Digital Platform for Building Permit: Towards Activating the Digital Administrative Police in the Urban Field

المنصة الرقمية لرخصة البناء: نحو تفعيل الضبط الإداري الرقمي في مجال التعمير



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Abstract:

The establishment of a digital platform by the Ministry of Housing, Urban Planning, and the City for submitting building permit requests and tracking their progress until approval represents a crucial step in the digital transformation process. However, the examination of administrative, engineering, and technical files, and the alignment of building permit requests with legal regulations have not yet been digitized. In contrast, some countries such as Germany, Austria, and the United Arab Emirates, which have successfully digitized all processes related to building permits. The study results indicate that while this platform could activate digital urban administrative Police, its success requires the development of a comprehensive digital platform that integrates all aspects of urban police. Additionally, it is essential to program the legal controls related to urban monitoring into the platform's database. This approach is considered the optimal solution for ensuring the quality of regulatory processes in urban field.

key words: Digital platform, Urban Police, Building permit, Urbanism.

ملخص:

إنّ إرساء وزارة السكن والعمران والمدينة لمنصة رقمية لإيداع طلبات رخصة البناء، وتتبُع مراحل سيرها إلى حين الحصول عليها، يُعد خطوة ضرورية في مسار التحوّل الرقمي، رغم أنّ دراسة الملف الإداري والهندسي والتقني، ومطابقة ملف طلب رخصة البناء للضوابط القانونية لم يتم رقمنتهما بعد، خلافا لبعض الدّول التي نجحت في رقمنة جميع العمليات المتعلقة باستصدار رخصة البناء كألمانيا والنمسا والإمارات العربية، وقد توصلت نتائج الدراسة إلى أنّ إرساء هذه المنصة من شأنه تفعيل الضبط الإداري العمراني، إلاّ أنّ نجاح هذا التفعيل يستلزم إنشاء منصة رقمية شاملة لجميع عمليات الضبط العمراني، وبرمجة الضوابط القانونية المتعلّقة بالرقابة العمرانية في قاعدة بينات هذه المنصة وهو الحل الأمثل لضمان جودة العملية الرقابية في مجال التعمير.

كلمات مفتاحية: المنصة الرقمية، الضبط العمراني، رخصة البناء، العمران.

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Introduction :

Information and communication technologies have become essential drivers of success in social and economic development programs, both regional and national, and across all areas of activity. In light of this, the Algerian government has prioritized the advancement of information and communication technologies with the goal of building an inclusive information society to enhance and elevate Algeria (1). Given that digital transformation is a comprehensive initiative encompassing all public administration services, it represents a shift from traditional forms of essential services to a smart, electronic format based on modern and advanced technology.

In this context, urban administration has undergone a notable shift towards modernization(2) since the first decade of the third millennium, through the digitization of several processes, such as the digital urban licensing system. **The importance of this study** lies in highlighting building permits, which play a crucial role in the lifecycle of buildings, without these Building permits cannot proceed legally, current digital building permit experiences focus on enhancing the efficiency of verifying compliance with urban laws and regulations. Although some countries have advanced in certain aspects of digitizing building permits, significant progress is still needed in other areas.

In Algeria's case, a digital platform has been established solely for submission and receipt building permit requests, the digitization of the procedures for preparing building permits, as well as other urban permits and certificates, may be adopted in the future, thereby activating digital urban police, which is considered an enhancement of the quality of regulatory processes in urban planning and development, based on this, **the following Problematic can be posed:**

Can the Algerian digital platform for building permit requests be considered an activation of the digital administrative police in the Urban Field?

The objectives of this study: This legal study aims to achieve a set of objectives, which can be summarized as follows:

)-1(Speech by Mr. the Secretary-General titled **"Prospects for Digital Transformation in Algeria"** at the 9th Virtual Meeting of Arab E-Government Program Directors organized by ESCWA on December 16, 2021. [En ligne]
https://www.unescwa.org/sites/default/files/event/materials/6-Algeria-Min-Post-Telecom-Ar.pdf

)- 2(Modernizing administration refers to the process of adapting to transformations by adopting modern management tools and methods, and establishing a new organizational culture based on the integration of technologies and the conversion of knowledge into services. See for more details:
Fatiha Fertas, **"Modernizing Public Administration in Algeria through the Application of E-Government and Improving Citizen Services"**, New Economy Journal, Khmis Miliana University, Vol 2, n 15, (pp. 305-322), 2016, p. 306.

- To introduce the digital platform for building permit requests, explain its operation, and analyze its role in improving the building permit issuance process.
- To examine successful international experiences with digital platforms in urban planning and derive insights from them.
- To identify the Necessities and goals of digital administrative control in the urban field.
- To assess how the digital platform may impact the effectiveness of administrative oversight and supervision, and evaluate the platform's potential to activate digital urban administrative Police.
- To identify potential legal issues in the implementation of the digital platform and, consequently, in the activation of urban administrative Police.

