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LEGAL ANALYSIS OF LEGAL CERTAINTY REGARDING THE USE OF AUTOMATIC GATES (AUTOGATE) AT THE IMMIGRATION CHECKPOINT OF THE INTERNATIONAL PORT OF CITRA TRITUNAS (A RESEARCH STUDY AT THE CLASS I SPECIAL IMMIGRATION OFFICE OF TPI BATAM)

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Abstract

The modernization of Indonesia's immigration system through the use of digital technology is a response to the need for efficient, fast, and legally guaranteed public services. One such innovation is the use of automatic gates (autogates) at Immigration Checkpoints (TPI), including at Citra Tritunas International Port, Batam. However, the implementation of autogates as an immigration inspection tool raises various legal issues, ranging from regulatory loopholes, technical obstacles, to cultural resistance that can threaten legal certainty and the protection of user rights. This study aims to analyze the regulation and implementation of autogate use from a legal certainty perspective, as well as identify obstacles and formulate relevant solutions. This study uses normative and empirical legal methodologies, with a regulatory approach, field interviews, and direct observation at the Class I Special Immigration Office for the Batam Port Area. John Rawls' theory of justice serves as a grand theory, Lawrence M. Friedman's theory of legal systems as a middle theory, and Sudikno Mertokusumo's theory of legal certainty as an applied theory. The research findings indicate that, from a normative perspective, the use of automatic gates has been regulated through the Regulation of the Minister of Law and Human Rights No. 9 of 2024; However, this is not yet supported by detailed technical regulations, such as standard operating procedures (SOPs) and operational guidelines. Field implementation demonstrates procedural efficiency; however, it still faces technical glitches, infrastructure limitations, and low user understanding. These obstacles result in legal uncertainty and inadequate protection of user rights. Therefore, technical regulatory updates, human resource training, public awareness campaigns, and strengthened cross-sector coordination and digital-based monitoring systems are needed.

Keywords: ***Legal Certainty, Autogate, Immigration, Public Services, TPI Batam Immigration Office***

1. Introduction

In an era of globalization characterized by increasing human mobility, technology has become an important tool in improving the efficiency and effectiveness of public services, including in the immigration sector. One innovation that has been adopted is the use of automatic gates (autogates) at immigration checkpoints, which are designed to speed up the process of checking travel documents while enhancing security. At Citra Tritunas International Port in Batam City, autogates have become an integral part of strategic efforts to modernize immigration services, given that the port serves as one of the main entry points for Indonesian citizens (WNI) and foreign nationals (WNA) in the border region. However, the implementation of autogates presents several legal and technical challenges that require further attention, particularly in ensuring legal certainty for both users and service providers. Legal certainty is a central issue in the use of autogates, given the complexity of the relationship between regulations, technology, and the protection of users' human rights. The use of autogates must be supported by clear and comprehensive regulations to ensure their implementation is in accordance with immigration law principles. This creates an urgent need to review the legal aspects of legal certainty in the use of autogates, particularly at Citra Tritunas International Port, to support the creation of modern,

transparent, and fair immigration services. Technological developments have had a significant impact on various sectors, including immigration control systems. At the global level, developed countries have implemented automated systems for border control, such as e-gates and autogates, to improve efficiency and security. Autogate is a form of biometric technology that allows users to independently check their travel documents at high speed. This system integrates facial recognition technology, fingerprint scanning, and electronic passport scanning to automatically verify users' identities. With the adoption of this technology, public services in the immigration sector have become more modern and relevant to the needs of the times [1]. In Indonesia, the modernization of the immigration system began to receive serious attention in the early 21st century, in line with the increase in international travel. One of the strategic steps taken was the introduction of automatic gates (autogates) at a number of international airports and seaports. The use of autogates was first introduced at Soekarno-Hatta International Airport as a pilot project in 2013, before being rolled out to other ports, including Citra Tritunas International Port in Batam City. This initiative aims to address the challenges posed by increasing international traffic without compromising high security standards [2]. The implementation of autogates is also part of the Indonesian government's commitment to comply with international standards set by the International Civil Aviation Organization (ICAO) regarding the use of biometric technology at international crossings. In addition to speeding up the administrative process, autogates are also designed to reduce direct interaction between immigration officers and users, thereby reducing the risk of human error and increasing transparency. This step reflects the integration of technology in immigration services as part of the government's digital transformation [3].

