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Analysis and Assessment of Algeria's Transition Toward Digital Customs Administration under the Implementation of the New Customs Information System "ALCES"

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Abstract:

This research paper examines and evaluates Algeria's experience in transitioning toward a digital customs administration through the implementation of the new customs information system "ALCES", considered a strategic project aimed at modernizing the customs sector and concretizing the national digital transformation agenda. The study focuses on the context and objectives of this transformation, while highlighting its technical and organizational dimensions, particularly the digitization of import and export procedures, the electronic processing of customs declarations, e-payment mechanisms, and shipment tracking systems.

Furthermore, the paper assesses the impact of the system on reducing customs clearance timeframes, lowering operational costs, enhancing transparency, improving service quality, and strengthening firms' competitiveness, while also identifying the key challenges associated with its implementation. The study concludes that "ALCES" represents a pivotal step toward building a modern digital customs administration that reinforces regulatory efficiency and contributes to achieving sustainable economic development.

Keywords: New Customs Information System (ALCES), Digital Transformation, Customs Administration.

JEL Classification: H83, F13, O33.

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1. Introduction:

The contemporary world is witnessing an accelerated digital transformation that has affected various economic and administrative sectors, with the customs sector being among the most significantly influenced by this technological revolution. Digital transformation has become a fundamental pillar in the development of customs operations, as it provides modern mechanisms to expedite procedures, facilitate international trade flows, and enhance transparency in transactions.

This transformation is based on shifting from traditional paper-based systems to integrated electronic platforms managed through smart digital infrastructures, enabling connectivity and communication among all relevant stakeholders, including shipping companies, ports, and governmental authorities. Such systems also allow for accurate tracking of goods movements, real-time data analysis, and the early detection of irregularities and fraud related to customs duties or documentation, thereby improving the efficiency of customs administration and strengthening public revenue collection.

In this context, many countries have moved toward digitizing their customs administrations and adopting the principle of "zero paper", by eliminating the physical submission of declarations and documents and replacing it with digitized systems relying on electronic data processing. This has facilitated the simplification of inspection and validation procedures, enhanced administrative performance, and accelerated customs clearance operations, while also enabling administrations to respond rapidly to the evolving dynamics of the business environment.

Moreover, the integration of advanced technologies—particularly artificial intelligence and big data analytics—has strengthened border control, improved the regulation of international trade, and supported efforts to combat fraud and tax evasion. It has also contributed to the development of remote services, such as issuing administrative certificates and electronically monitoring tax-related compliance.

Given the advantages offered by digital transformation in the customs field, several countries have accelerated the development and implementation of sophisticated information systems to modernize this vital sector. Algeria is among the countries that have devoted special attention to modernizing its customs administration, aiming to enhance its performance and improve its competitive effectiveness in line with global economic transformations, particularly under the liberalization of foreign trade.

This orientation has been reflected through a series of structural and organizational reforms, including the restructuring of administrative bodies, the modernization of management practices, and the upgrading of operational tools, alongside the conversion of a

large number of traditional processes into electronic operations supported by specialized information systems and smart technologies.

Within this framework, the Algerian Directorate General of Customs adopted the new information system "ALCES", an advanced digital platform designed to modernize and simplify customs procedures, ensure speed and transparency in transactions, comply with international trade standards, and strengthen the integration of the national economy into its regional and global environment.

Research Problem: To what extent has Algeria's digital transformation experience in the customs sector succeeded under the adoption of the new information system "ALCES"?

To address this research question, this paper examines the following key aspects:

1. A conceptual framework of digital transformation.
2. A conceptual framework of digital customs administration.
3. The implementation of digitization within the Algerian customs administration.
4. The performance outcomes of customs operations following the adoption of the new "ALCES" information system.
5. An assessment of the effectiveness of the new customs information system "ALCES".
6. The Finance Law 2025 proposals supporting the digitization of the Algerian customs sector.For content, the format of the writing is as follows.

2. A Conceptual Framework of Digital Transformation

Digital transformation in public administrations and institutions can be defined as a comprehensive strategic process aimed at redesigning work patterns and organizational structures through the optimal utilization of technology in its various forms, in order to enhance performance, improve efficiency, and generate sustainable value. It is not limited to merely introducing digital tools or upgrading technical systems; rather, it goes beyond that by bringing about a fundamental shift in service delivery methods, improving beneficiaries' experiences, and building institutional capabilities that foster innovation and adaptability to ongoing changes. Accordingly, digital transformation within organizations represents a transition from traditional operational models to more flexible and intelligent models, based on leveraging technology as a means of achieving institutional excellence, raising performance levels, and expanding the scope of activities of activities (Khoussa & guerrairi, 2023, p. 53).