The methodology followed: Answering the proposed issue requires the use of a descriptive approach to comprehensively understand the concept of the digital platform for building permit requests, describe its operation and stages, and present both the Algerian experience and that of other countries regarding digital platforms for building permit requests. Additionally, an analytical approach is needed to assess the possibility of considering the digital platform for building permit requests as an activation of digital administrative police in the field of urban planning, and to analyze the main legal issues arising from this activation.

The plan of this study: The issue of the study will be addressed according to a plan that includes two main Topics: The first Topic explores the theoretical Fundamentals of the digital platform for building permit requests, along with a review of some relevant Countries' experiences with such platforms. The second Topic focuses on discussing the Activation of Digital Urban Administrative Police.

The First Topic
Digital Platform for Building Permit: Fundamentals and Countries' Experiences

In line with cultural and technological advancements, and as part of the government's efforts to reform and modernize Algerian administration, a digital platform has been launched for the submission and receipt of building permits. This initiative is part of the state's policy aimed at curbing bureaucracy and promoting transparency and equality, particularly in adhering to deadlines for reviewing files that include building permit and other urban planning certificates. Furthermore, the integration of digital technology into the management of the building permit submission and receipt process will add speed and flexibility to this procedure, fostering renewal and modernization in administrative operations as well as in the execution of major public investment projects and individual private urban projects.

We will first cover the Fundamentals of the digital platform for building permit requests (**first requirement**) and then review some examples of building permit digitization in various Arab and European countries (**second requirement**).

First requirement: Fundamentals of the Digital Platform for Building Permits

Like other government departments, the Urban Planning Administration has embraced modernization and has made significant strides in this direction, among these strides is the establishment of a digital platform for submitting and receiving building permits, first, we will introduce this platform (**First section**), and then we will follow its operational steps (**Second section**), as outlined below:

First section: Concept of the Digital Platform for Building Permit

The digital platform for building permits is a technological tool designed to streamline and improve the process of obtaining building permits. This platform relies on digital technology to simplify all procedures related to the building permit process, from submitting requests to the issuance of the final permit(1) .

The online system designed for building permit requests marks a transformative shift in streamlining administrative processes. It empowers citizens and businesses to navigate the application process with greater ease and efficiency, this platform enables users to fill out forms, submit required documents, track the status of their requests, and communicate with the relevant authorities quickly and conveniently, the aim of using the digital platform is to facilitate and expedite the building permit process while enhancing administrative operations. The advantages of this technology for building permit requests include ease in submitting requests, saving time and effort, as well as allowing users to track the status of their requests and communicate directly with the authorities.

It is also a digital platform that allows investors, real estate developers, and individuals, both natural and legal persons, to submit and manage building permit as well as allowing users to track their requests status and communicate directly with the authorities through the digital platform instead of the traditional method. The platform was established as part of the roadmap prepared by the Minister of Housing, Urban Planning, and the City. The digital platform pertains to the submission and withdrawal of building permits with the aim of combating bureaucracy and ensuring transparency, as well as respecting deadlines for reviewing construction contracts. All applicants for building permits, whether investors or ordinary individuals, will receive a response within 20 days. The goals also include revitalizing projects aimed at encouraging national investment. The Minister of Housing, Urban Planning, and

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)-1(Mariana Ataide, Orjola Braholli, Dietmar Siegele**, " Digital Transformation of Building Permits: Current Status, Maturity, and Future Prospects, Buildings"**, Buildings journal, Vol. 13, n10, 2023, P1.

the city stated that the digital building permit will cover four provinces: Boumerdes, Oran, Constantine, and Ouargla.(1)

Second section: Phases of the Digital Building Permit Platform Process

Digital transformation serves as a bridge to modernization and is a crucial and necessary topic for all countries, whether developed or developing. It impacts all sectors of society and provides institutions with the opportunity to radically alter their business models through new digital technologies such as social networks, mobile phones, big data, and the Internet of Things. Consequently, society is experiencing a fundamental shift due to the advancement of digital technology and its widespread requests.(2) Therefore, it is essential to accelerate the comprehensive implementation of digital transformation across all Algerian state administrations, including urban planning, as a means to modernize and develop them, enabling better regulation and oversight of urban activities and control over urban growth.

Upon reviewing the digital building permit platform and accessing it after creating an account, we have attempted to summarize its operational process as follows:

Firstly: Submitting requests Through the Platform

Users can submit their building permit requests via the digital platform, which saves time and effort compared to visiting government offices and submitting requests in person. After creating an account on the platform, permit applicants can access it by entering their email address and password.

Secondly/ Uploading and Submitting Required Documents for the Building Permit File

Users can easily upload and submit the necessary documents for obtaining building permits through the digital platform. Initially, they need to complete a form related to the property owner's information, along with the administrative file (such as the permit references for buildings planned on land designated for residential purposes or other uses, the decision from the competent authority allowing the establishment or expansion of classified industrial and commercial institutions, and the certificate of usability for buildings within a subdivided plot), and the engineering file (including plans and designs, a memorandum with a descriptive and estimated overview of the work, signed by a qualified consulting firm). Additionally, the technical file must include required documents such as a report prepared and signed by a certified civil engineer, structural designs for all floors "certified by a licensed civil engineer," and diagrams showing the roof construction method "certified by a

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)-1(Amin Bechar, **Electronic Building Permit**, Study Day Organized at the headquarters of the Mutual Guarantee and Warranty Fund for Real Estate Development, on July 14, 2022.