The use of autogates is basically aimed at improving the quality of public services in the immigration sector, particularly in terms of speed, efficiency, transparency, and accuracy of checks at immigration checkpoints. By integrating biometric technology, travel document scanning, and electronic data verification, autogates ensure more objective services and reduce the potential for abuse of authority. However, the success of these public service guarantees remains dependent on the strict implementation of standard operating procedures (SOPs), the readiness of technological infrastructure, and the awareness of both users and staff. Under these new regulations, public services in the field of immigration through autogates are not only legally valid but also aimed at fulfilling the principles of transparency, accountability, and non-discrimination in accordance with the principles of public service as stipulated in Law No. 25 of 2009 on Public Service. In its technical implementation, the use of autogates is further reinforced by the issuance of a Director General of Immigration Circular Letter, which serves as an internal technical implementation regulation. This circular letter outlines the procedures for using autogates, the security of biometric data, the verification of travel documents, and the inspection process through autogates. Although the Circular Letter does not have the same legal standing as a law, government regulation, or ministerial regulation, its function remains crucial in providing detailed operational guidelines to immigration officers on the ground. Thus, the existence of this Circular Letter complements the formal regulations in Permenkumham No. 9 of 2024, ensuring that the use of autogates is not only legally valid but also standardized from a technical operational perspective to guarantee legal certainty and the effectiveness of immigration services at the Citra Tritunas International Port. The implementation of autogates also plays a strategic role in preventing the misuse of travel documents, such as double passports or the use of documents belonging to other people. The biometric technology integrated into this system ensures that only authorized individuals can pass through, in accordance with the identity stated on their travel documents. This is particularly important in border areas that are vulnerable to transnational crimes, including human trafficking and smuggling [4].

In immigration services, legal certainty means that every individual entering or leaving the country must be treated in accordance with valid and applicable regulations. This includes procedures for checking travel documents, handling violations, and the use of technology, such as autogates. The government must ensure that the rules governing these processes are consistent and free from ambiguity, so that they can protect national interests and individual rights in a balanced manner [5]. One of the main challenges in ensuring legal certainty for autogate users is the protection of privacy and personal data rights. Autogate systems require users to submit biometric information, such as fingerprints or facial recognition, which is highly sensitive. Without strict regulations, this data can be misused, leading to violations of users' privacy rights. This is a particular concern for foreign nationals, who may have different expectations regarding data protection based on the legal standards of their home countries. Additionally, there are challenges in ensuring that all users have equal access to autogate systems. The use of this technology must take into account specific groups, such as individuals with physical or technical limitations, for example, non-electronic passports that cannot be processed by the system. Mismatches between user needs and technological capabilities can create the perception of discrimination in public services. With the introduction of autogate technology, the Batam Special Class I Immigration Office also faces new challenges, including the need for technical training for officers and regular system maintenance. This shows that immigration modernization requires not only advanced technology but also competent human resources and

adequate regulations. One of the main challenges faced by the Batam Special Class I Immigration Office is ensuring that the autogate system can run optimally without reducing service quality. Infrastructure limitations, such as technological devices that sometimes experience disruptions, can hamper the smooth running of the inspection process. This requires reliable technical support and regular monitoring of the system. Additionally, the need for training for immigration officers is a critical concern. Not all officers have sufficient understanding of autogate technology, which could lead to operational errors that impact public trust. Therefore, investment in education and technical training for officers is essential.