A digital transformation strategy is considered an integrated and comprehensive plan aimed at implementing digital transformation in both the short and long term within any organization, while taking into account a set of essential components, most notably (mohamed, 2024):

- Leadership that initiates, guides, and ensures the sustainability of the transformation process;
- Investment and financial planning associated with digital projects;
- Key Performance Indicators (KPIs) to measure Return on Investment (ROI);
- Supporting tools and operational processes facilitating the transformation;
- Engaging external resources and experts when necessary;
- Assessing the impact of digital transformation on both customers and employees.

To ensure the successful implementation of a digital transformation strategy, four main steps may be followed:

➢ **Aligning digital transformation with institutional objectives:**

The digital transformation project should be closely linked to the organization's overall strategic plan and should not be limited to adopting a specific technology in isolation from institutional goals. Key focus areas must contribute to defining clear and measurable performance indicators, thereby accelerating value creation and maximizing returns.

➢ **Developing a Proof of Concept (PoC):**

It is preferable to begin with small, feasible initiatives that deliver tangible results within a short period (not exceeding six months). This approach helps convince top management of the return on investment, after which these pilot models can be gradually scaled up to cover various departments across the organization.

➢ **Establishing a technology implementation roadmap:**

Digital transformation involves a wide range of tools and technologies that bring fundamental changes to work practices and customer interaction. The most important of these include:

- Mobile technologies (customer-facing applications and internal productivity-enhancing apps);
- The Internet of Things (IoT), including sensors and smart devices connected to the internet;
- Cloud computing and cloud storage;
- Artificial intelligence and machine learning for data analysis and decision-making support;
- Augmented reality and virtual reality to enhance customer experience;
- Robotics technologies to improve operational efficiency.

The implementation of such technologies may require collaboration with external partners and experts to train work teams and strengthen their capabilities, within the broader framework of the digital transformation strategy.

- **Feedback collection and continuous improvement:**

A digital transformation plan should incorporate clear mechanisms for gathering feedback from various stakeholders. Digital transformation is not a temporary project but rather an ongoing journey; therefore, periodic review points and continuous evaluation are essential to ensure flexibility and introduce necessary adjustments in a timely manner.

Accordingly, a digital transformation strategy represents a dynamic framework that connects strategic vision with practical execution, aiming to achieve sustainable value and enhance the organization's competitive capacity.

3. A Conceptual Framework of Digital Customs Administration

Digital customs administration refers to the use of modern communication tools and advanced technologies by customs authorities in order to facilitate the services provided to economic operators, through reducing the time required to complete transactions and limiting complexities as well as bureaucratic procedures. The adoption of digital systems in customs operations also contributes to lowering costs and accelerating file processing, particularly with regard to customs clearance procedures. This, in turn, helps improve the business climate, supports the launch of investment projects, and enhances the attractiveness of the economic environment (ben miloud & douini, 2022, p. 674).

3.1. Requirements for the Transition Toward Digital Customs Administration

The transition toward digital customs administration requires the availability of a set of essential foundations to ensure its success and sustainability. Foremost among these is the provision of qualified human resources equipped with the necessary technical skills and capable of keeping pace with rapid technological developments.

This transformation also necessitates establishing cooperation and information-sharing relationships with customs administrations at both regional and international levels, in order to benefit from their expertise and experiences in the field of digitalization. In addition, it requires the development of a comprehensive and secure database that ensures information protection and the rapid processing of data.

Moreover, benefiting from training programs offered by experts of the World Customs Organization (WCO) represents an important element in supporting this process. It is also crucial to establish cooperation agreements with commercial banks in order to facilitate electronic financial transactions.

These requirements emerge within the recognition that digitalization has become an inevitable necessity for enhancing foreign trade and attracting foreign investment, particularly since the customs sector is considered one of the vital pillars supporting the national economy. This imposes the need to encourage the adoption of digitalization across all customs services and to provide the conditions required for its successful implementation (ben miloud & douini, 2022, p. 675).

