



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

Bouziane Bouchra *

PhD Student University of Abbas Laghrour,
Khenchela Algeria
bouziane.bouchra@univ-khenchela.dz

Djabaili Sabrina

University of Abbas Laghrour, Khenchela
Algeria
sabrina.djebaili@univ-khenchela.dz

Received: 16/04 /2026

Accepted: 15/08 /2026

Published: 22/09/2026

Abstract:

This article examines the role of electronic contracting in enhancing the principle of procedural transparency in public procurement. It analyzes the concept of transparency and its legal foundations within Algerian legislation, while highlighting the impact of digital transformation on reinforcing this principle. The study also emphasizes how electronic systems contribute to reducing administrative and financial corruption by ensuring access to information, equal opportunities, and minimizing human intervention. The article concludes that electronic contracting constitutes an effective tool for promoting integrity and good governance, despite the challenges that require continuous legal and technical improvements.

Keywords: Electronic Contracting - Public Procurement - Procedural Transparency - Digital Administration - Good Governance - Anti-Corruption - Electronic Information Disclosure - E-Administration

* Corresponding author

ملخص :

يتناول هذا المقال دور التعاقد الإلكتروني في تعزيز مبدأ شفافية الإجراءات في مجال الصفقات العمومية، من خلال تحليل مفهوم الشفافية وأسسها القانونية في التشريع الجزائري، إضافة إلى إبراز أثر الرقمنة في تكريس هذا المبدأ. كما يسلط الضوء على دور الأنظمة الإلكترونية في الحد من الفساد الإداري والمالي عبر ضمان علنية المعلومات، وتكافؤ الفرص، وتقليص التدخل البشري. ويخلص المقال إلى أن التعاقد الإلكتروني يمثل أداة فعالة لدعم النزاهة وتحقيق الحوكمة الرشيدة، رغم ما يطرحه من تحديات تستدعي تعزيز الإطار القانوني والتقني.

الكلمات المفتاحية: التعاقد الإلكتروني - الصفقات العمومية - شفافية الإجراءات - الرقمنة الإدارية - الحوكمة الرشيدة - مكافحة الفساد - النشر الإلكتروني للمعلومات الإدارية الإلكترونية

Introduction

Public procurement constitutes one of the most important mechanisms through which the state implements its economic and social policies, given its direct connection to the management of public funds and the achievement of the public interest. To ensure proper use of these funds, the legislator has established a set of fundamental principles that govern the process of awarding public contracts, foremost among which are the principles of freedom of competition, equality among economic operators, and procedural transparency.

However, rapid technological developments and the resulting shift toward e-administration have reshaped public contracting methods, making electronic contracting a modern tool that relies on digital media throughout all stages of contract awarding, from announcement to award. This shift has introduced new challenges but has also created significant opportunities to reinforce governance principles, particularly transparency.

In the digital environment, transparency is no longer merely an ethical obligation; it has become a legal and technical necessity imposed by the nature of electronic systems, which rely on information disclosure, documentation of procedures, and ensuring traceability. This strengthens the trust of economic

operators in public administration and mitigates corruption and deviation, which have historically affected public procurement.

Thus, electronic contracting emerges as an effective tool to consolidate procedural transparency, by providing mechanisms for immediate disclosure, equal access to information, and reducing human intervention, which contributes to equality among competitors and ensures the integrity of the contracting process.

Amid the shift toward digitalization and the adoption of electronic contracting in public procurement, the following research question arises:

To what extent does electronic contracting contribute to activating the principle of procedural transparency in public procurement, and how effective is it in reducing corruption and enhancing contractual integrity? This can be further broken down into the following sub-questions:

- What is meant by the principle of procedural transparency in the digital environment?
- What is the legal basis of this principle under Algerian legislation?
- How do electronic means practically contribute to its enforcement?
- To what extent is electronic contracting a preventive mechanism against corruption?

To answer this question and illustrate how digital tools affect the principle of transparency, we must first define procedural transparency (first section), then explain its legal foundation (second section), and finally, demonstrate how procedural transparency serves as an effective shield against corruption in public procurement (third section).

Section One: The Concept of Procedural Transparency

The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

In the context of digitalization, the dissemination of information via electronic portals and the documentation of all contract stages have become essential to ensure administrative neutrality and prevent manipulation. Electronic contracting relies on the immediate exchange of data and precise tracking of processing steps. Consequently, procedural transparency in electronic public procurement is not merely an ethical value but a legal obligation enshrined by the legislator across all stages of public tendering, allowing economic operators to access, understand, and monitor processes. This enhances trust in the contracting system and protects it from any form of deviation or opacity.¹