2. Literature Review

2.1 Legal Certainty

Legal certainty is one of the fundamental principles in legal theory that ensures that laws are enforced consistently and predictably. According to Gustav Radbruch, legal certainty is one of the three fundamental values of law, alongside justice and utility. Radbruch emphasizes that laws must be positive, meaning that they are established by a competent authority and are clear enough to be understood by the public [6]. Sudikno Mertokusumo, an Indonesian legal expert, states that legal certainty means clarity and order in the law, so that people know what is permitted and what is prohibited. Without legal certainty, the law loses its meaning because it cannot serve as a guide for people's behavior [7]. Law No. 25 of 2009 on Public Services emphasizes that legal certainty is one of the principles that must be fulfilled in the provision of public services. This means that every service must have a clear legal basis, transparent procedures, and standard service standards. Legal certainty in public services also includes the protection of the rights of the public as service recipients. The public has the right to receive services that meet the established standards and has a complaint mechanism if the services received do not meet those standards [8].

2.2 Use of Automatic Gates (Autogate)

The autogate system is an automated immigration checkpoint facility that allows border crossers, both Indonesian citizens (WNI) and foreign nationals (WNA), to complete the immigration process independently without direct interaction with officers. According to the Directorate General of Immigration, autogate utilizes advanced technology to scan passports, recognize faces, and check security-related databases. The primary objective of implementing the autogate system is to improve the efficiency and speed of immigration inspection processes at Immigration Checkpoints (TPI). With autogate, the time required for inspection can be reduced to approximately 15-25 seconds per person, thereby reducing long queues and smoothing traffic flow at international ports or airports. Additionally, autogates aim to improve accuracy and security in immigration inspection processes. By integrating facial recognition technology and border management systems, autogates can perform real-time identity verification and detect potential threats, such as individuals on the watchlist or prohibited entry list. The inspection process through the autogate begins with scanning the passport on the available device. Border crossers are asked to place the biodata page of their passport on the scanner, which will then read the electronic information stored in the passport chip. After passport scanning, the system performs biometric verification, such as facial recognition. Border crossers are directed to face a camera that scans and matches facial data with information stored in the immigration database. This process ensures that the individual traveling matches the identity stated on the passport.

2.3 Port Immigration Inspection

Law No. 25 of 2009 on Public Services is the legal basis governing the provision of public services in Indonesia. This law aims to provide legal certainty in the relationship between the public and public service providers, as well as to encourage improvements in the quality of services provided by the government and corporations. One of the main focuses of this law is the establishment of service standards that must be adhered to by public service providers. These standards cover aspects such as procedures, completion time, costs, service products, facilities and infrastructure, competence of personnel, and internal supervision. With these standards in place, it is hoped that public services will be transparent, accountable, and in line with public expectations [9]. Law No. 6 of 2011 on Immigration is the primary legal basis governing all aspects of immigration in Indonesia. This law replaces Law No. 9 of 1992, which was deemed no longer adequate to meet the evolving needs for regulation, services, and oversight in the field of immigration. The Immigration Law No. 6 of 2011 consists of 15 chapters and 141 articles covering various aspects, including the implementation of immigration functions, entry into and exit from Indonesian territory, travel documents of the Republic of Indonesia, visas, entry permits, residence permits, immigration supervision, administrative immigration measures, and criminal provisions.

2.4 Immigration Supervision

Immigration supervision is an integral part of the duties of the Directorate General of Immigration, which is carried out through immigration offices in various regions, including Immigration Checkpoints (TPI) at ports. According to Article 1, point 25 of Law Number 6 of 2011 on Immigration, immigration supervision is a series of activities to observe, investigate, inspect, and evaluate the presence and activities of foreign nationals to ensure compliance with immigration laws and regulations. This emphasizes that surveillance is a preventive and enforcement function against immigration violations at the country's entry points. Seaports designated as Immigration Checkpoints (TPI) have a strategic function in monitoring the entry and exit of people from and to the territory of Indonesia. The presence of immigration officers at ports is intended to ensure that every person who passes through has met immigration requirements and does not pose a threat to national order and security [10].In this context, international ports such as Citra Tritunas Port in Batam are one of the vital points that are strictly guarded by immigration officers with the assistance of inspection systems such as autogates as part of modernization efforts in surveillance.