3.2. Importance of the Transition Toward Digital Customs Procedures

The shift from traditional customs procedures to electronic ones represents a qualitative transformation of significant importance, not only for economic operators, but also for customs authorities and the national economy as a whole. Compared with conventional procedures that require physical presence during official working hours, electronic procedures provide greater flexibility for firms, as customs declarants can submit declarations and monitor their files from anywhere and at any time through digital platforms, while receiving processing results directly online. This enhances the autonomy of economic operators and accelerates their activities, in addition to reducing costs associated with travel, printing forms, and preparing paper-based files. Such improvements positively affect the speed of service delivery to clients and strengthen firms' competitiveness. Moreover, digitalization enables economic operators, under specific conditions and regulatory requirements, to conduct customs clearance from their own premises after obtaining prior authorization from the customs administration.

With regard to customs authorities, the digitalization of procedures enhances the collection of duties and taxes through the unified enforcement of legislation and the automated calculation of customs charges, while also strengthening administrative control and improving revenue collection efficiency. It further contributes to the provision of accurate and timely foreign trade data, since statistical outputs become an automatic product of the information system. Digitalization also helps accelerate customs clearance operations, simplify documentation in accordance with international standards, reduce the physical inspection of goods, and separate the payment of duties from the actual clearance process when deferred payment systems are adopted. In addition, it improves the efficiency of customs staff, lowers administrative costs, enhances real-time shipment tracking, and ensures compliance with modern regulatory requirements. Furthermore, it supports cargo security programs by enabling the electronic transmission of advance information prior to the actual arrival of goods. From a sustainable development perspective, digitalization contributes to reducing paper consumption and protecting the environment.

At the level of the national economy, the digitalization of customs procedures strengthens the business environment and investment climate, particularly in terms of attracting foreign direct investment, by facilitating trade, accelerating transactions, and

increasing capital productivity. It also provides an integrated database that supports economic planning and decision-making, while assisting in combating smuggling and illicit activities through selectivity systems and data analytics. Moreover, it reduces the administrative burden between customs authorities and the private sector through electronic connectivity, and facilitates import and export operations at border points, thereby contributing to increased trade exchanges and stimulating economic growth. Overall, the digitalization of customs procedures enhances transparency, credibility, and efficiency, while supporting the effectiveness of customs operations in a manner that serves both international trade and the national economy (rabhi & elhadj ali, 2023).

3.3. The Role of Information Systems in the Digitalization of Customs Procedures

Information systems constitute a fundamental pillar in the modernization of customs administration, as they have significantly contributed to the digitalization and simplification of customs procedures, enabling the shift from a traditional physical framework to an integrated

electronic environment. These systems, defined as an interconnected structure for collecting, processing, storing, and retrieving data in support of decision-making and control—as highlighted by Kenneth C. Laudon—have allowed customs authorities to accelerate the processing of declarations, reduce formal constraints related to the physical presentation and placement of goods under customs control, and facilitate the advance submission of data prior to the arrival of means of transport. This has strengthened forecasting capabilities and shortened customs clearance times.

Moreover, information systems have improved the management of warehouses, temporary storage facilities, and dry ports through electronic platforms that enable real-time information processing, reduce errors, and lower operational costs. In terms of control and enforcement, information technology has supported the transition from traditional inspection practices toward risk-analysis-based control mechanisms, including the use of scanners and smart systems. This development aligns with the SAFE Framework of Standards to Secure and Facilitate Global Trade, issued by the World Customs Organization (WCO). Consequently, it has contributed to enhancing the security and integrity of the supply chain, combating fraud and smuggling, improving resource allocation efficiency, and increasing customs revenues, while simultaneously reducing clearance durations and achieving a better balance between regulatory control requirements and trade facilitation (rabhi & elhadj ali, 2023).

4. The Implementation of Digitalization within the Algerian Customs Administration

4.1. Definition of the New Algerian Customs Information System “ALCES”

The new Algerian Customs Information System, ALCES, is a platform launched in November 2023 with the aim of simplifying and facilitating customs procedures, while

ensuring greater transparency in foreign trade operations. It also seeks to enhance the effectiveness of mechanisms aimed at combating fraud and customs and tax evasion, as well as securing data related to international trade exchanges (Ministry of Finance, 2026).

ALCES represents an electronic customs management system and an integrated technological platform adopted by the Algerian Customs Authority within the framework of the 2022–2024 strategic plan. This system is characterized by several key advantages, most notably (medjoudja & benhamed, 2025, p. 103):

- Accelerating the remote processing of customs files through electronic customs declaration platforms;
- Rationalizing customs control operations and improving their effectiveness;
- Ensuring a high level of transparency in external commercial transactions;
- Guaranteeing the accurate enforcement of applicable customs laws and regulations;
- Efficiently combating fraud and smuggling;
- Securing foreign trade data and facilitating access to it;
- Functioning as a centralized and collaborative system distributed across customs services nationwide, thereby enabling the standardization of procedures and improving coordination among different customs offices.