Procedural transparency ensures equality among contractors and equal opportunity through the uniform treatment of all competitors concerning deadlines and procedures. It entails clarity and understanding of legislative and regulatory rules, as well as easy access to actual practices—akin to looking through a perfectly clean transparent glass window. Transparency aims to promote openness, clarity, and accountability, removing the fog and opacity that previously created distrust between the government and the private sector.² Transparency involves the free flow of information in its broadest sense, providing stakeholders with necessary information to protect their interests, make timely decisions, and learn from mistakes. It encompasses two aspects:

1. Clarity of procedures and credibility of information and data provided by public and private entities, including planning, financing, and implementation to achieve announced goals.
2. The relationship between stakeholders and the services provided, ensuring their right to access accurate and timely information..³

¹ - Al-Safi, Hisham Abdel-Sayed Mohamed, *The Legal System of Electronic Administration Contracting*, 1st edition, Dar Al-Kutub Al-Qanuniya, UAE, 2017, P59.

² -Zouzou, Zolikhha, "Control as a Mechanism to Prevent Public Procurement Crimes," *Journal of Rights and Freedoms*, No. 62, University of Biskra, 2016, P536.

³ - Al-Azzawi, Reem Ali Ihsan Mohamed, *Methods of Concluding Administrative Contracts*, 1st edition, Al-Wafa Legal Library, Alexandria, 2014, P65.

The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

Globally, transparency is used as a key anti-corruption tool, enabling the public to understand state policies and administration practices, thereby reducing opaque and unshared decision-making. In public procurement, transparency ensures that bidders or suppliers can verify that the contract award process is conducted through clear and impartial means..⁴

ransparency is one of the most important instruments of good governance, guaranteeing individuals' rights to access information relevant to their legal and administrative status. In Algeria, electronic portals for ministries, agencies, and public institutions have emerged to facilitate information flow and enhance transparency in file management. Full transparency within digital organizations results from electronic oversight, which ensures accountability for services provided. Transparency bridges citizens, civil society, and authorities responsible for public services, enabling comprehensive participation in governance.⁵

Procedural transparency is critical for both the contracting state and foreign economic operators, as it provides access to information on the economic, financial, and technological status of potential partners, as well as legal, economic, and social aspects. Transparent procedures, particularly in tendering and candidate selection, must be clear and free from ambiguity to avoid discouraging participants and limiting competition.⁶

ransparency in the field of public procurement is defined as a system that allows bidders, suppliers, or other stakeholders to ensure that the process of selecting a contractor with a government entity is conducted through clear and impartial means. Generally, the principle of transparency is considered one of the most important tools of good governance. Individuals have the right to be informed about all matters related to their legal position, and the administration may not exercise any form of

⁴- Boudiab, Amar, *Explanation of the Algerian Wilaya Law*, 1st edition, Jisoor Publishing, Algiers, 2012, p. 18

⁵ - Kharchi, Al-Noui, *Public Procurement (Analytical, Critical, and Complementary Study)*, Dar Al-Huda, Algiers, 2018, p. 125

⁶ -Issam Abdel-Fattah Matar, *Administrative Corruption: Its Nature, Causes, Manifestations, International and National Documents on its Combat, the Role of Governmental and Non-Governmental Institutions in Combating Corruption*, New University Press, Alexandria, Egypt, 2011, p. 260



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

negative conduct that deprives them, for example, of accessing information that concerns them under the pretext of professional secrecy.⁷

Accordingly, Algeria has, for some time, witnessed the emergence of electronic portals for ministries, centers, and public bodies to facilitate the dissemination of information and to enhance transparency in the management of files. Full transparency within electronic organizations is regarded as the outcome of electronic oversight, ensuring periodic accountability for all services provided. Transparency serves as a bridge linking citizens and civil society institutions on one side, and the authorities responsible for public service functions on the other, allowing the entire society to participate in governance vision.⁸ The principle of transparency is considered one of the most modern guarantees due to its dual nature, which serves the interests of the contracting state, eager to understand the economic, financial, and technological conditions of foreign operators who seek to know all relevant information regarding the business and investment climate in the contracting state, including legal, economic, and even social characteristics. The importance of this principle also lies in the fact that it serves as the driving force for other principles.⁹

Procedures for calling for tenders, selecting candidates, and other transparent processes must be clear and free of ambiguity, and should not restrict the scope of competition. The lack of clarity in procedures should not discourage any economic operators, traders, or artisans from submitting their offers.¹⁰

Section Two: The Legal Basis of the Principle of Procedural Transparency in Electronic Public Procurement

⁷- Zouzo Zolikha, Crimes of Public Procurement and Mechanisms to Combat Them in Algerian Legislation, op. cit., p. 270.