) -2(Ziyadin Sayabek. Saltanat Suieubayeva, A. Utegenova, **"Digital Transformation in Business"**, Springer Nature Switzerland AG 2020, LNNS 84(pp. 408–415), 2020, P 408.

licensed civil engineer." All these documents are specified under Executive Decree 15-19.

Thirdly/ Tracking the requests Status

Users can track the status of their requests, which is a very important stage. In the traditional administrative process, building permit applicants had to frequently visit municipal offices to check the status of their application. Through the platform, urban administration has ensured transparency and reduced bureaucracy, allowing permit applicants to monitor the status of their requests from home or work.

Therefore, it can be said that the digital building permit platform is highly effective in the permit acquisition process. It facilitates and speeds up the submission of requests and uploading of necessary documents, saving significant time and effort. Moreover, users can track the status of their requests via the platform, providing them with quick and efficient updates on processing stages.

Second requirement: Some Countries' Experiences in Digitalizing Building Permits

Building permits ensure that construction complies with the conditions specified in laws and regulations. However, the traditional process of issuing these permits is often complex and time-consuming. In recent times, the digitalization and automation of building permits have emerged as solutions. This opportunity for digitalizing building permits is exemplified by the development of electronic portals, which allow for automated verification of programmed instructions and regulatory compliance, as well as data integration.

Most countries are still in the early stages of digital transformation, focusing on implementing electronic document management through digital platforms. However, some leading nations have advanced further, achieving automated compliance verification with code regulations, smart inspections, artificial intelligence, and building code programming.

We will present the experience of building permit digitalization in Germany and Austria (**First section**), as well as the experience of the United Arab Emirates (**Second section**).

First section: Digitalizing Building Permits in Germany and Austria

In recent years, significant efforts have been made in the academic realm regarding the digitalization of building permits. An initial approach has been established by defining a system for reviewing legal rules and regulations that serves as a foundation for various other methods. Frameworks for digitalizing building permits have been developed in some countries, such as Turkey and Florida in the United States. Additionally, researchers have explored the use of geographic spatial data in building permits by studying the digital workflow across all stages of the

building permit processing. They have concluded that Building Information Modeling (BIM) can support technical review.

Korean researchers have developed various methods for digitizing and integrating the Korean Building Code into specific building permit systems. In 2020, European researchers and practitioners established the European Network for Digital Building Permits (EUnet4DBP)[1] . This network is focused on defining goals and requirements to advance digital building permits by ensuring the direct involvement of relevant administrative bodies in the digitization process. Additionally, it aims to utilize interoperable, scalable systems applicable at different levels and to enhance the understanding of processes related to digital building permits[2] .

This discussion is relevant to both Germany and Austria, where building permits or construction approvals are managed by the federal states. However, building regulations differ between Germany's 16 states and Austria's 9 states. Despite these variations, the fundamental experiences in both countries are quite similar. Given the number of federal states and the differences in building regulations, it is clear why coordinating and standardizing the issuance of digital building permits using Building Information Modeling (BIM) is challenging in cities such as Hamburg, Munich, Graz, and Vienna. For monitoring software to effectively verify diverse parameters and requirements, it must be accurately programmed with all specified inspection criteria and regularly updated [3].

This challenge is significant, but it has been practically addressed (at least in Germany) by some service providers. As an initial step, construction projects can be thoroughly examined based on a model building code. Individual adjustments for the relevant federal states are then made manually. Although this approach is not yet perfect, it represents a substantial advancement toward achieving a BIM-based building permit system. By verifying numerous rules and dependencies through the "Building Permit Model" based on the International Finance Corporation framework,

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) - 1(**The European Digital Building Permit Network**: This network, composed of researchers and stakeholders, is dedicated to establishing a unified strategy for the digitalization of the building permit issuance process. The network aims to achieve benefits such as interoperability, streamlined procedures, data enhancement, standardization, and effective implementation. While the primary focus is on Europe and its technical context, the network is also open to the participation of other countries. For more information, please visit, see: **European Network for Digital Building Permit at** https://eu4dbp.net

)-2(Judith Fauth, Gabriele Pasetti Monizza, Giada Malacarne, **«understanding processes on digital building permits–a case study in SouthTyrol»**, Building Research & Information, Vol. 51, n. 5(518–532), 2023,, p4.

) -3(Tim Westphal, The Digital Building Permit – A Dream Coming True?, Published on: November 11, 2022, accessed on August 20, 2024, at 14:30. Available at the link: https://blog.nemetschek.com/en/topics-and-insights/digital-building-permit.

significant time savings and improvements in planning quality can be achieved through its widespread adoption across all building offices.

Second section: Digitization of Building Permits in the United Arab Emirates

In line with Dubai's strategic move towards a fully digital environment, the Dubai Municipality has launched the "Building in Dubai" platform. This comprehensive digital platform encompasses all urban services and aims to establish Dubai as a future global capital for the construction, building, and urban development sectors. The new platform supports the development of a smart and sustainable construction(1) industry and enhances Dubai's leadership as one of the world's leading cities in leveraging technology to improve efficiency in key sectors. It offers comprehensive services through the platform for all stakeholders in the industry, including owners, developers, consultants, and contractors, within a user-friendly system that reduces time and effort.