Furthermore, the ALCES system covers several operational areas, including (Ministry of Finance, 2026):

- **Shipment Monitoring:** providing an integrated mechanism for tracking and supervising shipments from their departure until arrival;
- **Risk Management:** relying on artificial intelligence techniques to analyze potential risks in export and import operations;
- **Electronic Customs Declarations:** enabling economic operators to submit their customs declarations electronically, thereby accelerating procedures and reducing the need for paper-based transactions;
- **Electronic Clearance:** offering a comprehensive digital customs clearance process, from declaration submission to duty payment;
- **Revenue Accounting Management:** managing accounting operations related to customs revenue collection, thus ensuring financial transparency;
- **Alertness and Control System:** providing advanced monitoring and control mechanisms for customs operations, which supports the fight against smuggling and fraud.

4.2. Objectives of the New Algerian Customs Information System "ALCES"

The new customs information system ALCES aims to achieve several key objectives, including (Ministry of Finance, 2026):

- **Trade Facilitation and Cost Reduction:**

  - **Simplification of procedures**: The new system enables the completion of customs procedures electronically, thereby reducing the need for paper-based transactions and accelerating the customs clearance process.
  - **Cost reduction:** Through the automation of operations, costs are reduced for both commercial companies and customs authorities, which enhances the competitiveness of the national economy.

- **Improving the Efficiency of Customs Operations:**

  - **Increasing speed:** The system contributes to accelerating customs operations, from data registration to inspection and final clearance.
  - **Enhancing accuracy:** By relying on modern technologies, human errors are minimized and data accuracy is improved, which supports better decision-making.

- **Strengthening Transparency and Combating Smuggling:**

  - **Shipment tracking:** The system provides accurate monitoring of shipment movements, helping detect and combat smuggling activities.
  - **Improving transparency:** The electronic availability of information enhances transparency and reduces the likelihood of corruption.

- **Supporting Decision-Making:**

  - **Data analysis:** The system allows for the effective collection and analysis of data, supporting informed decision-making and the development of efficient customs policies.
  - **Performance development:** Through accessible information, customs authorities can assess their performance, identify strengths and weaknesses, and continuously improve operational outcomes.

- **Enhancing International Cooperation:**

  - **Information exchange:** The new system facilitates information-sharing between customs administrations and different countries, thereby strengthening international cooperation in combating smuggling and facilitating trade.
  - **Standardization of procedures:** The system contributes to harmonizing customs procedures across countries, easing international trade flows and reducing procedural complexities.

In addition, the new customs information system can support the development of e-commerce and facilitate import and export operations for small and medium-sized enterprises (SMEs). It represents an important step toward modernizing the customs sector and improving

its performance, thereby contributing to the protection of the national economy and the facilitation of international trade flows.

The project of digitalizing customs administration in Algeria falls within the strategic priorities of public authorities' directives aimed at modernizing and upgrading public administration. It seeks to enhance the efficiency of customs operations and procedures, strengthen transparency, and facilitate foreign trade, thereby improving the business climate and attracting investment. This project is based on the development of technological infrastructure through the establishment of a modern data center, the expansion of communication networks, and the development of integrated software within a new information system that keeps pace with advancements in information technology.

Within this framework, the customs administration is considered one of the leading public institutions in the field of digital transformation, as it has developed an integrated information system known as ALCES (Algerian Electronic Customs System), in cooperation with the Information System Agency of the South Korean Customs Service and with the support of the public institution for digital development assistance (EADN). This system aims to automate various customs operations through a set of sub-systems. Its development went through several stages, including the reengineering of procedures in accordance with World Customs Organization (WCO) standards, requirements analysis, basic and detailed design, followed by development, testing, and finally implementation and deployment.

The new information system includes several key components, notably internal and external electronic portals that enable customs officers and various economic operators (importers, exporters, carriers, banks, port authorities, and others) to access customs services remotely without the need for physical presence, thereby embodying the principle of the dematerialization of procedures. It also incorporates a shipment tracking system that allows real-time monitoring of goods status through the Cargo Reference Number (CRN) or container number, as well as a risk management system that analyzes foreign trade data and directs control operations toward high-risk shipments, thereby enhancing security while accelerating procedures.