3. Methodology

Specifically, according to type, nature, and purpose, Soerjono Soekanto distinguishes between normative legal research and sociological or empirical legal research [11]. This normative legal research is also known as doctrinal legal research, or library research or document study. Researchers conducting research on this subject have established specifications for normative legal research. This thesis research is normative legal research combined with sociological (empirical) legal research using secondary data obtained directly from primary sources through field research via interviews and primary data as sources/information in the form of primary legal materials, secondary legal materials, and tertiary legal materials. The location of this study was conducted in Batam City, precisely at the Citra Tritunas International Port in Batam City. This location was determined based on the data that became the object of this thesis research.

4. Results and Discussion

4.1 Legal Regulations on the Use of Automatic Gates (Autogate) at Immigration Checkpoints at Citra Tritunas International Port

Law Number 6 of 2011 on Immigration is the main legal basis governing immigration in Indonesia. This law repeals and replaces Law Number 9 of 1992, bringing a more adaptive approach to global dynamics, including in the aspects of public services and supervision of foreigners. In Article 1(1), immigration is defined as matters relating to the movement of people entering or leaving the territory of Indonesia and its supervision in order to maintain the sovereignty of the state. This law also reinforces the position of the Directorate General of Immigration as the implementing agency for immigration policy responsible for regulating, serving, and supervising cross-border movements. Within Law No. 6 of 2011 on Immigration, there are several provisions that open the door to modernizing immigration services. For example, Articles 68 and 69 regulate immigration checks that can be conducted at immigration checkpoints (TPI), where checks are conducted on every person entering or exiting Indonesian territory. This provision then became the legal basis for the development of inspection system technology, such as the use of automatic gates (autogates), which is part of the digital transformation in public services. Thus, although autogates are not explicitly mentioned in the law, their existence is still in line with the mandate of the law, which provides room for innovation in the immigration inspection process.

The role of regulation in technology-based immigration services is crucial as a means to achieve legal certainty and bureaucratic efficiency. In this context, Law No. 6 of 2011 serves as the normative foundation for the development of subsidiary regulations, such as Minister of Law and Human Rights Regulation No. 9 of 2024, which specifically regulates the procedures for immigration inspection by incorporating the use of autogates as an electronic inspection method. Such regulations are necessary to ensure that the implementation of technology does not conflict with legal principles but rather becomes part of the modern, efficient, and accountable performance of immigration functions. On the other hand, regulations also serve as a control mechanism against potential abuse of authority and human rights violations in the use of technology. The use of autogates involving biometric data, for example, requires legal protection for data privacy and system security. Therefore, the existence of clear and detailed regulations is essential not only for the legality of the system but also to ensure justice and legal certainty for all users of immigration services. This reflects that technology-based immigration services should not only be focused on administrative efficiency but must also uphold the applicable legal principles. Ministry of Law and Human Rights Regulation No. 9 of 2024 was issued as a further implementation of the provisions of Article 22 of Government Regulation No. 31 of 2013 concerning the

Implementation Regulations of Law No. 6 of 2011 on Immigration. This regulation governs the procedures for immigration checks on persons entering or leaving the territory of Indonesia, including the mechanisms, standards, and forms of immigration services, both manual and electronic, at Immigration Checkpoints (TPI). In the context of modernization, this Ministerial Regulation provides scope for the use of electronic systems, such as autogates, as a form of technology-based service. Article 1(6) of Permenkumham No. 9 of 2024 explicitly defines an autogate as "an electronic crossing gate for Indonesian citizens or certain foreign nationals during exit or entry inspections into the territory of Indonesia." This definition provides normative clarity regarding the physical form and function of autogates within the immigration crossing system. Legally, the existence of autogates has obtained formal legitimacy as a valid immigration inspection instrument that can be implemented at TPI. Autogates have become one of the immigration inspection methods with the same legal standing as conventional inspections by immigration officials, provided that the system is integrated with the Directorate General of Immigration's database through the Simkim (Immigration Management Information System) application. In the context of administrative law, the recognition of autogate in ministerial regulations provides administrative validity that this system can be used as the basis for issuing entry and exit permits for border crossers. Articles in Permenkumham No. 9 of 2024, such as Articles 27 and 37 for foreign nationals and Indonesian citizens, indirectly provide an operational framework for the autogate system, particularly regarding the collection of biometric data, scanning of travel documents, and verification against immigration databases. This process is carried out automatically by the autogate, which replaces some of the functions of immigration officers during the initial identification of travelers, provided the system is capable of processing data in accordance with technical standards.