⁸- Ammar Boudiaf, Explanation of the Organization of Public Procurement (Part One), 6th ed., Jisr Publishing and Distribution, Algiers, 2019, p. 84

⁹ - Bouabdallah Oudan & Mohamed El-Béchir Merkan, The Public Procurement Electronic Portal: Towards Better Public Service within the Framework of E-Government, op. cit., p. 108

¹⁰- Abdelwahab Aalaq, Guarantees in Contracts with an International Dimension, Part Two, PhD Thesis submitted for the degree of Doctor of Law, Public Law specialization, Faculty of Law and Political Science, University of Badji Mokhtar, Annaba, 2016–2017, p. 1053



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

Transparency constitutes one of the fundamental pillars upon which the public procurement system is built, and its importance increases in the digital environment, as it represents an effective mechanism to protect public funds from waste and manipulation. It also contributes to creating an environment characterized by integrity and tightening the constraints on administrative and financial corruption. Transparency enables all relevant parties—whether suppliers, contractors, citizens, or even oversight bodies and financial institutions—to ensure that contracting procedures are conducted according to objective and publicly declared rules, thereby guaranteeing equality and equal opportunities..¹¹

The Algerian legislator has taken care to enshrine the principle of transparency through several scattered legal provisions, all of which emphasize the necessity of adopting clarity at all stages of public procurement. Article 10 of Law No. 06-01, relating to the prevention and combat of corruption, stipulates that the necessary measures must be taken to strengthen transparency, rationality, and accountability in the management of public funds, thereby ensuring the optimal use of public money.

An explicit affirmation of this principle also appears in Article 9 of Order No. 10-05, which provides that procedures related to the conclusion of public procurement contracts must be based on the principles of transparency, integrity, and fair competition, and must rely on objective criteria. The same article emphasizes a set of procedural guarantees to achieve these principles, most notably: ¹²

- **Publicity of information related to contracting procedures.**
- **Prior and clear preparation of participation and selection conditions.**
- **Mandatory inclusion of a declaration of integrity upon contract conclusion.**
- **Adoption of precise and objective criteria for decision-making.**

¹¹- Zoulouka Zouzou, *Public Procurement Crimes and Their Combating Mechanisms in Algerian Legislation*, op. cit., p. 270.

¹²- Order No. 10-105 dated Ramadan 1431 AH, corresponding to 26 August 2010, concerning the Prevention and Combating of Corruption, Official Journal No. 50, issued on 1 September 2010

•Provision of means of appeal in case of violation of contracting rules.

In the same context, Algerian Law No. 23-12, which sets out the general rules governing public procurement, emphasizes transparency, particularly through **Article 61**, which stipulates that envelopes containing bids must be opened in a public session, thereby enshrining the principle of publicity and reflecting procedural transparency. **Article 5** of the same decree further reinforces this principle, highlighting it as a central element in public administration.

The emphasis on transparency in public procurement is not limited to Algerian legislation alone but is also reflected in several comparative legal systems. For instance, **French Law No. 360-2016** explicitly provides for the requirement to respect the principle of transparency in all stages of contracting. Similarly, **European Directive 18/2004**, in Articles 2 and 12, obliges member states to apply clear and transparent rules in awarding public contracts, whether for works, services, or supplies.

The principle of transparency in electronic public procurement thus has a solid legal foundation both in the Algerian framework and in comparative systems, demonstrating a deep legislative awareness of its importance as a guarantee of integrity in public administration and a tool for combating corruption. This is particularly relevant given the opportunities provided by digitalization to reinforce the principle through electronic publication, announcements, and platforms that track the stages of contracting.

Section Three: Digital Transparency as an Effective Preventive Mechanism to Reduce Corruption in Public Procurement

Modern experience has shown that the digitalization of public procurement and the adoption of electronic contracting represent an effective means of safeguarding public funds from various forms of corruption, by enshrining the principle of procedural transparency. Thanks to digital transformation, government transactions are no longer subject to the discretion of officials or dependent on complex bureaucratic procedures; instead, they are executed through electronic mechanisms characterized by accuracy and publicity, allowing information to flow in a timely



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

manner. This reduces opportunities for manipulation and collusion and enhances trust in public administration.¹³

The establishment of e-governments is considered one of the most prominent initiatives in this regard, as it allows the integration of various public transactions into digital systems open to societal oversight. This approach helps reduce delays, minimizes direct interactions between officials and service applicants, and imposes a form of self-discipline and internal control within administrative bodies. Additionally, it alleviates administrative burdens, enhances functional efficiency, and raises the level of informational awareness among different segments of society.¹⁴

The principle of transparency assumes great importance in the context of combating corruption, as it stands in opposition to secrecy and opacity. Corruption tends to grow and flourish in closed environments where information is absent and decisions are monopolized. Therefore, ensuring the publicity of procedures and providing information to all parties enables evaluation, accountability, and participation in submitting offers, which ultimately serves the public interest. Public procurement, in particular, has witnessed high rates of legal and financial violations due to its large scale and direct connection to the state budget. This situation prompted the Algerian legislator to enact Law No. 06-01 dated February 20, 2006, on the prevention and fight against corruption, as a comprehensive legislative framework that strengthens oversight mechanisms and defines prohibited conduct. In addition, the repeated amendments to the public procurement regulations reflect a clear effort to improve governance and prevent deviations..¹⁵

Administrative corruption, encompassing practices such as bribery, favoritism, nepotism, patronage, and abuse of influence, represents one of the most significant challenges facing public administration. It manifests in any action taken by a public official aimed at securing personal gain at the expense of the public interest, whether

¹³ -Essam Abdel Fattah, M.: Administrative Corruption..., previous reference, p. 452.