Furthermore, the system provides electronic customs declaration services, enabling operators to submit declarations, upload supporting documents, and track the status of their files electronically. It also offers an electronic clearance system and revenue accounting management, allowing customs duties and charges to be paid through various secure and instantaneous electronic payment methods, while automatically generating accounting entries. In addition, it includes an alertness and control system designed to secure databases, monitor network and application performance, and detect suspicious activities, thereby strengthening cybersecurity and ensuring service continuity.

Capacity building and skills development constitute a fundamental pillar in ensuring the success of this transformation. Accordingly, training and awareness sessions have been organized for customs officers and various external stakeholders, alongside the preparation of educational manuals to facilitate the use of the system. Trainers have also been deployed across regional directorates to ensure the widespread adoption of the system, in addition to specialized training programs for engineers in programming, database management, and cybersecurity, thus guaranteeing a smooth, secure, and sustainable digital transformation process.

The customs administration, with the support of the Ministry of Finance and public authorities, succeeded in completing the project of developing the technological infrastructure and modernizing the communication network through fiber optics, in addition to operating fixed and mobile satellite stations using the Algerian satellite Alcomsat-1 during 2023. This has strengthened the readiness of the digital system at the national level. Furthermore, the administration finalized the development of the main modules of the new customs information system (ALCES) in accordance with the latest technologies, enabling the automation of various customs operations.

The first remote customs declarations were launched on the eve of 1 November 2023, coinciding with the nationwide generalization of the system across all customs offices and land, sea, and air border posts throughout the country. This has ensured the full electronic processing of goods customs clearance files. The number of detailed customs declarations processed through the system reached approximately 120,000 declarations in July 2024, which constitutes a clear indicator of the system's effectiveness and widespread adoption.

Project teams are currently working on the development of the second (complementary) phase, which includes software dedicated to dispute management, investigations, post-clearance control, and human resource management, in addition to a passenger customs clearance system. This phase will cover the issuance of vehicle transit documents, electronic foreign currency declarations, and all customs procedures related to travelers, including vehicle clearance.

The system has achieved full coverage of its information network, as all customs offices have become connected to it, while ensuring the management of all customs clearance operations related to commercial goods. More than 6,000 economic operators have been registered on the platform, reflecting tangible progress in the digital transformation trajectory of the customs sector.

Within the framework of implementing the single window system, the customs administration is simultaneously working, alongside the development of the ALCES information system software, on establishing a digital interoperability platform. This platform will enable the integration of the customs information system with those of various ministries and institutions responsible for issuing licenses and administrative certificates related to import and export operations. Initial pilot testing began in July of the current year with regard

to documents issued by the Ministries of Trade, Agriculture and Rural Development, and Industry and Pharmaceutical Production. This interconnection is expected to be generalized to include other ministerial sectors, thereby contributing to accelerating procedures, improving the quality of public services, and supporting the advancement of the digital economy.

In a related context, the Directorate General of Customs has attached particular importance to the issue of securing information systems and protecting data, especially in light of the expanding use of the new customs information system. For this purpose, it organized a study day entitled "Cybersecurity: Reality and Challenges" on 27 March 2024, with the participation of representatives from specialized national sectors and institutions, including the National Agency for Information Systems Security, as well as stakeholders from the defense, security, and digitalization sectors. This meeting was devoted to presenting the current state of cybersecurity in Algeria, reviewing the threats targeting information systems, and exploring ways to strengthen protection mechanisms.

Customs authorities emphasized that cybersecurity constitutes a fundamental element in ensuring the protection of foreign trade-related data, particularly given the adoption of a new information system aimed at facilitating procedures and enhancing transparency, in addition to strengthening control mechanisms to combat fraud and tax evasion. The importance of training, awareness-raising, and adopting sound practices in system usage was also highlighted, considering that safeguarding the digital space is a shared responsibility among all actors. This falls within the framework of consolidating digital sovereignty and ensuring national control over data and information infrastructure.

Such protection requires an integrated set of technical, organizational, and regulatory policies and procedures. Among the most prominent measures are the establishment of clear security policies that are regularly updated to keep pace with evolving threats, as well as the encryption of sensitive data during transmission and storage through robust protocols such as AES, supported by a secure key management system. This also includes conducting periodic backups of critical data and testing recovery plans to ensure their effectiveness.

Access control mechanisms represent another essential pillar, through defining user privileges according to the principle of least privilege and adopting multi-factor authentication (MFA) to verify users' identities. In addition, it is necessary to ensure the regular installation of security updates to address vulnerabilities, alongside implementing an effective patch management system. Training and awareness remain highly important through organizing regular sessions for employees on how to recognize phishing messages and cyberattacks.