4.2 Implementation of Automatic Gates (Autogate) at Citra Tritunas International Port by the Special Class I Immigration Office of TPI Batam

The Batam Special Class I Immigration Office is a technical implementation unit of the Directorate General of Immigration under the Ministry of Immigration and Corrections of the Republic of Indonesia. Structurally, the office is headed by a Head of Office who oversees several sections, including the Immigration Traffic Section, the Immigration Intelligence and Enforcement Section, the Residence Permit and Immigration Status Section, and the Administrative Affairs Subdivision. Based on interviews with structural officials in the Immigration Traffic Section, it was found that the main duties of this office are to carry out immigration service, supervision, and law enforcement functions in the TPI Batam work area, which includes several international ports, such as Citra Tritunas, Batam Center, and Harbour Bay. As an immigration office classified as "Class I Special," the Batam TPI Immigration Office has more complex operational characteristics compared to regular immigration offices. Based on direct observations within the office environment, there is a technology-based surveillance system integrated with the Immigration Management Information System (SIMKIM) and the implementation of an autogate system at several ports. The office's authority includes issuing passports, monitoring foreign nationals, conducting immigration checks at the TPI, handling administrative immigration actions, and providing digital immigration services. According to internal data obtained during the study, the office's operational area covers strategic international traffic points in Batam, making it one of the busiest immigration offices in Indonesia.

In the context of immigration supervision, the primary function carried out by the Batam TPI Immigration Office at the Citra Tritunas International Port is to inspect every person and travel document entering or exiting Indonesian territory. Based on interviews with field officers, the autogate system has been utilized to expedite the inspection process, particularly for Indonesian citizens using electronic passports. However, surveillance is still carried out in layers, combining automated systems and manual verification by officers to anticipate possible document misuse or the entry of individuals on the watchlist. Immigration services at Citra Tritunas Port include issuing entry and exit permits for the territory of the Republic of Indonesia, biometric data checks, and real-time reporting to the central server of the Directorate General of Immigration. Based on direct observations of the service process at the autogate area, the system demonstrates high efficiency in reducing queues, although technical challenges such as the system's inability to recognize certain users' biometric data were still encountered. Officials stated that technical training and IT support are crucial in ensuring the smooth operation of the autogate system as part of the digital transformation of immigration services.

In general, the supervisory and service functions of the Batam TPI Immigration Office have been carried out in accordance with applicable regulations, particularly in implementing Ministry of Law and Human Rights Regulation No. 9 of 2024 on Procedures for Immigration Inspection. However, interview results indicate that optimizing the autogate system still requires more detailed technical regulations, as well as infrastructure updates to ensure system reliability in the long term. In this regard, the Batam TPI Immigration Office plays a strategic role as a policy implementer and as a link between the normative legal immigration system and operational dynamics on the ground, including in ensuring

legal certainty and protecting the rights of immigration service users. Based on direct observations at the Citra Tritunas International Port Immigration Checkpoint (TPI), the autogate system operates as an automatic crossing gate integrated with the Immigration Management Information System (SIMKIM). The autogate is equipped with an electronic passport scanner (e-passport), a facial recognition camera, and a fingerprint scanner. This system is designed to verify users' identities biometrically and automatically in less than 15 seconds, without direct intervention from immigration officers.