¹⁴ - Ibid., p. 452

¹⁵ - Khedri Hamza, "Contribution on the Prevention and Combat of Corruption within Public Procurement," in Proceedings of the National Symposium on Combating Corruption and Money Laundering, Faculty of Law and Political Science, Mouloud Mammeri University, Tizi Ouzou, March 10–11, 2009, p. 44



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

directly or indirectly. Naturally, the field of public procurement attracts such deviant behaviors due to the substantial profits that can be obtained through manipulation, making it a preferred target for corruption networks.¹⁶

The United Nations Convention against Corruption of 2003 emphasizes the need to establish clear standards that ensure integrity and transparency in public contracting, as it is one of the sensitive areas in financial administration. Hence, identifying prohibited behaviors and criminalizing them through precise legal provisions, along with implementing follow-up and accountability mechanisms, constitutes one of the most effective means of protecting public funds and ensuring that public procurement serves the fulfillment of collective needs..¹⁷ In the context of

¹⁶- Issam Abdel Fattah Matar: Administrative Corruption..., previous reference, p. 31.

¹⁷ - Faiza Qasdi: Professional Ethics in the Field of Administrative Contracts, Comparative Study, 1st ed., Arab Studies Center for Publishing and Distribution, Egypt, 2015, p. 153.

Article 9 of the United Nations Convention against Corruption provides that:

First: Each State, in accordance with the fundamental principles of its legal system, shall take the necessary steps to establish systems based on transparency and objective criteria in decision-making, characterized, among other things, by their effectiveness in preventing corruption. These systems shall address matters including:

The dissemination of information related to procedures and procurement contracts, including information on invitations to tender and relevant documents, to the public, allowing potential bidders sufficient time to prepare and submit their offers.

The prior establishment and publication of participation conditions, including selection criteria, contract award procedures, and tender rules.

The use of objective and predetermined criteria for decision-making in public procurement, facilitating later verification of compliance with rules or procedures.

The establishment of an effective internal review system, including an effective appeals mechanism, ensuring legal remedies and fairness in case of non-compliance with rules or objective procedures.

Taking measures, as appropriate, to regulate matters concerning personnel responsible for procurement, such as disclosure of any interest in specific public procurements, selection procedures, and training needs.

Second: Each State Party shall take appropriate measures, in accordance with the fundamental principles of its legal system, to promote transparency and accountability in the management of public funds. These measures include:

Procedures for national budget approval.

Timely reporting of revenues and expenditures.

Systems including accounting standards, audits, and related oversight.

Effective and efficient systems for risk management and internal control.



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

intense competition among private companies to secure public projects—which sometimes leads to violations of the law, particularly with the collusion of certain officials—the chances of small and medium-sized enterprises to win contracts are reduced. This undermines the principle of equal opportunity and results in the dominance of private interests at the expense of national development.¹⁸

Hence, the importance of adopting electronic administration in the conclusion of public contracts becomes evident, as it provides technologies capable of reducing human intervention and, consequently, limiting opportunities for deviation. Electronic contracting minimizes the influence of personal biases of employees and prevents cases of bribery, extortion, or favoritism by ensuring that offers are published, files are submitted and evaluated, and results are announced through transparent digital means. This guarantees a direct and fair connection between the administration and the candidates.¹⁹

The use of electronic administration in concluding most of its contracts, such as electronic public procurement contracts, aims to achieve multiple advantages. It shields the administration from the deviations of employees who contract on its behalf, especially when they might pursue personal gain rather than awarding the contract to the best offer. Personal greed or self-interest could lead them to compromise the administration's interests in exchange for financial benefits from prospective contractors if the process were left to their discretion or conducted in secrecy. Electronic contracting establishes direct communication between contracting

Taking corrective measures, as appropriate, in case of non-compliance with the requirements set forth in this paragraph.

Third: Each State Party shall take such civil and administrative measures as may be necessary under the fundamental principles of its domestic law to safeguard accounting records, registers, financial data, or other documents related to expenditures and revenues, to prevent falsification of such documents.

¹⁸- Siham Ben Dadas, *Crimes of Public Procurement in Algerian Legislation*, Dar Houma for Printing, Publishing, and Distribution, Algeria, 2019, p. 8.

