

Indonesian Travel Documents and The ICAO Document 9303: Principles, Security, Technology, and Infrastructure

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Abstract

The issuance, printing, production, and distribution standards of Indonesian travel documents are considered the international policies of travel documents and the Regulation of the Minister of Law and Human Rights. However, there is a notable gap about the concept and compliance of Indonesian passport issuance referring to the Indonesian Immigration Law No. 6 of 2011 with the ICAO Document 9303, which sets international standards for travel documents, security, and management. This study aimed to investigate the issuance standards of Indonesian travel documents under the ICAO Document 9303 about Travel Documents and the principle/management of stolen and lost travel documents, using qualitative research with document analysis and policy evaluation. The results showed that Indonesian travel documents were yet to fully comply with the ICAO Doc 9303, as the bearer signature was compulsory in the biodata or additional pages. The data on stolen and lost Indonesian passport were also not recorded in the Interpol SLTD (Stolen and Lost Travel Documents) database. As a novelty, the infrastructure of the security, cooperation, and management of SLTD was proposed, as all travel documents were redesigned and equipped with the chip features.

1. INTRODUCTION

The immigration clearance process is responsible for playing very important roles at international airports, seaports, and land borders in Indonesia since the global economic, political, social, cultural, and tourism sectors are rapidly growing with the dynamic mobility of people. This was very evident after reopening borders in early 2022, as the movement of people entry into and exit from the country was increasing and citizens immediately resumed traveling overseas for work, business, investment, study, pilgrimage, or tourism purposes¹. The government is also expected to re-boost national and regional economic growth, as the development of international airport, seaport, and land border infrastructure is equipped with technological advances in several regions to facilitate travelers². Therefore, Indonesian passport applications in immigration offices are significantly increasing, with the DGI (Directorate General of Immigration) rolling out the mobile app, M-Paspor, for relevant submission in January 2022³. This app allows passport applicants to lodge the required documents and complete the payment processes.

Indonesian passport and travel documents are also responsible for disclosing a long history of the issuance process by different authorities and the development of security aspects. Indonesian passport is divided into three types, diplomatic-official passport for diplomats/government employees, regular passport for travelers, and Hajj pilgrims, respectively⁴. From this context, the Ministry of Foreign Affairs often issues diplomatic and official passports to diplomats and government employees for official duties, respectively. The DGI under the Ministry of Law and Human Rights is also responsible for the issuance of regular papers to citizens for international travels. Meanwhile, before 2009, the Ministry of Religious Affairs commonly provides a special passport known as the Hajj document for pilgrimage purposes⁵. The issuance of this document was subsequently discontinued under Indonesian Immigration Law No. 6 of 2011, with citizens expected to apply for a regular passport for Hajj pilgrimage.

According to the Indonesian Immigration Law 2011, Indonesian travel documents consisted of relevant passport and travel document in lieu or SPLP (Indonesian emergency passport). This showed that the SPLP was categorized into three types: SPLP for Indonesians and foreign nationals, as well as border crossing pass/travel documents (Pas Lintas Batas/PLB). The arrangement of Indonesian and emergency passports is also governed under the Regulation of Minister of Law and Human Rights No. 18 of 2022 about the Revision of Regulation of Minister of Law and Human Rights No. 8 of 2014. This regulation describes the types of national passports, authority, validity, security features, conditions, requirements, distributions, cancellation, withdrawal, and issuance process. From this context, Indonesian passport comprise non-electronic and electronic documents with a 10-year maximum validity (previously 5 years for under 17 years old applicants). Based on security features standards, Indonesian passport refers to the ICAO (International Civil Aviation Organization) Document 9303. The new security features and specifications of passport are also presently regulated under the Decision Letter of Minister of Law and Human Rights No. M.HH-01.GR.01.03.01 of 2019, accompanied by regular revision and update at least once in five years. This recent regulation shows that the DGI is responsible for excluding the bearer signature column in Indonesian travel document, for effectiveness reasons and page saving.

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- 1 Fahriza Rianda, "Pemodelan Intervensi Untuk Menganalisis Dan Meramalkan Jumlah Penumpang Pesawat Di Bandara Soekarno-Hatta Akibat Pandemi Covid-19," *Seminar Nasional Official Statistics* 2021, no. 1 (November 1, 2021), <https://doi.org/10.34123/semnasoffstat.v2021i1.857>.
 - 2 Imas Sholihah, "Kebijakan Hukum Pembangunan Kawasan Perbatasan Melalui Infrastruktur Berbasis Teknologi," *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional* 5, no. 3 (2016): 305–21.
 - 3 Intan Nurkumalawati and Muhammad Syaroni Rofii, "Public Review of M-Paspor Application in Indonesia: Mobile Government, Digital Resilience, Cyber Security," in *Proceedings of the Fifth Annual International Conference on Business and Public Administration (AICoBPA 2022)* (Atlantis Press, 2023), 404–12, https://doi.org/10.2991/978-2-38476-090-9_32.
 - 4 Dadi Darmadi, "Hak Angket Haji: Pilgrimage and the Cultural Politics of Hajj Organization in Contemporary Indonesia," *Studia Islamika* 20, no. 3 (2013): 433–66, <https://doi.org/10.15408/sdi.20.3.512.443-466>.
 - 5 Pemerintah Indonesia, "Undang-Undang Nomor 17 Tahun 1999 Tentang Penyelenggaraan Ibadah Haji" (1999).