Observations show that the process flows from passport scanning, facial recognition, data confirmation, to the gate opening automatically if verification is successful. The autogate at Citra Tritunas is positioned on a dedicated lane separate from the manual inspection lane, intended for Indonesian citizens and foreign nationals who meet certain criteria, such as holding an electronic passport and having biometric data recorded in the system. In a single day, the autogate can serve over 500 border crossers, particularly during peak departure and arrival hours. In terms of surveillance, the system is equipped with automatic notifications linked to the control room if verification fails or potential violations occur, such as expired passports or individuals on the watchlist. The use of autogates demonstrates greater time efficiency and orderliness in port traffic compared to manual lanes. According to internal Standard Operating Procedures (SOPs) obtained during the study, the autogate inspection procedure for Indonesian citizens (WNI) begins with inserting an electronic passport into the autogate scanner.

The system then performs facial verification using face recognition technology matched with passport data and the Directorate General of Immigration database. If the data is valid, the system opens the first gate, followed by fingerprint verification. Once the entire verification process is complete, the second gate opens, and the traveler is deemed cleared for entry. Meanwhile, for eligible foreign nationals (WNA), specifically holders of passports from certain countries that have established electronic immigration cooperation with Indonesia and possess an e-passport with recorded biometric data, the procedure is similar to that for WNI. However, the system automatically verifies residence permit or visa data through integration with the immigration authorization system. If there is a discrepancy, the system will direct the user to the manual lane. Immigration officers are stationed near the autogate to handle any notifications from the system regarding potential violations or technical issues. All SOPs for the use of autogates have been aligned with Permenkumham No. 9 of 2024 and technical guidelines established by the Directorate General of Immigration.

In practice, the autogate also records the time, identity of the traveler, and verification results as part of a digital record that can be reviewed in the event of an administrative dispute or investigation. The SOP also requires that autogate users have no blacklist entries in the system (such as a watchlist) and have undergone biometric data recording at the time of passport issuance or autogate user registration. Interviews with immigration officers at the site indicate that the use of autogates has significantly helped reduce manual workload and expedite the inspection process, especially during peak hours. One officer stated that “with autogates, we can focus on users who require further inspection, while regular travelers can be processed more quickly without long queues.” However, they also noted that technical training for officers and system maintenance need to be improved to prevent system downtime that disrupts operations.

4.3 Obstacles and Efforts in the Use of Automatic Gates (Autogate) at Immigration Checkpoints in Citra Tritunas International Port by the Special Class I Immigration Office of TPI Batam

Challenges faced in the implementation of the use of Automatic Gates (Autogate) at the Immigration Checkpoint at Citra Tritunas International Port by the Class I Special Immigration Office TPI Batam, are as follows:

1. Regulatory challenges

Observations and interviews with structural officials at the Special Class I Immigration Office at TPI Batam indicate that although Permenkumham No. 9 of 2024 has become the legal basis for the use of autogates, there are no technical regulations that detail operational procedures, maintenance, system failure handling, and administrative dispute resolution procedures. The absence of technical guidelines has led to inconsistencies in procedures among staff, particularly in handling users who experience verification failures or errors in the autogate system. As a result, decisions are subjective and risk reducing legal certainty for users. For example, in an interview with an officer in the Immigration Traffic Division, it was mentioned that there is no formal reporting system in place if there is a data discrepancy or error in the autogate system. Officers rely solely on their work experience and verbal coordination between teams. This has the potential to cause legal problems if users feel that their rights have been violated but there is no clear administrative mechanism for filing complaints. Therefore, these regulatory obstacles demonstrate the urgency for the Directorate General of Immigration to develop and disseminate standard operating procedures (SOPs) nationwide.

2. Technical obstacles

From a technical perspective, direct observations show that the autogate hardware still frequently experiences system malfunctions, such as facial recognition failures, errors in reading electronic passport chips, and slow system response times when verifying biometric data. One user said in an interview that he had to try up to three times before the system could read his facial data correctly. This caused queues to form, even though the system was designed for efficiency. These disruptions not only hamper the smooth running of services but also have the potential to undermine public confidence in this technology.