In this context, the platform offers, for the first time, a range of services related to the construction and building sector in a single location. It will function as a user-friendly, proactive digital service system that reduces effort and saves time for project owners, thereby increasing their satisfaction. The platform represents the Municipality’s efforts to advance the global construction industry by developing a smart, sustainable, and cutting-edge sector, employing the latest innovative technologies to deliver exceptional services in building permits.

Dubai is also leading the digital transformation of the construction sector by preparing a road plan to implement construction information modelling in Dubai in collaboration with partners and provide information on buildings to provide multiple smart services and build Dubai's digital twins, To issue the first building permit using automated auditing, Dubai Municipality is developing standard building design standards building information modelling ", given the importance and benefits of achieving building information modelling on the life cycle of the building, By reducing costs, increasing the efficiency of construction and operation operations and reducing dependence on unqualified labour, reducing implementation time, and accelerating the licensing process.(2)

) -1(Dubai Government Media Office: **Dubai Municipality Launches the Comprehensive Digital "Building in Dubai" Platform for All Construction and Building Services**, published on October 18, 2023. Date and time of review: August 15, 2024, at 15:30. See the link:
https://mediaoffice.ae/ar/news/2023/October/18-10/Dubai%20Municipality%20launches%20Building%20in%20Dubai%20platform

) -2(Imad Al Ali, "Dubai Municipality Launches **'Building in Dubai' Digital Platform to Provide All Construction Services**, Emirates News Agency, published on October 18, 2023, accessed on August 20, 2024, at 11:30. Available at the link:
https://www.wam.ae/article/12iopx1-%D8%A8%D9%84%D8%AF%D9%8A%D8%A9-%D8%AF%D8%A8%D9%8A-%D8%AA%D8%B7%D9%84%D9%82-%D9%85%D9%86%D8%B5%D8%A9-%D8%A7%D9%84%D8%A8%D9%86%D8%A7%D8%A1-%D8%AF%D8%A8%D9%8A-%D8%A7%D9%84%D8%B1%D9%82%D9%85%D9%8A%D8%A9-%D8%A7%D9%84%D8%B4%D8%A7%D9%85%D9%84%D8%A9

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Dubai Municipality has successfully issued the first building permit using automated construction inspection technology for a 37-story mixed-use residential tower in the "Al Markaz" area, as part of a development project. The tower was designed according to Building Information Modeling (BIM) standards and requirements in Dubai, showcasing Dubai's global leadership in applying automated inspections to building designs. Standard criteria have been established for Dubai, and digital tools are continuously available on the "Building in Dubai" platform to conduct automated model inspections via a 3D model viewer. The system highlights code compliance issues, allowing consultants to review inspection results and address identified problems early.(1)

The new platform aligns with the "Digital Cities Experience" requirements set by Dubai Digital Authority, providing a comprehensive experience for owners throughout the construction journey in one place. It allows them to monitor the status of their projects (land information, construction details, and steps), provides a construction advisory guide, and offers model contracts as well as a list of registered consultants and contractors with their evaluations. The platform also incorporates the latest global technologies in the field, such as automated building design inspection using Building Information Modeling (BIM), an area where Dubai is a global leader, in addition to smart inspection and artificial intelligence.(2)

The digital platform is being developed in phases and will include a range of core services for owners, real estate developers, consultants, and contractors throughout the entire building process. This encompasses services for acquiring land, designing the building, obtaining building permits, carrying out construction work, completing and delivering services, moving into the building, leasing or selling it, as well as services for additions, modifications, maintenance, and demolition. Dubai Municipality aims to consolidate all construction-related services into a single comprehensive platform. Clients will be able to access the "Building in Dubai" platform and explore the diverse range of services available for owners, developers, consultants, and contractors.(3)

)-1(Dubai Government Media Office, https://mediaoffice.ae/ar/news/2023/October/18-10/Dubai%20Municipality%20launches%20Building%20in%20Dubai%20platform, op.cit.

) -2(Imad Al Ali,Op.cit.

) -3(buildindubai.gov.ae

The Second Topic
Activation of Digital Urban Administrative Police

The state's relentless and ongoing efforts in response to the demands of urban quality and its confrontation with all challenges and obstacles that attempt to hinder its progress towards establishing this quality have brought it to the brink of no return. This means that it is determined to continue working towards its realization by addressing all the problems plaguing the urban sector(1) . Therefore, it has become essential for urban management to take a step towards Activating Digital Urban Administrative Police to enhance this quality. This involves adopting digital control in all management and operation processes, using technology to issue digital permits and certificates, and making digital decisions to halt construction activities that violate urban planning rules based on digital inspection reports sent by urban police. Despite the urgent need to activate digital urban police, achieving this goal requires meeting many prerequisites **(first requirement)** and poses several legal issues **(second requirement)**.

