronic administrative decisions should therefore be considered within the wider SPBE framework.

A decision-making platform cannot operate effectively if it remains isolated from the administrative records, identity verification systems, information security arrangements, and communication channels of the relevant public institutions.

Integration is necessary to ensure that electronic decisions can be reliably prepared, approved, transmitted, retrieved, and reviewed.

3.4. Personal Data Protection and Information Security

The expansion of electronic administrative systems necessarily involves the collection, processing, storage, and exchange of personal information.

Administrative authorities may process identity information, financial records, employment data, health information, family details, and other sensitive information when determining applications or exercising regulatory powers.

Indonesia's Law No. 27 of 2022 on Personal Data Protection establishes a specific legal framework governing the protection of personal data and the obligations of entities involved in its processing.

This legislation is relevant to electronic administrative decisions because the administration must ensure that personal data is processed lawfully and protected against unauthorised access, disclosure, alteration, or misuse.

The obligation to protect personal data should be considered throughout the decision-making process, from the initial collection of information to the storage and eventual retention or destruction of administrative records.

Security measures must also be proportionate to the sensitivity of the information and the potential consequences of unauthorised access.

3.5. International Legal Principles

The international legal framework provides useful guidance concerning the recognition and reliability of electronic records.

The UNCITRAL Model Law on Electronic Commerce 1996 is based on three important principles: non-discrimination against electronic means, functional equivalence, and technological neutrality.

The principle of non-discrimination means that information should not be denied legal effect merely because it is presented electronically.

Functional equivalence focuses on whether electronic methods can perform the legal functions traditionally associated with paper-based documents, such as providing accessible information, identifying the author, and preserving the integrity of the record.

Technological neutrality seeks to avoid making legal recognition dependent upon a particular technological solution.

These principles provide a useful conceptual foundation for electronic administrative decision-making. They support the legal recognition of electronic records while allowing national legal systems to establish specific requirements appropriate to the exercise of public authority.

The UNCITRAL Model Law is not, however, a complete framework for administrative decision-making. It primarily addresses electronic commerce and should therefore be used as a reference for electronic legal form and evidentiary recognition, rather than as a substitute for administrative law requirements.

4. Legal Requirements and Procedural Guarantees for Valid Electronic Administrative Decisions

4.1. Competence and Legal Authority

The first requirement of a valid administrative decision is the existence of lawful competence.

An administrative authority must act within the powers conferred upon it by legislation. This principle remains unchanged when the decision is issued electronically.

The use of a centralised electronic platform does not transfer the statutory competence of one authority to another. Nor does it authorise an employee or technical administrator to exercise a decision-making power that has not been legally assigned to that person.

Electronic systems should therefore incorporate mechanisms that identify the authorised decision-maker and distinguish between officials responsible for preparing, reviewing, approving, and communicating decisions.

The distinction is particularly important in institutions where several administrative levels participate in the decision-making process.

4.2. Compliance with Substantive Legal Requirements

An electronic administrative decision must satisfy the substantive legal requirements governing the exercise of administrative power.

These include the existence of a lawful basis, the pursuit of a legitimate administrative purpose, compliance with the limits of discretion, and respect for the principles of equality and proportionality.

The digital environment may facilitate the application of standardised procedures, but standardisation must not become a substitute for legal assessment.

For example, an electronic licensing system may automatically identify missing documents or calculate whether an application meets specified technical criteria. However, where the applicable law requires the exercise of discretion or an assessment of individual circumstances, the system must not eliminate that legal responsibility.

The administration must ensure that technological processes remain consistent with the substantive law governing the relevant decision.

4.3. Authentication and Electronic Signatures

Authentication is a central requirement for establishing the legal reliability of electronic administrative decisions.

An electronic decision must be attributable to the authority responsible for issuing it. The system should provide reliable evidence of the identity of the approving official and the date and time of approval.

Electronic signatures may serve this function, particularly where they are supported by appropriate authentication and security mechanisms.

Nevertheless, the legal significance of an electronic signature must be distinguished from the validity of the administrative decision itself.

A decision may be electronically signed but remain unlawful because it was issued by an incompetent authority, lacked a statutory basis, or violated mandatory procedural requirements.

Conversely, an administrative decision should not be rejected solely because it is expressed in electronic form where the applicable law recognises electronic records and the relevant authentication requirements have been satisfied.

4.4. The Duty to Give Reasons

The obligation to provide reasons is an important guarantee of administrative legality and accountability.