In line with security features, significant issues about Indonesian passport stated that the holders applying for German visas were rejected by the Embassy of the Federal Republic of Germany in Jakarta. This showed that the German authority refused travel documents without appropriate bearer signatures during the visa application in August 2022. Another similar case occurred when Indonesian passport holders applied for the Netherlands travel permit, where the Embassy of the Dutch Kingdom in Jakarta rejected the applications. In October 2022, other European countries, Belgium, and Luxemburg also refused the visa application for citizens holding Indonesian passport without the bearer signature⁶. This led to the declaration of a short-term solution by the DGI. From this context, non-electronic passport holders requesting a bearer signature column were advised to carry out a free relevant application at the Immigration office or the closest representatives, such as the Embassy or Consulate General of Indonesia. The signature column was also manually added to the endorsement page of travel document, using the template stamp.

Other important issues about Indonesian passport comprised the policy and management of SLTD (stolen and lost travel documents). In this case, the DGI reflected the poor management of SLTD in immigration offices and country representatives overseas⁷. Strategic cooperation was also constructed with NCB Interpol about SLTD database, which was integrated with immigration control application (APK) at all Indonesian entry and exit ports. However, SLTD policy was fragmented between National Police, Immigration offices, and the Interpol. Since stolen and lost passport data were yet to be recorded in the Interpol SLTD, the security of information and documents were potentially used for illegal migrants and other trans-border crimes. Despite rapid changes in Indonesian passport service, the present issuance problems were not considered, with only a few satisfactions expressed by applicants. This was largely because the issuance program focused more on public service delivery over security considerations and technology adoptions.

Some current works critically examines the queue apps system for passport application, various aspects of Indonesian passport issuance, including the application of Standard Operating Procedures (SOPs), the use of information technology, the efficiency of services, and the strategies for personal data protection. Bahri⁸ argues that in the application of the SOP for Indonesian passport issuance, there are no legal problems. However, there is an absence of an interview guide for officers, which serves as a legal foundation to evaluate applicants seeking employment. This gap could lead to non-procedural practices and other potential transnational criminal activities. Besides, Wilonotomo and Aji⁹ find that the use of information technology in Indonesian passport services greatly helps in improving both the effectiveness and efficiency of work. Additionally, the use of information technology also enhances the security of document authenticity. Therefore, the role of information technology becomes a primary aspect in this digital era. Indonesian passport services can now be considered very fast and significantly timesaving, making it easier for applicants. However, adoption of technology in passport issuance and security requires massive improvement. As technology continues to evolve, the government should maximize its use to close existing gaps¹⁰. The strategy employed by the Indonesian immigration office does not overtly emphasize the protection of personal data for electronic passports. This is evident from the office's organizational strategy, where the protection of personal data is not explicitly mentioned in its vision, mission, or values. Despite having a system that adheres to international standards and employs advanced technology, the access to e-passport personal data is restricted, which helps in maintaining public trust¹¹. As such, it identifies a notable gap in existing research regarding the compliance of Indonesian

6 CNN Indonesia, "Negara Yang Menolak Paspor Baru Indonesia Tanpa Tanda Tangan," 2022, <https://www.cnnindonesia.com/gaya-hidup/20221010185528-269-858730/4-negara-yang-menolak-paspor-baru-indonesia-tanpa-tanda-tangan>, accessed November 20, 2023, 10.30 PM

7 Ridwan Arifin, "Assessing Border Control Management of Immigration Control at Airports in Indonesia: A Theoretical and Empirical Study," *Public Administration* (2020) p.43.

8 Mohammad Thoriq Bahri, "Assessing Legal Challenges on Passport Issuance Process in Indonesia as Transnational Crime Prevention by Using CIPP Analysis," *European Journal of Law and Political Science* 1, no. 5 (November 3, 2022): 1–12, <https://doi.org/10.24018/ejpolitics.2022.1.5.40>.

9 Wilonotomo Wilonotomo and Koesmoyo Ponco Aji, "Pelayanan Pembuatan Paspor Dalam Kajiannya Terhadap Teori Manfaat Teknologi Informasi," *Jurnal Ilmiah Kebijakan Hukum* 12, no. 2 (2018): 163–78.

10 Lynda Asiana, "The Use of Information Technology in Searching Transnational Crime," in *The 2nd International Conference of Law, Government and Social Justice (ICOLGAS 2020)* (Atlantis Press, 2020), 32–42.