In addition, limitations in network infrastructure and device support are also major obstacles to the implementation of autogates. In an interview with the immigration office's internal IT team, it was mentioned that not all autogate systems are optimally integrated with the central server, and data synchronization often experiences delays. The lack of specialized technicians in the field means that system repairs take a long time because they have to wait for assistance from the central office or technical vendors. This shows that the successful use of autogates is highly dependent on continuous technical support and professional routine maintenance.

3. Cultural barriers

Another equally important obstacle is cultural resistance from some officers who are not yet fully prepared to switch from manual checks to automated system-based checks. In several interviews, some officers said they still preferred manual checks because they felt more confident in identifying travelers directly. This indicates that not all human resources understand the function of autogates as a tool, rather than a replacement for immigration authorities. This lack of preparedness creates inconsistencies in service and has the potential to reduce the effectiveness of autogates as the main system. On the other hand, interviews with a number of Indonesian and foreign nationals revealed that the level of understanding of autogate usage procedures is still low. Some users expressed confusion in reading the system instructions, especially when using the autogate for the first time. There are no clear visual instructions or active assistance from officers during peak hours, so users who are unfamiliar with the system tend to avoid the autogate and choose the manual lane. This situation reflects the need for public education and increased technological literacy, so that cultural resistance to electronic systems can be minimized through a systematic educational and informative approach. The following are several efforts and solutions to overcome the obstacles to the implementation of autogates at the immigration checkpoint at Citra Tritunas International Port:

a. Updating Technical Regulations and SOPs

Field observations show that the existence of inadequate technical regulations is a major obstacle to ensuring the effectiveness and legal certainty of autogate use. Therefore, the first step that must be taken is the development of specific and detailed Standard Operating Procedures (SOPs) related to the use of autogates. Based on interviews with structural officials at the Batam TPI Immigration Office, the current SOPs are still general in nature and do not regulate in detail the handling of special cases such as system malfunctions, double verification, or biometric identification errors. This technical regulation update must be carried out by the Directorate General of Immigration through the mechanism of drafting implementation guidelines (juklak) and technical guidelines (juknis) in accordance with Permenkumham No. 9 of 2024. The new SOP must regulate the rights and obligations of users, steps to be taken in the event of system failure, response times for officers, and forms of administrative accountability. In addition, it is necessary to regulate the official reporting procedure for obstacles encountered by users so that there is a legal administrative channel for objections and complaints.

b. Human Resource Training and Public Awareness

The quality of human resources (HR) is also an important factor in optimizing autogates. Observations and interviews revealed that some immigration officers do not fully understand the technical functions and mechanisms of autogates. Some officers rely on personal experience without formal guidance, which can lead to inconsistencies in user handling. Therefore, periodic technical training is necessary, especially for officers in TPI areas who are directly assigned to supervise autogate operations. In addition to technical training, legal and public service ethics training is also important. Officers must be equipped with an understanding of the principles of legal certainty and user rights in technology-based public services. In interviews with sources from the administrative department, it was suggested that there should be a training module that integrates aspects of state administrative law with technical operational procedures. This is to ensure that officers' actions have a clear legal basis and are accountable. From the user's perspective, the interviews showed that many foreign and Indonesian nationals were unclear about the procedures for using the autogate and whether they met the criteria for using it. Therefore, public awareness needs to be expanded through various information media at the port, such as infographics, instructional videos, and direct assistance on site. The socialization should also cover understanding of user rights, including the right to request assistance from officers in the event of technical or administrative problems.

c. Strengthening Cross-Sector Coordination and Digital Surveillance

The implementation of autogates cannot run optimally without cross-sector coordination, particularly between the Directorate General of Immigration, port managers, system operators (technology vendors), and security agencies such as the Indonesian Navy and the Indonesian National Police. Observations indicate that coordination has been sectoral and not integrated into a single joint monitoring system. Therefore, a regular coordination forum involving all relevant parties should be established to discuss operational evaluations of the autogate system and determine joint improvement measures.