Reasons enable the affected individual to understand why a decision was adopted and provide a basis for assessing whether the administration has acted lawfully.

In an electronic environment, the provision of reasons becomes particularly important because the individual may receive the outcome through a short digital notification or a standardised message without having direct access to the administrative assessment underlying the decision.

The electronic decision should therefore provide, where legally required, sufficient information concerning:

- The legal basis of the decision.
- The relevant facts considered by the authority.
- The principal considerations supporting the outcome.
- The reasons for accepting or rejecting the application.
- The available administrative or judicial remedies.
- The relevant time limits for challenging the decision.

The duty to provide reasons should not be reduced to the insertion of standard phrases into electronic forms. The reasons must be sufficiently connected to the individual circumstances of the case.

Where an automated system contributes to the decision, the authority should also be able to explain the principal criteria and data that materially influenced the outcome.

4.5. Notification and the Legal Effect of the Decision

Notification is a particularly important element of electronic administrative decision-making because it may determine when the decision becomes legally effective and when the period for challenging it begins.

Article 38(3) of the Indonesian Law No. 30 of 2014 provides that an electronic administrative decision has the same legal force as a written decision and takes effect upon receipt by the person concerned.

This rule raises practical questions concerning what constitutes receipt in an electronic environment.

The mere act of uploading a decision to an administrative website should not necessarily be treated as proof that the affected individual has received it, particularly where the person has not been properly informed that the decision is available.

A reliable notification mechanism should therefore establish:

1. The identity of the intended recipient.
2. The electronic address or account used for communication.
3. The date and time at which notification was transmitted.
4. Evidence that the notification reached the designated system or account.
5. The availability of the decision in a form that can be accessed and retained.
6. The means by which the recipient can obtain assistance if access is unsuccessful.

The legal framework should also clarify the consequences of technical failure, incorrect contact information, system outages, or other circumstances that prevent effective notification.

These safeguards are essential to ensure that individuals are not deprived of the opportunity to challenge an administrative decision because of failures in the electronic communication system.

4.6. The Right to Be Heard and Procedural Fairness

Digital administration must preserve the procedural rights of individuals.

Where the applicable law requires an opportunity to present arguments, submit evidence, respond to allegations, or participate in a hearing, these requirements must continue to be respected.

Electronic platforms may facilitate the exercise of these rights through online submissions, electronic document exchange, and remote hearings.

However, the availability of digital communication does not automatically establish that procedural fairness has been achieved.

The administration must consider whether the affected person has received adequate notice, sufficient time to respond, access to relevant information, and a genuine opportunity to influence the decision.

The use of automated procedures should not be allowed to eliminate an opportunity to be heard where such an opportunity is legally required.

4.7. Access to Administrative Records and Judicial Review

One of the principal advantages of electronic administrative systems is their potential to preserve a detailed record of the decision-making process.

A properly designed system should retain the documents and information necessary to reconstruct the administrative process, including the original application, supporting evidence, internal reviews, approvals, communications, and the final decision.

This record is important for several reasons.

First, it assists administrative authorities in responding to complaints and reviewing their own decisions.

Secondly, it enables individuals to obtain information relevant to their legal position.

Thirdly, it allows courts to examine whether the decision was issued by a competent authority, whether the required procedure was followed, and whether the reasons for the decision are legally sufficient.

The availability of a reliable electronic record is therefore an essential component of effective judicial review.

5. Technical and Institutional Requirements for Implementation

5.1. Reliable Technological Infrastructure

The implementation of electronic administrative decisions requires a reliable technological infrastructure capable of supporting the preparation, approval, transmission, and preservation of administrative records.

The infrastructure generally includes secure servers, suitable software applications, reliable networks, identity management systems, and appropriate backup arrangements.

The technical design should reflect the legal significance of the information being processed. A system used to issue decisions affecting legal rights cannot be treated as an ordinary administrative database.

Reliability must therefore be assessed not only in terms of speed and operational performance but also in terms of accuracy, availability, security, and the ability to preserve the integrity of official records.

The choice of technology should also take account of the institution's resources, maintenance capacity, and long-term requirements. An advanced system that cannot be maintained or updated may ultimately undermine the continuity of administrative services.

5.2. Data Management and Record Preservation

Electronic administrative decisions depend upon the effective management of information throughout the life cycle of administrative records.

A decision-making system should be capable of recording the creation, approval, amendment, transmission, retrieval, and retention of each decision.