First requirement: Digital Urban Administrative Police: prerequisites and Objectives

Algeria, like many other countries, has moved towards modernizing its administration to ensure its effective operation.(2) In the context of modernizing urban management, it is essential to modernize the regulation of urban planning activities to enhance the quality of the supervisory process. The activation of Digital Urban Administrative necessitates addressing various technological, conceptual, and legal prerequisites. This type of regulation aims to achieve several objectives, which we will attempt to clarify in the following:

In Algeria, the field of urban planning and development is supported by a vast array of legal and regulatory texts concerning urban and environmental matters, these texts aim to regulate urban and environmental domains under the concept of maintaining public order, both in its traditional and modern senses. This is managed through administrative police and urban policing authorities, which exercise their regulatory functions within the confines of specific legal and regulatory frameworks in force.(3)

)-1(Souhila Boukhmis,, " **The quality of urbanism control between digitization requirements and legal mechanisms**", Journal of Rights and Freedoms, University of Mohamed Khider-Biskra, Vol. 10, No. 1 (pp. 705-723) , 2022, p. 707.

) -2(Warda Khelifi, and Benani Ahmed Mawaqi. " **The electronic governance as a tool to manage and improve the performance of local communities in Algeria**." Journal of Law and Political Science, University of Abbes Laghrour-Khenchela, Vol. 6, No. 2 (pp. 288-301), June 2016, p. 289.

)-3 (Souhila Boukhmis, **Op.cit**, p.720.

To transition from traditional administrative urban police to digital urban administrative police, the urban management sector needs to undertake several steps to transform traditional processes into digital operations using modern technology. This may include employing the internet, smartphones, and applications to enhance efficiency and streamline processes. It is crucial for urban management to be prepared and ready for the transition, planning for its gradual and effective implementation through:

First section: prerequisites of Digital Urban Administrative Police

The activation of digital regulation necessitates meeting several key necessities, including the establishment of a comprehensive Digital platform for urban administrative police processes, programming the legal controls related to digital urban monitoring, and training employees on digital urban regulation applications. These aspects will be discussed as follows:

Firstly: Digital platform for urban administrative police processes

A comprehensive digital urban management system can be achieved by developing an integrated electronic system that allows for the digital management of urban processes. This involves creating a database that includes crucial information such as project details, permits, and licenses granted, ensuring that this information is easily accessible and can be updated efficiently.

All decisions and urban planning documents should be added to the digital platform for building permit applications. This requires collaboration and coordination among relevant authorities to provide and regularly update this information on the platform. Once decisions and plans are uploaded, they will be accessible to users for viewing and downloading. Users will be able to search for decisions and plans related to specific construction projects and obtain detailed information about them. In this way, access to all relevant decisions, plans, and violations related to construction projects will be made available easily and effectively, facilitating the management of urban processes and the making of informed decisions.

Secondly: Programming Legal Controls for urban administrative police

The activation for Digital Urban Administrative Police does not solely depend on creating a digital platform and developing systems to process information and use advanced communications and software technologies. It also requires simplifying laws and regulations and introducing some flexibility into their procedures(1) .

In this context, to achieve the goals of digitalization, it is essential to program the legal controls related to digital monitoring within the framework of digital data

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)-1(Nabil Aït Chaalal, " **Requirements for modernizing public administration in Algeria (reality and hope)**,Journal of legal and social studies, University of Zian Achour-Djelfa, Vol. 8, No. 01 (pp. 1651-1664), March 2023, p. 1652.

and the national registry system, decisions or legal actions involving citizens cannot be made without access to the necessary data concerning citizens' rights, the fulfillment of legal conditions, and the data programmed into digital systems. This information should be accessible only to authorized entities.

Such programming includes[1] **:**

- Programming legal controls related to construction, demolition, subdivision, and any legal actions within the urban domain.
- Programming the types of urban violations specified by Urban Law No. 90-29 and Law No. 08-15.
- Programming the legal framework governing urban planning tools, such as land use plans and the master plan for urban development, which specify the conditions required for construction projects, with the aim of achieving urban expansion that highlights the value of areas with natural, cultural, or historical achievements, while protecting agricultural land, forests, green spaces, and other areas of significant value.
-Programming the legal system that governs urban public order, particularly with respect to beauty and charm, is essential since the beauty and charm of cities fall within the objectives of general administrative police, urban public safety, and urban tranquility. This system should ensure the preservation of natural beauty and charm within the urban fabric and built environments, it must also be based on the imperative to respect the environment, protect against, and combat all forms of pollution, with the goal of improving the quality of life, especially in relation to the management of construction debris. Additionally, it involves establishing categories of urban violations and corresponding penalties in accordance with the applicable legislation and regulations.