¹⁹- Abdel Fattah Al-Jabali, *Research Paper: Transparency in Government Procurement and Projects to Ensure Fair Competition for Small and Medium Enterprises*, Policy Paper Series on Promoting Transparency and Combating Corruption, Center for International Private Enterprises (CIPE), Arab Republic of Egypt, p. 9.



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

officers and candidates, effectively closing the door to bribery, abuse of power, and extortion.²⁰

- In order to limit deviations that may affect the process of public procurement and to consolidate the principles of transparency and integrity, we propose a set of practical precautionary measures, including:

- Complete written documentation of all stages of the contract, from the announcement to the award, including the minutes of the envelope opening sessions and the evaluation of bids, in order to maintain clear and reviewable written records.

- Publication of the results of envelope openings and bid evaluations via administrative notice boards or on the official website of the contracting authority, ensuring publicity and enhancing trust in the contracting process.

- Adoption of the principle of rotation among employees in charge of managing procurement files, to avoid any personal relationships or potential collusion with economic operators.

- Mandatory signing by evaluation committee members of a “declaration of honor,” in which they confirm the absence of any conflict of interest or relationship with the candidates.

- Allocation of an internal email or a closed complaints box to receive reports of violations or suspicions in complete confidentiality, under the supervision of the administrative oversight officer.

- Clearly and transparently specifying participation conditions in the procurement announcement, especially technical and financial qualification requirements, to avoid any misinterpretation or arbitrary exclusion.

²⁰ - Mohamed Amin Youssef, *Administrative Contracts and Electronic Administrative Contracts – with Reference to the Administration Contracts System in Dubai, the United States, and the Electronic Transactions Laws in GCC Countries*, Dar Al-Kutub and Dar Al-Dirasat Al-Arabiya, Alexandria, Egypt, 2017, p. 247.



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

- Organizing periodic training courses on public procurement ethics for the relevant employees, with the aim of instilling integrity values and strengthening the culture of self-monitoring.
- Restricting the receipt and submission of bids exclusively to the official electronic platform, preventing any contact outside the announced procedures.
- Prohibiting direct communication between evaluation committee members and economic operators during the evaluation phase, while formally documenting all inquiries and responses.
- Ensuring an effective mechanism for appeals by setting clear deadlines for responses under the supervision of a responsible administrative authority, thus enhancing participants' sense of fairness.

These measures form an integral part of the ethical and oversight framework that the Algerian administration must adopt to enhance integrity and transparency in electronic public procurement, in accordance with the requirements of digitalization and good governance.

At the conclusion of this article, it becomes clear that electronic contracting represents a qualitative leap in the field of public procurement, providing modern mechanisms that contribute to reinforcing the principle of procedural transparency. This is achieved by ensuring the publicity of information, the ability to track all stages of contracting, and the reduction of human intervention, which is considered one of the main sources of deviation.

Moreover, consolidating transparency in the digital environment is no longer optional but a necessity imposed by the requirements of good governance and anti-corruption efforts, particularly given the challenges associated with the volume of funds involved and the complexity of procedures. Electronic contracting has proven its effectiveness in reducing unlawful practices through precise electronic oversight and by reinforcing accountability.



However, the success of this transformation remains dependent on the integration of the legal framework with technological means, as well as the level of awareness among stakeholders regarding the importance of respecting transparency rules. This calls for the continuation of reforms and intensification of efforts to ensure the effectiveness of this sys.

Fourth Section: The Role of the Electronic Public Procurement Portal in Ensuring Procedural Transparency

In the context of the digital transformation of public procurement, the electronic portal has emerged as a central institutional mechanism for strengthening procedural transparency. It represents not merely a technical tool, but a comprehensive legal and organizational framework through which information is disseminated, documents are exchanged, and interactions between contracting authorities and economic operators are regulated. By digitizing procurement procedures, the portal contributes to reducing discretionary practices, enhancing traceability, and ensuring equal access to public contracts. Consequently, it plays a decisive role in embedding transparency as a practical and enforceable principle rather than a purely theoretical one.

1. Definition of the Electronic Public Procurement Portal

The Algerian legislator has clearly determined the legal and functional characterization of the electronic public procurement portal through the regulatory decision defining its content. According to Article 02 of this decision, the portal is defined as an institutional digital space primarily aimed at “publishing and exchanging documents and information related to public procurement,” with the Ministry of Finance entrusted with its operational management.²¹

This definition reflects a significant evolution in the role of the portal. It is no longer limited to the mere publication of procurement notices but has become an interactive digital platform enabling the exchange of information, the uploading and downloading of documents, and the electronic submission of bids by economic

²¹- Hout, Fairouz, *The Legal System of Electronic Contracting in the Field of Public Procurement (Comparative Study)*, PhD Thesis in Sciences, Law Specialty, Djillali Liabes University, 2019-2020, p. 22.

operators. Accordingly, the portal can be analyzed through three complementary dimensions:

A. Functional Definition (as a tool for information exchange)

From a functional perspective, the portal constitutes a technological medium that enables the publication of calls for tender, provisional awards, and all documents related to public procurement procedures. It also allows economic operators to access tender documents, submit their bids electronically, and follow the different stages of the procedure. In this sense, the portal facilitates continuous access to information, thereby reducing informational asymmetry between contracting parties and reinforcing transparency.