An audit trail is particularly important. It should make it possible to identify who accessed or modified a record, when the relevant action occurred, and the nature of the change.

Where a decision is corrected or replaced, the system should preserve sufficient information concerning the original version and the legal basis for the subsequent action.

This is necessary to prevent unauthorised alteration and to ensure that the administration can demonstrate the history of the decision.

Record retention policies should also be established in accordance with applicable legal requirements. Some administrative decisions may need to be preserved for extended periods because they affect continuing legal relationships, financial obligations, property rights, or other matters that may be examined years after their issuance.

The system should therefore support secure storage, retrieval, transfer, and migration of records without compromising their authenticity or integrity.

5.3. Cybersecurity and Protection Against Unauthorised Access

Cybersecurity is an essential requirement for the legitimacy and continuity of electronic administrative decision-making.

Unauthorised access, data manipulation, identity theft, and system disruption may affect the reliability of administrative decisions and undermine public confidence in digital government.

Security measures should include appropriate access controls, authentication procedures, encryption where necessary, regular security assessments, backup systems, and incident-response arrangements.

The administration should also establish clear responsibilities for managing security risks and responding to breaches.

Where external technology providers participate in operating administrative platforms, contractual and regulatory arrangements should ensure that the public authority retains appropriate oversight and control over the systems and records used in exercising its legal powers.

5.4. Integration with Existing Administrative Systems

The implementation of electronic decisions should not take place in isolation from the wider administrative environment.

Public institutions frequently operate multiple information systems relating to applications, registries, finance, human resources, licensing, and other administrative functions.

If these systems cannot communicate effectively, the administration may face duplicated data entry, inconsistent records, delays, and errors.

Integration should therefore be based on common standards for data exchange, secure interoperability, consistent identification procedures, and clearly allocated institutional responsibilities.

However, integration must also respect the legal limits governing access to and exchange of personal information.

The objective should be to improve administrative coordination without creating unnecessary or unrestricted circulation of personal data between public institutions.

5.5. Accessibility and Digital Inclusion

An electronic administrative system should be accessible to the individuals who are expected to use it.

The availability of online services does not guarantee equal access. Some individuals may lack reliable internet access, appropriate devices, digital literacy, or the ability to use particular interfaces because of disability or other circumstances.

If administrative decisions are communicated exclusively through electronic channels without adequate alternatives or assistance, digital transformation may create new barriers to the exercise of legal rights.

Accessibility should therefore be incorporated into the design of the system from the beginning.

This includes clear navigation, understandable language, compatibility with assistive technologies, appropriate presentation of information, and accessible methods of obtaining support.

Where necessary, alternative procedures should remain available to ensure that individuals are not excluded from administrative services because they cannot reasonably use the digital platform.

5.6. Human Resources and Institutional Capacity

The successful implementation of electronic administrative decisions depends upon the competence of the officials responsible for using the system.

Public officials must understand not only how to operate the technology but also the legal consequences of the decisions they issue.

Training should address administrative competence, procedural requirements, electronic signatures, information security, data protection, record management, and the handling of applications and objections.

Officials should also understand the distinction between decisions that may be processed through standardised digital workflows and decisions that require individual assessment or the exercise of administrative discretion.

Institutional capacity-building should be continuous. Changes in technology, legislation, and administrative practice require regular training and updated operational guidance.

INTERNATIONAL JOURNAL ON CYBERSPACE LAW AND POLICY
VOLUME 4 AND ISSUE 2 OF 2026
APIS – 3920-0012 | ISSN - 2583-7990
Published by
Institute of Legal Education
https://iledu.in

6. Implementation Challenges and Comparative Developments

6.1. Planning and Institutional Readiness

The implementation of electronic administrative decisions should be treated as an institutional reform project rather than a purely technical exercise.

Introducing a digital platform may require changes to administrative procedures, internal responsibilities, approval structures, record management, and communication practices.

Before implementation, public authorities should assess their existing procedures, identify legal and technical gaps, and determine whether their institutional capacity is sufficient to operate the proposed system.

A phased approach may be more appropriate than immediate institution-wide implementation, particularly where existing administrative systems are complex or where the relevant officials require additional training.

Pilot projects can help identify technical difficulties, procedural weaknesses, and accessibility problems before the system is extended to a larger number of users.

6.2. Stakeholder Engagement and Administrative Change

The implementation of electronic administrative decisions affects more than the officials responsible for issuing them.