Thirdly: Training Employees on Digital Urban Police Applications

Proper training and adequate preparation of employees in the use of digital technology and digital urban administrative police applications are among the most important requirements for activating digital administrative police. Learning how to use various software and applications, along with providing technical support for employees and citizens in understanding and utilizing digital urban control, can significantly alter their perception of the routine work system they have practiced and become accustomed to over the years. This can facilitate their transition from the traditional administrative police model to the digital model. From a legal perspective, the legislator has mandated training and qualification for all public officials to ensure the quality of administrative work, as stipulated in Executive Decree No. 20-194 dated July 25, 2020, concerning the training of public employees and officials and the

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)-1(Souhila Boukhmis, **Op.cit**, p709.

enhancement of their skills in public institutions and administrations(1) , as well as Executive Decree No. 20-373 dated December 12, 2020, concerning the basic legal status of employees. (2)

Winning the bet on modernizing administration and successfully digitizing it while making it more accessible to citizens is tied to the institutions' ability to train personnel to manage public and private administrations with professionalism and efficiency. To provide public services that meet expectations and to succeed in the reform initiatives and transformation dynamics in the country under the leadership of "President Abdelmadjid Tebboune", it is essential to have effective human resources and cadres capable of keeping pace with these reforms. This requires prioritizing training as a fundamental cornerstone of the process of reforming and modernizing administration and public service.

The government's plan places significant emphasis on human resources, which are the most important and valuable assets held by administrations and institutions. These individuals are key to achieving effective performance within agencies and administrations through the quality of the policies and programs they propose, the decisions they make, and the services they strive to provide to citizens. This focus aligns with efforts to achieve renewed governance based on enhancing transparency and improving performance by ethicalizing public life and modernizing administration. Additionally, the process of evaluating the performance of public employees should serve as a tool to strengthen the achievement of desired outcomes from public policies, provided that the training and qualification of staff are continuous, aligned with career progression, job requirements, and administrative needs.(3)

The use of digital urban administrative police requires adjustments to existing legislation and regulations to align with new technologies. Therefore, relevant authorities must study and analyze the legal impacts and amend current legal frameworks accordingly.

Fourthly: Creating a Digital Space for Information and Participation

It is essential for the urban planning department to establish a digital platform for information and participation, and to develop digital applications and platforms

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)-1(Executive Decree No. 20-194 dated July 25, 2020, concerning the training of public employees and officials and the enhancement of their skills in public institutions and administrations, Official Journal, No. 43, published on July 28, 2020.

)-2(Executive Decree No. 20-273 dated December 12, 2020, concerning the basic legal status of employees, Official Journal, No. 77, published on December 30, 2020.

)-3(This was confirmed by Prime Minister "Aymen Ben Abdel Rahmane" during the graduation ceremony of the 50th cohort of the National School of Administration. See the link: https://www.youtube.com/watch?v=VJzzjw28Z68

that enhance interaction and communication between urban administration and citizens. This would enable citizens to feel the significance of their role in their local environment. Citizens are not only those who violate urban regulations and face penalties but also partners in urban development and key participants in the decision-making process. The creation of a digital space offers numerous benefits, including:

- **Enhancing Communication and Participation:** The digital platform allows individuals to communicate and engage in urban planning and development issues in easy and flexible ways. The digital system enables citizens to participate in the decision-making process and provide their opinions and suggestions regarding urban projects, contributing to sustainable development and meeting community needs.
- **Enhancing Transparency:** The digital platform can provide comprehensive and transparent information about urban projects and related decisions, which helps build trust between the public and the concerned authorities.
- **Improving Efficiency and Management:** The digital platform can facilitate management and coordination processes between stakeholders and improve the efficiency of resource and time utilization.

Second section: Objectives of Digital Urban Administrative Police

We can outline some objectives that digital urban police aims to achieve, including:

Firstly: Regarding administration

It helps improve the efficiency and effectiveness of urban management procedures, leading to enhanced planning, organization, implementation, and monitoring. Digital data can be used to make better and more accurate decisions, as well as to analyze patterns and trends for more informed strategic decisions. This allows for more effective city and regional planning and investment direction.

Secondly: Regarding citizens

It allows citizens to interact more easily and transparently with local authorities, enabling them to express their concerns, submit suggestions, and share their opinions effortlessly through digital applications. Citizens can also access information and services quickly and conveniently. Additionally, they can use digital platforms to receive notifications about proposed urban projects in their local area, review urban planning schemes, provide feedback and comments digitally, and send them to the urban administration via the platform. They can also easily access local government services and report infrastructure issues.

Thirdly: Regarding the urban and natural environment

Digital urban administrative control can be used to enhance the sustainability of infrastructure and reduce pollution and natural resource consumption. It allows for

better monitoring and management of energy and water usage, reduces harmful emissions, and promotes environmental conservation. Digital technology can also improve resource management, water management, waste management, and biodiversity conservation. Additionally, air quality can be improved, and noise pollution reduced through data monitoring and analysis.