B. Organizational Definition (as a mechanism of management and oversight)

From an organizational standpoint, the portal is conceived as a “single electronic gateway” designed to secure transactions and protect data. It serves as the official and secure space through which all procurement-related documents and communications are processed. This centralized structure ensures uniformity in procedures, strengthens administrative control, and limits the risks of manipulation or fragmentation of information. It also facilitates the intervention of oversight bodies by providing them with direct and structured access to relevant data.²²

C. Procedural Definition (as a technical operational mechanism)

Procedurally, the portal represents the infrastructure through which electronic exchanges are carried out. It enables the sending and receiving of data and documents in digital formats while ensuring that strict technical safeguards are in place. These safeguards prevent unauthorized access to bids before the legally مقرر opening session, thereby preserving the integrity and confidentiality of the procurement

²² - inisterial Order dated 16 Shaaban 1447 AH, corresponding to 4 February 2026, determining the content of the public procurement electronic portal and the modalities of its management, Official Journal of the People's Democratic Republic of Algeria No. 17, issued on 12 Ramadan 1447 AH, corresponding to 2 March 2026.

process. This procedural dimension is essential in guaranteeing that transparency does not compromise the principle of fair competition.²³

2. The Role of the Electronic Portal in Activating the Principle of Electronic Exchange and Ensuring Document Integrity

The electronic public procurement portal plays a fundamental role in establishing a secure and reliable digital system for data exchange. It enables the transition from traditional paper-based procedures to a legally and technically protected digital environment, thereby reinforcing both efficiency and transparency.

A. Implementation of the Dematerialized Electronic Exchange Principle

The portal serves as the official platform through which all procurement-related documents—such as tender specifications, technical and financial bids, and evaluation reports—are exchanged electronically. This dematerialization significantly accelerates the flow of information, reduces administrative burdens, and lowers logistical costs associated with paper-based procedures.²⁴

Moreover, the use of the portal is not merely optional but becomes mandatory in cases specified by law, thereby ensuring the generalization of electronic procedures. Article 4 of the relevant regulatory decision reinforces this role by assigning the portal essential functions, including managing information exchange between contracting authorities and economic operators, enabling the uploading and downloading of documents, and institutionalizing the electronic submission of bids. Through these mechanisms, the portal enhances accessibility and ensures that all participants have equal opportunities to compete.²⁵

B. (Ensuring Document Integrity and Protection Against Tampering)

²³ - Article 2 of the Ministerial Order dated 23 December 2020, determining the modalities for operating the public procurement electronic portal and the procedures for electronic exchange, Official Journal No. 01, 2021.

²⁴ - Article 53 of Law No. 23-12 dated 05 August 2023, determining the general rules relating to public procurement, Official Journal No. 51, issued on 06 August 2023.

²⁵ - Article 02 of Executive Decree No. 18-199 dated 2 August 2018, relating to the delegation of authority to conclude and manage public procurement via the electronic portal, Official Journal No. 48.



One of the most critical contributions of the portal lies in its ability to guarantee the integrity of exchanged documents. From the moment a document is submitted until it is officially opened, the system ensures that it remains unchanged and inaccessible to unauthorized parties. This protection is essential for maintaining the credibility of procurement procedures and preventing fraudulent practices.

Technically, this principle is implemented through secure system design requirements. Article 5 (paragraph 1) of the regulatory framework stipulates that the information system must ensure that the digitization of written documents does not compromise their integrity. Furthermore, documents must be authenticated through electronic signatures in accordance with applicable legal provisions. These measures collectively establish a secure digital environment where trust in the authenticity and reliability of documents is preserved.

C. Providing Digital Traceability and Ensuring Confidentiality of Communications

The portal also plays a crucial role in establishing what may be termed a “digital audit trail.” Advanced technical systems embedded within the platform enable the precise identification of the sender and recipient of each document, as well as the exact time of transmission. This traceability creates a comprehensive and verifiable record of all exchanges, which can be consulted in the event of administrative review or judicial disputes.

In addition, the portal ensures the confidentiality of communications through encryption and other cybersecurity mechanisms. These protections prevent unauthorized access to sensitive information and safeguard the secrecy of bids until the appropriate stage of the procedure. Thus, the portal achieves a delicate balance between transparency—through accessibility and traceability—and confidentiality—through data protection and controlled access.²⁶

²⁶- Article 4 of the Ministerial Order, determining the modalities for operating the public procurement electronic portal and the procedures for electronic exchange, previous reference.