Effective protection further requires the use of intrusion detection systems (IDS) to monitor networks and identify abnormal activities, as well as the establishment of clear incident management and response plans, supported by periodic simulation exercises. It is also advisable to conduct regular security audits and vulnerability assessments in order to detect weaknesses and address them.

Among other measures, securing mobile devices through mobile device management (MDM) solutions, using antivirus and anti-malware software with continuous updates, and protecting networks through firewalls and virtual private networks (VPNs) to secure internet communications are also crucial. Identity and access management (IAM) systems play an important role in controlling user privileges throughout the lifecycle of digital identities. Furthermore, local and international cooperation and the exchange of information regarding cyber threats are essential, alongside compliance with internationally recognized standards in this field, such as ISO/IEC 10072, thereby ensuring the establishment of a strong and sustainable cybersecurity framework (Direction Générale des Douanes Algériennes, 2024).

5. Outcomes of Customs Operations under the Adoption of the New Information System (ALCES)

Within the framework of combating smuggling, illicit trade, and various forms of transnational crime, operational customs units recorded significant seizure results during the third quarter of 2025. These operations were carried out as part of the protective missions entrusted to customs authorities across the entire customs territory, in close coordination with various security bodies and agencies, foremost among them the National People’s Army.

The operations conducted during this period resulted in the seizure of more than 2,214 kg of processed cannabis, over 151 kg of cocaine, and approximately 3,587,389 psychotropic tablets, as part of ongoing efforts to counter the illicit trafficking of narcotics and psychotropic substances, which pose a direct threat to the health and safety of citizens. Additionally, quantities of alcoholic beverages exceeding 15,518 liters were confiscated.

In the context of combating speculation and the smuggling of subsidized consumer goods, and in implementation of the directives of the country’s highest authorities aimed at protecting the national market and preserving citizens’ purchasing power, customs services succeeded in seizing 4,158,000 kg and 1,204,000 liters of subsidized goods. The seizures also included 74,934 liters of fuel, more than 107,795 units and 50.4513 kg of tobacco products.

Furthermore, customs authorities seized 6 firearms and 623 rounds of ammunition, in addition to 116,542 units of firecrackers and fireworks, reflecting the continuous field vigilance of customs services across air and maritime gateways as well as land border crossings, and their sustained commitment to ensuring comprehensive coverage of the customs territory and combating all manifestations of organized crime (Directorate General of Customs, 2025, pp. 22-23).

- ✓ **New Measures Concerning the Algerian Customs Sector under the Adoption of the ALCES Information System**

Within the framework of examining the Draft Finance Law for 2026, the Director General of Customs, Abdelhafid Bakhouche, presented the new amendments and measures relating to the customs sector. These included the introduction of two new articles and the amendment of four existing provisions within the Customs Code. These reforms are part of the implementation of the State's reform-oriented vision, notably through compliance with the recommendations of the Financial Action Task Force (FATF/GAFI), the reduction of congestion in ports and airports, the promotion of small-scale import activities, and the strengthening of African economic cooperation by granting exemptions to goods destined for the 2025 Intra-African Trade Fair.

The proposed amendments include the expansion of mandatory declaration requirements concerning currency and precious metals, as well as granting customs officers the authority to request additional information or temporarily seize suspected funds while notifying the Public Prosecutor's Office. The reforms also provide for the modernization of the management system for areas under customs control and the establishment of new storage zones to alleviate pressure on port infrastructure.

Furthermore, the draft law maintains the exemptions granted for small-scale import activities benefiting self-entrepreneurs, as well as the exemption of livestock imported on the occasion of Eid al-Adha 2025. It also provides facilitative measures for non-resident citizens and diplomatic personnel to import vehicles under customs exemption schemes.

During the discussions, the parliamentary committee put forward a series of practical proposals aimed at enhancing customs efficiency. These include further digitalization of the customs process and its alignment with international standards, strengthening transparency through digital platforms, training customs officers in advanced financial detection techniques and the use of artificial intelligence, accelerating clearance procedures for investors through the Green Channel, and reinforcing both human and material resources in border regions.

The session concluded by reaffirming the pivotal role of customs authorities in protecting the national economy and safeguarding the State's financial security (benamar, 2025).