It also affects applicants, businesses, legal representatives, service providers, oversight bodies, and courts that may subsequently review the decisions.

Their participation in the design and assessment of electronic systems can help identify practical difficulties that may not be apparent during technical development.

Consultation is particularly important where the system changes the method of notification, the documents required from applicants, the means of submitting objections, or the procedure for obtaining copies of administrative records.

Resistance to technological change should not automatically be regarded as an obstacle to progress. It may reveal legitimate concerns about the accessibility, reliability, or legal consequences of the proposed system.

Effective implementation therefore requires communication, consultation, and a willingness to modify systems where necessary to protect procedural rights and improve usability.

6.3. Training and Capacity Building

Training should be tailored to the responsibilities of different groups of users.

Officials who prepare administrative decisions may require training in the use of electronic workflows and the proper recording of supporting documents.

Officials authorised to approve decisions should understand the legal significance of electronic authentication and the continuing application of administrative law principles.

Technical personnel should understand the security and record-management requirements associated with official administrative documents.

Members of the public should also have access to clear guidance explaining how to submit applications, receive decisions, retrieve records, and exercise available remedies.

Training should include practical exercises and opportunities to identify problems before the system becomes fully operational.

6.4. Monitoring and Evaluation

The performance of electronic administrative systems should be assessed continuously.

Evaluation should not be limited to measuring the number of transactions completed or the time saved. These indicators provide useful information about administrative efficiency but do not establish whether the system is producing lawful and fair decisions.

A more comprehensive evaluation should consider:

- The accuracy and consistency of administrative decisions.
- Compliance with statutory procedures.
- The reliability of electronic notification.
- The frequency and causes of technical failures.
- The security of administrative records.
- The accessibility of the platform.
- The number and nature of complaints and appeals.
- The time required to resolve administrative objections.
- The effectiveness of record retrieval and judicial review.
- The satisfaction of users and administrative personnel.

Independent evaluation may be particularly useful where the system processes sensitive information or has a significant effect on individual rights.

The results should inform regular improvements and, where necessary, the redesign or replacement of systems that do not adequately satisfy legal and operational requirements.

6.5. The United States: Electronic Records and Administrative Procedure

The United States provides a useful comparative perspective concerning the legal recognition of electronic records and the procedural obligations of administrative agencies.

The Administrative Procedure Act (APA), codified in Title 5 of the United States Code, establishes important procedural requirements governing federal administrative action.

Section 555(e) requires prompt notice of the denial, in whole or in part, of a written application, petition, or other request made in connection with an agency proceeding. Except where the denial affirms an earlier decision or is self-explanatory, the notice must include a brief statement of the grounds for denial.

Although this provision does not establish a comprehensive system for electronic administrative decisions, it illustrates the continuing importance of notice and reasons in administrative procedures.

The Electronic Signatures in Global and National Commerce Act (E-SIGN Act 2000), codified at 15 USC § 7001, establishes that an electronic signature, contract, or record relating to a transaction in or affecting interstate or foreign commerce cannot be denied legal effect solely because it is in electronic form.

However, the Act should not be interpreted as a general authorisation for every federal administrative decision to be issued electronically. Its scope and statutory limitations must be considered, and the legal requirements governing the relevant administrative action remain applicable.

The American experience therefore illustrates an important principle: the legal recognition of electronic records and signatures must operate alongside, rather than replace, the procedural guarantees established by administrative law.

6.6. The European Union: Data Protection and Automated Decision-Making

The European Union provides a particularly relevant framework for examining the relationship between digital administration, personal data, and automated decision-making.

The General Data Protection Regulation (GDPR), Regulation (EU) 2016/679, establishes safeguards concerning the processing of personal data and the use of automated individual decision-making.

Article 22 addresses decisions based solely on automated processing, including profiling, where those decisions produce legal effects concerning an individual or similarly significantly affect that person.

The provision establishes a general right not to be subject to such decisions, subject to specified exceptions. Where applicable exceptions are relied upon, safeguards must be provided to protect the individual's rights and freedoms, including, in relevant circumstances, the right to obtain human intervention, express a point of view, and contest the decision.

The significance of Article 22 extends beyond private-sector data processing. It is relevant to public administration where governmental authorities use automated systems to determine matters affecting individuals.

However, the GDPR does not establish a general prohibition on electronic administrative decisions. Its principal concern in this context is the protection of personal data and the consequences of decisions based solely on automated processing.

The distinction between electronic issuance and automated determination therefore remains essential.