The second requirement: Legal problematics for activating the Digital Urban Administrative Police

Implementing digital urban control is not an easy task, especially from a practical standpoint. While theoretical discussions focus on the requirements and desired objectives of such implementation, it is crucial not to stop there. The implementation process raises numerous legal issues that must be considered and addressed with technical, software, and legal solutions. Some of the key legal challenges posed by the implementation of digital control include:

First section: Privacy and Data Protection Issues

Privacy, in general, is a subjective measure that varies in definition and parameters from one environment to another. However, the common aspect among all definitions is that "privacy" is one of the most fundamental human rights in life. Its concept depends on the environment and context. According to Roger Clarke, a consultant and expert in electronic business and data privacy, privacy is "the ability of individuals to keep their personal space free from intrusion by organizations or other people." Personal data privacy, on the other hand, involves the expectation that one's personal data should not be readily accessible to others, including individuals or organizations. Even when this data is used by another party, individuals should retain significant control over how their data is handled and used. Roger Clarke defined it as "the desire of individuals to control or at least significantly influence how their personal data is managed."(1) Since digital urban control requires the use of digital technology to collect and store citizens' personal data, it is essential for relevant authorities to comply with data protection and privacy laws to ensure the safety and security of this data.

The Second section: Security and Cyber Threats Issues

To implement digital urban control securely, cybersecurity issues must be addressed, including protecting digital infrastructure from threats and cyber intrusions. Cybersecurity(2) encompasses security related to the internet, as well as wired and wireless communication networks. It involves a combination of technical

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) -1(Mona Turki Al-Moussawi, Jean Cyril Fadlallah. "**Information Privacy: Its Importance and the Risks Posed by Modern Technologies**.", Journal of Baghdad College of Economic sciences, University of Baghdad, Vol. 2013, No. 4 (pp. 303-355), pp. 307-308.

) -2(The term is derived from the Latin word "cyber", which means the realm of information.

information, organizational and administrative measures to prevent unauthorized access to and misuse of information systems and electronic information, ensuring the confidentiality and privacy of personal data, and taking all necessary measures to protect citizens and consumers from all threats in cyberspace. Cybersecurity can be described as the protection of vital information and systems from digital threats and attacks, especially given the increasing number of individuals attempting to access information. Consequently, cybersecurity is fundamentally linked to data storage for individuals and organizations and protection against hacking and breaches. Digital transformation relies on a system of hardware and software operating in technical environments, enabling the secure, efficient, and effective use of all assets[(1)] .

Conclusion:

At the end of this article, we conclude that the digital platform for building permit requests represents a significant step toward Activating the digital urban Police. However, this step still requires further enhancement. Establishing a digital platform does not, in itself, mean that building permits have been fully digitized. Files for building permit applications remain piled up in the single-window offices at the municipal level, awaiting examination through the traditional administrative process. What has been digitized so far is merely the submission of permit requests and tracking their progress. Through this study, we have arrived at the following results:

1. Digital platforms contribute to improving the efficiency of the building permit issuance process by reducing the time required to complete procedures and minimizing human errors, they also enhance transparency by providing clear and easily accessible information to all stakeholders.

2. There are numerous successful international experiences in establishing comprehensive digital platforms for all permits and certificates in the urban field, such as the German, Austrian, and UAE models. These experiences have advanced significantly in digitizing the technical and legal standards and regulations related to building permits.

3. Algeria's experience in establishing a "digital platform for building permit requests " represents a means of quickly accessing information related to building permits. This facilitates citizens and investors in understanding the requirements and necessary procedures, and allows them to track the stages of their permit requests. However, Algeria has not yet reached the stage of incorporating the legal standards and requirements used for approving building permits.

) **-1(**Abdelilah Chouchri,, Maryam Bouni. " **The role of the National Strategy for Digital Transformation in achieving the dimensions of sustainable development in Algeria- Vision 2030**.", MÂAREF" Journal, Vol. 18, No. 1 (pp. 4024-406), 2023, p. 412.

4. The establishment of a digital platform contributes to the activation of digital urban administrative Police by digitizing data and monitoring procedures, enabling the relevant authorities to better track permit applications and ensure compliance with laws and regulations.

5. Successful activation of digital urban administrative Police requires several prerequisites to achieve its objectives, among these are the creation of a comprehensive digital platform for all urban control operations, programming the legal regulations related to urban oversight into this platform, focusing on training and equipping employees with skills for digital urban management applications, and establishing a digital space for information and public engagement.

6. Implementing digital urban administrative police securely requires compliance with data protection laws to ensure the safety and security of personal data. It also necessitates addressing cybersecurity issues and protecting digital infrastructure from threats and breaches.

Based on the results obtained, the study provides the following recommendations:

1. Expand Digital Platform Capabilities: Develop and integrate a comprehensive digital platform that encompasses all aspects of the building permit process, including the incorporation of legal standards and regulations. This should aim to replicate successful international models and cover both technical and legal dimensions.

2. Benchmark Against International Models: Consider adopting best practices and features from successful international experiences such as those from Germany, Austria, and the UAE. These models have effectively digitized technical and legal standards, which could serve as a valuable reference for enhancing Algeria's system.

3. Integrate Legal Standards: Ensure that the digital platform for building permits includes the integration of legal standards and requirements. This will enhance the approval process by providing a complete digital solution that includes all necessary legal frameworks.

4. Enhance Digital Urban Administrative Police: Develop a comprehensive digital system for urban control that includes monitoring, data management, and procedural oversight. This will enable authorities to better track permit applications and enforce compliance with urban regulations.

5. Prioritize Training and Skill Development: Invest in training programs to equip municipal staff with the necessary skills for managing and operating digital urban management systems. Focus on enhancing their proficiency in using digital tools and platforms to ensure smooth implementation.