In light of the above, it is evident that the electronic public procurement portal constitutes a cornerstone in the digital transformation of public contracting. Its role goes beyond facilitating administrative procedures to actively embedding the principle of transparency within the procurement system. By ensuring open access to information, securing document exchanges, and providing traceability of operations, the portal strengthens trust in public administration and contributes effectively to the prevention of corruption.

At the same time, the effectiveness of this mechanism remains dependent on the robustness of its technical infrastructure, the level of digital literacy among users, and the continuous adaptation of the legal framework to technological developments. Therefore, while the portal represents a significant advancement, it must be supported by ongoing reforms to fully realize its potential as a tool for transparent and accountable governance.

Conclusion

At the conclusion of this article, it becomes clear that electronic contracting represents a qualitative leap in the field of public procurement, providing modern mechanisms that contribute to reinforcing the principle of procedural transparency. This is achieved by ensuring the publicity of information, the ability to track all stages of contracting, and the reduction of human intervention, which is considered one of the main sources of deviation.

Moreover, consolidating transparency in the digital environment is no longer optional but a necessity imposed by the requirements of good governance and anti-corruption, particularly given the challenges associated with the volume of funds involved and the complexity of procedures. Electronic contracting has proven its effectiveness in reducing unlawful practices, through precise electronic oversight and by enhancing the principle of accountability.

However, the success of this transformation remains contingent upon the integration of the legal framework with technological means, as well as the level of

awareness among stakeholders regarding the importance of respecting transparency rules. This calls for the continuation of reforms and intensification of efforts to ensure the effectiveness of this system.

Recommendations

In light of the results obtained regarding the pivotal role of electronic contracting in reinforcing the principle of procedural transparency in public procurement, a set of practical and legislative recommendations can be proposed to enhance the effectiveness of this system and ensure the achievement of its objectives, as follows:

1. **Strengthening the legal framework governing electronic contracting**, by reviewing current texts and updating them in line with rapid technological developments, particularly concerning the definition of digital concepts, setting legal responsibilities for various actors in the electronic environment, and including rules regarding the validity of electronic documents and mechanisms of digital evidence, thereby ensuring legal certainty and reducing ambiguity in application.
2. **Extending digitalization to all stages of public procurement**, so that the use of electronic means is not limited to the announcement phase only, but includes the preparation of specifications, submission of bids, evaluation, announcement of results, as well as contract execution and follow-up. This ensures an integrated electronic process and consolidates comprehensive transparency instead of partial transparency.
3. **Enhancing the principle of public disclosure of information via digital platforms**, by obliging contracting authorities to publish all procurement-related data in real time, including announcements, specifications, evaluation results, and committee minutes, ensuring easy access for all economic operators without discrimination. This strengthens trust and enforces the principle of equal opportunities.
4. **Reinforcing electronic oversight mechanisms**, by developing advanced digital systems that allow traceability of all contract stages, automatically recording

all operations and procedures, enabling later review by oversight bodies, and making manipulation or concealment of information more difficult.

5. **Training and qualifying human resources**, recognizing that the success of electronic contracting depends not only on technology but also on user competence. Therefore, continuous training courses should be organized for public employees and economic operators on the use of digital platforms, information security, and the ethics of electronic contracting, enhancing their capabilities and minimizing human errors.

6. **Strengthening information security and protecting digital data**, by adopting advanced security protocols (such as encryption and electronic signatures), and ensuring the protection of databases from breaches or tampering, especially since public procurement involves sensitive economic and financial information, requiring a secure and reliable digital environment.

7. **Activating electronic appeal mechanisms**, by creating dedicated platforms for submitting appeals and complaints related to procurement procedures, setting reasonable deadlines for responses, and ensuring transparency in handling them. This increases economic operators' confidence in the contracting system and reinforces administrative and judicial oversight.

8. **Establishing the principle of digital accountability**, by linking each electronic procedure to a specific digital identity, which allows precise identification of responsibilities in the event of violations, fosters a culture of individual responsibility within the administration, and reduces impunity.

9. **Encouraging the adoption of modern technologies, such as artificial intelligence**, to analyze bids and detect unusual or suspicious patterns, such as collusion between operators or unrealistic offers, supporting proactive oversight and enhancing integrity.

10. **Promoting transparency through open data**, by providing public access to public procurement databases in a machine-readable format, allowing



researchers, civil society, and the media to exercise effective oversight, reinforcing community monitoring as a complement to official oversight.

11. **Developing a unified national electronic public procurement platform**, serving as a comprehensive digital space encompassing all contracting authorities and economic operators, standardizing procedures and criteria, reducing fragmentation, and enhancing transparency and efficiency.

12. **Strengthening international cooperation and experience exchange**, by benefiting from comparative experiences in public procurement digitalization, particularly systems that have proven effective in promoting transparency and combating corruption, and adapting them to the specificities of the Algerian legal system.