6. Evaluation of the Effectiveness of the New Customs Information System (ALCES)

During 2025, the customs information system "ALCES" witnessed a qualitative advancement marked by the launch of a package of digital services dedicated to travelers and economic operators. These included the digitalization of transit documents and currency declarations, which contributed to accelerating file processing, enhancing operational

accuracy, and improving tracking and control mechanisms without compromising trade facilitation requirements. This development reflects significant progress in modernizing customs administration and consolidating digital transformation across its procedural and supervisory processes.

In practical implementation of this transformation, Algerian Customs continued to contribute effectively to supporting public finances through the collection of customs duties, taxes, and various levies due, in accordance with a performance-based approach aligned with the strategy adopted by the Ministry of Finance. The efforts undertaken in 2025 resulted in achieving a positive efficiency rate of 47.34% relative to the predefined target, reflecting the effectiveness of the adopted collection mechanisms and the efficiency of the control and management system.

Moreover, measures taken in the field of dispute-related recovery—through customs settlements, public auctions, and enforced collection procedures—generated revenues exceeding 52 billion Algerian dinars in 2025, representing an increase of 66.16% compared to 2024. Concurrently, a positive efficiency rate of 48.119% was recorded in the seizure of prohibited goods relative to the previously established target. This demonstrates the complementarity between the protective and fiscal missions of customs services and confirms their central role in safeguarding and strengthening national economic resources.

From a security perspective, Algerian Customs continued to enhance its operational vigilance in combating smuggling and transnational crime. Operational units recorded significant seizures of psychotropic substances and other prohibited goods during 2025. From a developmental standpoint, customs services have maintained their support for major state-led projects, particularly vital infrastructure initiatives, by facilitating the importation of essential equipment and materials, simplifying related administrative and customs procedures, and enabling investors to benefit from incentives provided under economic customs regime designed to encourage investment and support national development (Directorate General of Customs, Mot du Directeur Général (JID 2026), 2026).

Furthermore, the Directorate General of Algerian Customs announced the issuance of Internal Circular No. 3873, dated 21 July 2025, which sets out the practical modalities for monitoring the declared value of vehicles imported by individuals, within the framework of activating the new information system “ALCES.” This measure, effective as of 21 July, aims to process vehicle customs clearance files based on the actual data of commercial transactions, while taking into account objective price-determining factors such as the technical characteristics of the vehicle and its country of origin.

The circular also provides for the activation of new national databases integrated into the system, thereby supplying customs services with accurate reference tools. This contributes to the harmonization of valuation methodologies, enhances the effectiveness of control mechanisms, and ensures a more transparent and precise application of the relevant legislative and regulatory provisions (hamouda, 2025).

7. Provisions of the Finance Law 2025 Supporting the Digitalization of Algerian Customs

Mr. Adel Habassa, Director of Legislation, Regulation and Customs Systems at the Directorate General of Customs, stated that the provisions proposed by customs services and incorporated into the Finance Law for 2025 fall within the broader framework of the State's efforts to support economic recovery and consolidate the digital transformation trajectory. These measures aim to strengthen transparency in management, facilitate commercial operations, and further simplify procedures for the benefit of economic operators in particular and citizens in general.

He explained that the customs-related provisions of the Finance Law primarily seek to continue the digitalization of customs services by enabling operators to complete various customs procedures through electronic platforms. They also aim to improve management at land border crossings by establishing a legal basis for the creation of temporary storage facilities by public entities responsible for managing these crossings, while facilitating export procedures through them. In addition, these measures grant further facilities to economic operators, particularly by reducing the length of time goods remain in port and airport storage areas and shortening customs clearance deadlines, thereby limiting late-payment penalties transferred abroad.

Within the same context, these provisions seek to regulate, from a customs perspective, economic activities carried out within free zones and to define the specific control mechanisms applicable to them. They also aim to increase revenues collected for the State Treasury by facilitating the disposal of goods placed under customs warehousing arrangements and by clearing customs revenue warehouses, as well as transferring any remaining proceeds from the sale of such goods to the State budget. Furthermore, the measures provide for the release of additional storage spaces at ports and airports, authorize the customs clearance of new and used equipment owned by the State, public institutions, and public economic enterprises located abroad, and allow for the confiscation of seized gold, silver, and platinum items that remain unclaimed, transferring them to the Legal Solidarity Reserve.