The European framework demonstrates that the digitisation of administrative procedures must be accompanied by safeguards concerning the use of personal data, transparency, and the ability of affected individuals to challenge significant automated outcomes.

6.7. The Emerging Challenge of Artificial Intelligence in Public Administration

The increasing use of artificial intelligence introduces a further dimension to electronic administrative decision-making.

AI systems may be used to classify applications, detect irregularities, assess eligibility, identify patterns, or support officials in evaluating complex administrative matters.

These applications may improve the speed and consistency of certain administrative processes. However, they may also introduce risks relating to inaccurate data, algorithmic bias, insufficient explanation, and the transfer of practical decision-making authority from public officials to technological systems.

One of the central legal questions is whether an administrative authority can remain accountable for a decision when a substantial part of the assessment has been performed by an algorithm that cannot readily be explained or examined.

The answer should be grounded in the principle that administrative responsibility cannot be displaced merely by delegating technical functions to a digital system.

The public authority remains responsible for ensuring that the decision is lawful, that the relevant information is accurate, and that the affected individual has access to an effective means of challenging the outcome.

The Council of Europe has emphasised the importance of transparency, accountability, human rights protection, and appropriate safeguards in the use of automated decision-making and artificial intelligence by public authorities.

Accordingly, the use of AI in administrative decision-making should be accompanied by:

1. A clear legal basis for the use of the relevant system.
2. Prior assessment of potential effects on individual rights.
3. Reliable and relevant data.
4. Appropriate testing for discriminatory or inaccurate outcomes.
5. Meaningful human oversight where required by law or the nature of the decision.
6. Sufficient explanation of the principal factors influencing the outcome.
7. Effective procedures for correction, reconsideration, and appeal.
8. Clear allocation of responsibility between the administrative authority and any external technology provider.

The use of artificial intelligence should therefore be regarded as a further development of digital administration that requires additional legal safeguards, rather than as a reason to weaken the established principles of administrative law.

7. Conclusion and Recommendations

The electronic administrative decision has become an important instrument in the transformation of contemporary public administration. By enabling administrative authorities to prepare, approve,

record, and communicate decisions through digital systems, it offers opportunities to improve efficiency, accessibility, institutional coordination, and accountability.

However, the analysis demonstrates that the legal validity of an electronic administrative decision cannot be established solely by confirming that it has been generated or transmitted through an authorised electronic platform. Its legitimacy continues to depend upon compliance with the substantive and procedural requirements governing administrative action.

The first principal conclusion is that electronic form does not alter the fundamental legal nature of an administrative decision. Competence, legality, proper purpose, procedural fairness, and the duty to provide reasons remain essential requirements.

Secondly, the electronic environment creates additional conditions concerning authentication, electronic signatures, notification, data integrity, secure storage, and the preservation of administrative records. These conditions are necessary to establish the reliability of decisions and to ensure that individuals and courts can examine the procedures through which they were adopted.

Thirdly, effective notification deserves particular attention. Where the legal effect of a decision or the commencement of a period for appeal depends upon receipt, administrative authorities must be able to demonstrate that the decision was made available to the correct recipient through a reliable communication process.

Fourthly, cybersecurity and personal data protection are indispensable components of digital administration. The collection and processing of information through electronic systems must remain subject to appropriate legal safeguards, particularly where administrative decisions affect sensitive personal or financial interests.

Fifthly, electronic administrative decisions must be distinguished from automated administrative decisions. The use of technology to issue and communicate a decision does not necessarily involve the delegation of substantive decision-making to an algorithm. Where automated systems are used to determine or materially influence outcomes, additional safeguards are necessary to ensure transparency, accountability, and effective review.

The comparative examination of Indonesia, the United States, and the European Union demonstrates that the legal recognition of electronic records must operate alongside the procedural guarantees established by administrative law. The Indonesian framework, particularly Article 38 of Law No. 30 of 2014, provides an express statutory basis for electronic administrative decisions. The American framework illustrates the continuing importance of notice and reasons, while the European framework offers significant safeguards concerning automated decision-making and personal data protection.

On the basis of these findings, the following recommendations are proposed:

1. Developing a comprehensive legal framework. Legislators should ensure that the rules governing electronic administrative decisions clearly address their legal form, authentication, notification, evidentiary value, retention, and enforceability.

2. Preserving the principles of administrative legality. The adoption of electronic systems should not reduce the legal requirements governing administrative competence, statutory authority, proper purpose, procedural fairness, or the exercise of discretion.