6. Ensure Data Protection and Cybersecurity: Implement robust data protection measures to safeguard personal information and ensure compliance with data

protection laws. Address cybersecurity challenges by fortifying digital infrastructure against potential threats and breaches.

List of sources and references:

A. Regulatory texts :

1. Executive Decree No. 20-194 dated July 25, 2020, concerning the training of public employees and officials and the enhancement of their skills in public institutions and administrations, Official Journal, No. 43, published on July 28, 2020.

2. Executive Decree No. 20-273 dated December 12, 2020, concerning the basic legal status of employees, Official Journal, No. 77, published on December 30, 2020.

B. Articles:

B.1. Journal articles:

3. Abdelilah Chouchri, Maryam Bouni. " **The role of the National Strategy for Digital Transformation in achieving the dimensions of sustainable development in Algeria- Vision 2030**.", MÂAREF" Journal, Vol. 18, No. 1 (pp. 4024-406), 2023.

4. Judith Fauth, Gabriele Pasetti Monizza, Giada Malacarne, **«understanding processes on digital building permits–a case study in SouthTyrol»**, Building Research & Information, Vol. 51, n. 5(518–532), 2023.

5. Fatiha Fertas, **"Modernizing Public Administration in Algeria through the Application of E-Government and Improving Citizen Services"**, New Economy Journal, Khmis Miliana University, Vol 2, n 15, (pp. 305-322), 2016.

6. Mariana Ataide, Orjola Braholli, Dietmar Siegele, " Digital Transformation of Building Permits: Current Status, Maturity, and Future Prospects, Buildings", Buildings journal, Vol. 13, n10, 2023.

7. Mona Turki Al-Moussawi, Jean Cyril Fadlallah. "Information Privacy: Its Importance and the Risks Posed by Modern Technologies.", Journal of Baghdad College of Economic sciences, University of Baghdad, Vol. 2013, No. 4 (pp. 303-355).

8. Nabil Aït Chaalal, " Requirements for modernizing public administration in Algeria (reality and hope),Journal of legal and social studies, University of Zian Achour-Djelfa, Vol. 8, No. 01 (pp. 1651-1664), March 2023.

9. Souhila Boukhmis,, " The quality of urbanism control between digitization requirements and legal mechanisms", Journal of Rights and Freedoms, University of Mohamed Khider-Biskra, Vol. 10, No. 1 (pp. 705-723) , 2022.

10. Warda Khelifi, and Benani Ahmed Mawaqi. " The electronic governance as a tool to manage and improve the performance of local communities in Algeria." Journal of Law and Political Science, University of Abbes Laghrour-Khenchela, Vol. 6, No. 2 (pp. 288-301), June 2016.

11. Ziyadin Sayabek. Saltanat Suieubayeva, A. Utegenova, "Digital Transformation in Business", Springer Nature Switzerland AG 2020, LNNS 84(pp. 408–415), 2020.

B.2.Seminar articles:

12. Amin Bechar, **Electronic Building Permit**, Study Day Organized at the headquarters of the Mutual Guarantee and Warranty Fund for Real Estate Development, on July 14, 2022.

B.3.Electronic articles:

13. Imad Al Ali, "Dubai Municipality Launches **'Building in Dubai' Digital Platform to Provide All Construction Services**, Emirates News Agency, published on October 18, 2023, accessed on August 20, 2024, at 11:30. Available at the link:
https://www.wam.ae/article/12iopx1-%D8%A8%D9%84%D8%AF%D9%8A%D8%A9-%D8%AF%D8%A8%D9%8A-%D8%AA%D8%B7%D9%84%D9%82-%D9%85%D9%86%D8%B5%D8%A9-%D8%A7%D9%84%D8%A8%D9%86%D8%A7%D8%A1-%D8%AF%D8%A8%D9%8A-%D8%A7%D9%84%D8%B1%D9%82%D9%85%D9%8A%D8%A9-%D8%A7%D9%84%D8%B4%D8%A7%D9%85%D9%84%D8%A9

14. Tim Westphal, The Digital Building Permit – A Dream Coming True?, Published on: November 11, 2022, accessed on August 20, 2024, at 14:30. Available at the link: https://blog.nemetschek.com/en/topics-and-insights/digital-building-permit

C. Internet websites:

15. Dubai Government Media Office: **Dubai Municipality Launches the Comprehensive Digital "Building in Dubai" Platform for All Construction and Building Services**, published on October 18, 2023. Date and time of review: August 15, 2024, at 15:30. See the link:
https://mediaoffice.ae/ar/news/2023/October/18-10/Dubai%20Municipality%20launches%20Building%20in%20Dubai%20platform

16. ESCWA, Speech by Mr. the Secretary-General titled **"Prospects for Digital Transformation in Algeria"** at the 9th Virtual Meeting of Arab E-Government Program Directors organized by ESCWA on December 16, 2021. [En ligne]
https://www.unescwa.org/sites/default/files/event/materials/6-Algeria-Min-Post-Telecom-Ar.pdf

17. European Network for Digital Building Permit at https://eu4dbp.net