These objectives are reflected in Articles 144 to 163 of the Finance Law 2025. Article 145 introduces a new Article 31 bis into the Customs Code concerning the digitalization of all customs procedures. It also amends Article 67 of the Customs Code to establish a legal basis for the creation of temporary storage facilities at land border crossings. Articles 146 and 147 reduce the maximum duration of goods' stay in temporary storage facilities and the maximum period for submitting a detailed customs declaration from fifteen days to eight days, in accordance with Articles 71 and 76 of the Customs Code.

Article 148 defines the conditions and modalities for submitting advance detailed declarations, while Article 149 addresses the cases and conditions for amending customs declarations. Article 150 revises the legal framework governing the Authorized Economic Operator (AEO) scheme. Article 151 modifies the conditions governing customs inspections of declared goods with a view to reducing processing times. Meanwhile, Article 152 introduces a new Chapter VII bis into the Customs Code relating to free zones in order to provide them with a clear legal framework. Articles 153 and 154 revise provisions concerning the automatic placement of goods under customs warehousing arrangements and the conditions for examining stored goods, thereby contributing to faster clearance and reduced penalties.

Regarding Articles 155, 156, and 157, these introduce the possibility of amicable sale of goods not removed after the expiration of legal deadlines, establish rules governing the disposal of goods after the warehousing period has lapsed, and classify certain sensitive equipment and products not collected within the prescribed timeframe as abandoned in favor of the State Treasury. They also revise the distribution of proceeds from the sale of goods under customs warehousing. Article 158 specifies the modalities for the destruction of goods placed under warehousing or a customs regime in order to clear customs revenue warehouses. Article 159 aims to adapt the fee structure related to the use of the new customs information system to the nature of the services provided under its mechanisms.

Article 160 amends Article 319 of the Customs Code by exempting public administrations, public bodies, local authorities, and public administrative institutions from certain fines and penalties, thereby allowing them to rectify errors made in declarations without incurring penalties in specified cases. Articles 161 and 162 establish the legal basis for customs clearance of goods owned by the State and public bodies located abroad, as well as for the confiscation of unclaimed precious items and their transfer to the Legal Solidarity Reserve.

In conclusion, Mr. Adel Habassa emphasized that, through its proposals within finance laws, the Directorate General of Customs seeks to serve as an effective instrument for implementing public authorities' orientations, particularly in encouraging investment, promoting non-hydrocarbon exports, and supporting the national economy. This is achieved by granting facilities to foreign trade operators, reducing goods' dwell time, and enhancing customs performance efficiency in a manner that supports comprehensive economic development (Direction Générale des Douanes Algériennes, 2024).

8. Conclusion

The adoption of information and communication technologies (ICT) is no longer merely a technical option; rather, it has become a strategic pillar for achieving sustainable development and enhancing the competitiveness of the national economy. This is accomplished through improving performance efficiency, fostering innovation, and upgrading the quality of public services. Digitalization, as one of the most prominent manifestations of these technologies, represents an effective tool for transforming procedures and transactions from their traditional formats into integrated digital environments. This ensures faster service delivery, facilitates access to information, and strengthens transparency and interaction between public administration, citizens, and economic operators.

In light of the economic transformations currently taking place in Algeria, public authorities have prioritized the digitalization of public facilities as a key component in supporting the economic recovery process, based on a strong conviction in the role of digital transformation as a driver of development. Within this context, the Algerian Customs Administration has emerged as one of the vital sectors that has embraced this orientation through the launch of the new information system "ALCES", which has constituted a qualitative shift in customs operations management by digitalizing all stages of import and export procedures, from the submission of declarations to the release of goods. This has contributed to simplifying procedures, shortening processing times, reducing costs, and strengthening the confidence of economic partners.

This system has been built upon an integrated technical infrastructure, including the establishment of a data center, the interconnection of customs services through a fiber-optic network and the Alcomsat-1 satellite, as well as the development of software enabling comprehensive electronic processing of customs operations. It has also introduced modern services, such as electronic payment of duties and taxes, and shipment tracking capabilities, thereby enhancing transparency, supporting the effectiveness of control mechanisms, and contributing to combating various forms of crimes related to foreign trade.

The results recorded since the system entered into operation and was generalized across customs offices at land, sea, and air border points reflect the soundness of this strategic choice, both in terms of improving the business environment, strengthening firms' competitiveness, and protecting the national economy. Accordingly, further reinforcing this trajectory—through continued software development, enhanced information exchange, and stronger institutional cooperation within the foreign trade logistics chain—will consolidate the foundations of an efficient digital customs administration capable of aligning with international standards and effectively contributing to the promotion of non-hydrocarbon exports, the diversification of national production, and the achievement of sustainable economic development.

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