5. Comparison

Immanuel Simanjuntak's thesis research provides a different perspective compared to previous works on human trafficking and the role of immigration. Most previous studies, such as those by Rahayu (2020) and Wiratama (2018), focused more on victim protection and a purely criminal law approach. Their focus is on how victims obtain justice, rehabilitation, and fulfillment of their basic rights. Meanwhile, this thesis emphasizes the position of immigration as the gatekeeper of the state, which has not only administrative but also preventive and repressive responsibilities against human trafficking crimes. In other words, this study highlights the institutional dimension that has often been overlooked in previous analyses. Another comparison can be seen in the methodological approach. While previous studies have mostly used a normative legal approach by examining legislation, this thesis combines it with an empirical approach through case studies in border areas.

This enriches the analysis because it does not only discuss legal texts but also their implementation in the field, including bureaucratic obstacles, resource constraints, and issues of official integrity. Thus, this thesis seeks to bridge the gap between legal norms and social reality. In terms of contribution, this research broadens the horizon by emphasizing the importance of synergy between agencies, especially immigration, police, and women's and children's protection agencies. This differs from other studies that tend to view the roles of agencies separately. This thesis demonstrates that the success of human trafficking eradication is not solely determined by the strength of regulations but also by the effectiveness of coordination among state actors. With this focus, this thesis not only strengthens the academic literature on immigration but also provides practical recommendations for policymakers to ensure that existing legal instruments are truly operational and have a tangible impact.

6. Conclusions and Suggestion

Based on the discussion in the previous chapter, the following conclusions can be drawn:

a. The use of automatic gates (autogates) at the immigration checkpoint of Citra Tritunas International Port has been legally recognized through Ministry of Law and Human Rights Regulation No. 9 of 2024, which defines autogates as an official immigration inspection facility based on technology. However, the absence of detailed technical implementing regulations in the form of SOPs, guidelines, or technical guidelines has resulted in regulatory gaps that could potentially lead to legal uncertainty.
b. The implementation of autogates by the Special Class I Immigration Office at Batam International Port at Citra Tritunas International Port demonstrates progress in immigration services, with improved efficiency and accuracy of the inspection process. However, implementation in the field still faces constraints due to the limited number of devices. Nevertheless, system integration with the national database and supervision by officers continue to make autogate a strategic instrument for the modernization of immigration services.
c. The use of autogate at Citra Tritunas International Port faces obstacles, namely the absence of detailed technical regulations, technical obstacles such as system disruptions, and infrastructure limitations.

From these conclusions, the author can offer several recommendations, namely:

a. It is recommended that the Directorate General of Immigration immediately develop and establish comprehensive technical guidelines and SOPs regarding the use of autogates, including system failure handling scenarios, administrative complaint procedures, and technical guidelines for officers, in order to strengthen legal certainty and unify service standards at all immigration checkpoints.
b. It is recommended that the Government, through the Ministry of Immigration and Corrections of the Republic of Indonesia, accelerate the development of digital infrastructure and the integration of technology-based surveillance systems, and allocate a budget for periodic human resource training, so that the implementation of autogates is not only administratively efficient but also complies with the principles of substantive justice in public services.

c. Strategic efforts are required through the updating of technical regulations and SOPs, as well as continuous training and socialization for human resources. These steps are aimed at ensuring that the use of autogates is effective, fair, and guarantees legal certainty in immigration public services.

Author Contributions: A short paragraph specifying their individual contributions must be provided for research articles with several authors **(mandatory for more than 1 author)**. The following statements should be used "Conceptualization: X.X. and Y.Y.; Methodology: X.X.; Software: X.X.; Validation: X.X., Y.Y. and Z.Z.; Formal analysis: X.X.; Investigation: X.X.; Resources: X.X.; Data curation: X.X.; Writing—original draft preparation: X.X.; Writing—review and editing: X.X.; Visualization: X.X.; Supervision: X.X.; Project administration: X.X.; Funding acquisition: Y.Y."
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Data Availability Statement: We encourage all authors of articles published in FAITH journals to share their research data. This section provides details regarding where data supporting reported results can be found, including links to publicly archived datasets analyzed or generated during the study. Where no new data were created or data unavailable due to privacy or ethical restrictions, a statement is still required.
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