Integrating transparency indicators into administrative performance evaluation, by adopting objective criteria to measure the extent to which administrations comply with the principle of transparency.



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

Bibliography:

A- Books:

1. Al-Azzawi, Reem Ali Ihsan Mohamed, *Methods of Concluding Administrative Contracts*, 1st edition, Egypt; 2014.
2. Al-Safi, Hisham Abdel-Sayed Mohamed, *The Legal System of Electronic Administration Contracting*, 1st edition, UAE; 2017.
3. Ben Dadas, Siham, *Crimes of Public Procurement in Algerian Legislation*, Algeria; 2019.
4. Boudiab, Amar, *Explanation of the Algerian Wilaya Law*, 1st edition, Algeria; 2012.
5. Boudiaf, Ammar, *Explanation of the Organization of Public Procurement (Part One)*, 6th edition, Algeria; 2019.
6. Hout, Fairouz, *The Legal System of Electronic Contracting in the Field of Public Procurement (Comparative Study)*, PhD Thesis in Sciences, Law Specialty, Djillali Liabes University, 2019-2020.
7. Kharchi, Al-Noui, *Public Procurement (Analytical, Critical, and Complementary Study)*, Algeria; 2018.
8. Matar, Issam Abdel-Fattah, *Administrative Corruption: Its Nature, Causes, Manifestations, International and National Documents on its Combat, the Role of Governmental and Non-Governmental Institutions in Combating Corruption*, Egypt; 2011.
9. Qasdi, Faiza, *Professional Ethics in the Field of Administrative Contracts, Comparative Study*, 1st edition, Egypt; 2015.
10. Youssef, Mohamed Amin, *Administrative Contracts and Electronic Administrative Contracts – with Reference to the Administration Contracts System in Dubai, the United States, and the Electronic Transactions Laws in GCC Countries*, Egypt; 2017.
11. Zouzou, Zolikhha, *Public Procurement Crimes and Their Combating Mechanisms in Algerian Legislation*. (Note: Publication details were missing in the provided text).

B- Theses:

1. Aalaq, Abdelwahab, *Guarantees in Contracts with an International Dimension, Part Two*, PhD Thesis, Public Law specialty, University of Badji Mokhtar (Annaba), 2016–2017.

C- Newspaper Articles:



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

1. Zouzou, Zolikha, Control as a Mechanism to Prevent Public Procurement Crimes, Journal of Rights and Freedoms, University of Biskra, No. 62; 2016.
2. Al-Jabali, Abdel Fattah, Transparency in Government Procurement and Projects to Ensure Fair Competition for Small and Medium Enterprises, Policy Paper Series on Promoting Transparency and Combating Corruption, Center for International Private Enterprises (CIPE), Egypt. (Note: Year of publication was missing in the provided text).
3. Oudan, Bouabdallah & Merkan, Mohamed El-Béchir, The Public Procurement Electronic Portal: Towards Better Public Service within the Framework of E-Government.

D- Seminar Papers:

1. Hamza, Khedri, Contribution on the Prevention and Combat of Corruption within Public Procurement, Proceedings of the National Symposium on Combating Corruption and Money Laundering, Tizi Ouzou (March 10–11), Algeria; 2009.

F- United Nations Reports

1. United Nations Convention against Corruption (Article 9).

J- National Laws:

1. Order No. 10-105 dated Ramadan 1431 AH, corresponding to 26 August 2010, concerning the Prevention and Combating of Corruption, Official Journal No. 50, issued on 1 September 2010.
2. Law No. 23-12 dated 05 August 2023, determining the general rules relating to public procurement, Official Journal No. 51, issued on 06 August 2023.
3. Executive Decree No. 18-199 dated 2 August 2018, relating to the delegation of authority to conclude and manage public procurement via the electronic portal, Official Journal No. 48.
4. Executive Decree No. 18-199 dated 2 August 2018, relating to the delegation of authority to conclude and manage public procurement via the electronic portal, Official Journal No. 48.
5. Ministerial Order dated 16 Shaaban 1447 AH, corresponding to 4 February 2026, determining the content of the public procurement electronic portal and the modalities of its management, Official Journal of the People's Democratic Republic of Algeria No. 17, issued on 12 Ramadan 1447 AH, corresponding to 2 March 2026.
6. the Ministerial Order dated 23 December 2020, determining the modalities for operating the public procurement electronic portal and the procedures for electronic exchange, Official Journal No. 01, 2021.



The Role of Electronic Contracting in Promoting the Principle of Procedural Transparency in Public Procurement Contracts

7. Ministerial Order, determining the modalities for operating the public procurement electronic portal and the procedures for electronic exchange.

8. the Ministerial Order, determining the modalities for operating the public procurement electronic portal and the procedures for electronic exchange, previous reference.