3. Establishing reliable authentication mechanisms. Administrative authorities should adopt secure electronic signature and identity-verification procedures capable of establishing the authenticity and integrity of official decisions.

4. Strengthening notification procedures. Legislation and administrative regulations should clarify when an electronic decision is deemed to have been received and how receipt may be demonstrated, particularly where notification determines the commencement of appeal periods.

5. Ensuring adequate reasoning and access to information. Individuals should be able to understand the legal and factual grounds of decisions affecting them and obtain access to relevant administrative records in accordance with applicable law.

6. Protecting personal data and administrative records. Public authorities should establish clear rules governing the collection, processing, storage, access, retention, and secure destruction of information used in electronic decision-making.

7. Ensuring digital accessibility. Electronic administrative services should be designed to accommodate persons with disabilities and individuals who may face technological or digital-literacy barriers. Appropriate alternative channels should be maintained where necessary.

8. Introducing safeguards for automated decision-making. Where algorithms or artificial intelligence systems are used to determine or materially influence administrative outcomes, authorities should ensure appropriate transparency, human oversight, accountability, and effective opportunities to challenge adverse decisions.

9. Strengthening institutional capacity. Continuous training should be provided to administrative officials, technical personnel, and other relevant users to ensure that electronic systems are operated in accordance with both legal and technical requirements.

10. Establishing continuous monitoring and evaluation. The performance of electronic administrative systems should be assessed not only by reference to speed and cost reduction but also by their impact on the legality, fairness, accessibility, and reliability of administrative decisions.

Ultimately, the success of electronic administrative decision-making should not be measured solely by the extent to which public institutions replace paper documents with digital platforms. Its real value lies in whether technology enables public authorities to exercise their powers more effectively while strengthening the legal protection available to individuals.

Digital transformation should therefore be understood as a means of improving administrative governance, not as an exception to the principles that govern it. The electronic administrative decision will achieve its intended purpose only when technological efficiency is accompanied by legal certainty, transparency, accountability, and effective protection of individual rights.

References

A. Legislation and International Legal Instruments

1. Administrative Procedure Act, 5 USC §§ 551–559 (United States).
2. Electronic Signatures in Global and National Commerce Act 2000, 15 USC §§ 7001–7031 (United States).
3. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation).
4. Indonesia, Law No. 30 of 2014 concerning Government Administration.
5. Indonesia, Law No. 11 of 2008 concerning Electronic Information and Transactions, as amended by Law No. 19 of 2016 and Law No. 1 of 2024.
6. Indonesia, Law No. 27 of 2022 concerning Personal Data Protection.
7. Indonesia, Government Regulation No. 71 of 2019 concerning the Operation of Electronic Systems and Transactions.
8. Indonesia, Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System.
9. UNCITRAL, Model Law on Electronic Commerce with Guide to Enactment 1996 (United Nations 1999).
10. UNCITRAL, Model Law on Electronic Signatures with Guide to Enactment 2001 (United Nations 2002).

B. Books

1. Dunleavy P, Margetts H, Bastow S and Tinkler J, *Digital Era Governance: IT Corporations, the State, and E-Government* (Oxford University Press 2006).
2. Fountain JE, *Building the Virtual State: Information Technology and Institutional Change* (Brookings Institution Press 2001).
3. Mashaw JL, *Due Process in the Administrative State* (Yale University Press 1985).
4. Kettl DF, *The Transformation of Governance: Public Administration for Twenty-First Century America* (Johns Hopkins University Press 2002).

C. Academic Journal Articles

1. Citron DK, 'Technological Due Process' (2008) 85 Washington University Law Review 1249.
2. Coglianese C and Lehr D, 'Regulating by Robot: Administrative Decision Making in the Machine-Learning Era' (2017) 105 Georgetown Law Journal 1147.
3. Yeung K, 'Algorithmic Regulation: A Critical Interrogation' (2018) 12(4) Regulation & Governance 505.

D. Institutional and Policy Publications

1. Council of Europe, *The Administration and You: A Handbook* (3rd edn, Council of Europe 2024).
2. OECD, *The OECD Digital Government Policy Framework: Six Dimensions of a Digital Government* (OECD Public Governance Policy Papers No 02, 2020).

3. United Nations Department of Economic and Social Affairs, *United Nations E-Government Survey 2024*: *Accelerating Digital Transformation for Sustainable Development* (United Nations 2024).