11 Glory Magdalena Putri Zebua, "Strategi Pemerintah dalam Melindungi Keamanan Data E-Passport Di Kantor

passport issuance with the ICAO Document 9303, which sets international standards for travel documents, security, and management. This study fills this gap by comprehensively examining the standards of Indonesian travel document issuance, their alignment with ICAO Doc 9303, and the principles and management of stolen and lost travel documents, thus contributing a crucial dimension to the understanding of Indonesia's passport system in the global context.

Two questions are subsequently prioritized against the two primary issues about the standard of Indonesian passport and travel documents, as well as the stolen and lost travel documents management: (1) To what extent have the travel documents published by the DGI for the issuance at the immigration and international representative offices complied with the ICAO Doc 9303? and (2) How is the management of SLTD implemented under the Interpol database and cooperation? Therefore, this study aims to evaluate Indonesian passport published by the DGI for issuance in immigration offices and at Indonesian Embassy or Consulates, regarding the ICAO Doc 9303 about Travel Documents. The management of SLTD and the relevant Interpol database are also appropriately assessed and analyzed. In addressing the study questions concerning the adequacy of Indonesian passport and travel document issuance system, the problems and arguments surrounding the present practices are systematically explored. This exploration subsequently starts with a detailed methodology section, articulating the policy evaluation and document analysis approaches used to assess Indonesia arrangement with global standards. The discussion prioritizing the issuance process and standard of Indonesian passport and travel documents based on the ICAO Doc 9303 is also conducted, providing an extensive evaluation regarding the adherence of relevant procedures to international specifications. This is accompanied by the focus on the management of SLTD and similar Interpol databases, evaluating the present mechanisms and their effectiveness in reducing security risks. Moreover, the future infrastructure of the security, cooperation, and management of lost and stolen Indonesian passport and travel documents is evaluated, proposing a framework for an integrated and technologically advanced approach to secure trip files. For conclusion and recommendations, the results obtained are synthesized, enabling the advocacy for a comprehensive passport issuance system reform while strengthening international cooperation. The study novelty is also expressed by its forward-thinking recommendations, to enhance Indonesian travel document security to international standards and provide a template for global passport management system improvements. It subsequently depended on the integrative approach combining policy analysis, risk management, and technology to propose a more secure, efficient, and globally compliant passport and travel document system for Indonesia.

2. METHOD

This study employs the qualitative research methodology using the policy evaluation approach that was implemented to assess and analyze Indonesian passport and travel documents issued by the DGI based on the ICAO Doc 9303 about Travel Documents. This approach¹² was appropriate in reviewing the design and security features of passports and documents, such as visas, emergency travel documents, and border crossing pass/card/book. It also adequately evaluated the management of SLTD by immigration offices, through the observation of the security and cooperation framework according to the relevant Interpol. Data were obtained through the observation of Indonesian passport pages and security features, as well as the relevant files provided on the official website of Prado Passport or Edison TD. When these travel documents were not provided, samples were obtained from the immigration office issuing national passport, visa, emergency travel document, and border crossing pass/card/book. A tele-interview was also conducted with four officers posted at different units, such as Yogyakarta, Banggai, and Ngurah Rai Immigration Offices, to determine the management of stolen and lost travel documents. In this case, the analyses of policy¹³ and documents were implemented to analyze the data and samples of the travel documents and papers, using the Regulation of Minister of Law and Human Rights about Standards of Indonesian Passport and Travel Documents, compared with the ICAO Doc 9303. The

Imigrasi Kelas I Khusus TPI Medan" (Universitas Sumatera Utara, 2022), p.17

12 C Knill and J Tosun, *Public Policy: A New Introduction* (Macmillan Education UK, 2012), <https://books.google.co.id/books?id=Ijc9AwEACAAJ>, p.144-159

13 Jennifer Browne et al., "A Guide to Policy Analysis as a Research Method," *Health Promotion International* 34, no. 5 (2019): 1032-44.

interview texts were also evaluated to determine the informants experience and perspectives on the management of SLTD. This information was adopted to propose the future infrastructure of the security, cooperation, and sustainability of lost and stolen documents.

3. FINDING AND DISCUSSION

Various areas were comprehensively analyzed, transitioning from the introductory overview to prioritizing the significant issues surrounding the management of Indonesian travel documents and SLTD. This analysis systematically determined and evaluated the complex details under several relevant subheadings, including (1) an in-depth exploration of the compliance of Indonesian passport and travel documents using the ICAO Doc 9303 standards, (2) the effectiveness of present SLTD management strategies, and (3) the integration with the Interpol database. The operational and policy gaps were also assessed in the existing infrastructure of security, cooperation, and management at Indonesian immigration offices and consulates. Furthermore, a comprehensive understanding of the analyzed issues was provided, prioritizing the encountered complexities and challenges, as well as identifying potential pathways for enhancing the security and efficiency of Indonesian travel document management.

3.1. The Issuance Process and Standard of Indonesian Passport and Travel Documents Based on the ICAO Doc 9303

Based on the arguments referring to the identified gaps in the management of Indonesian travel document issuance, the legal and regulatory framework governing the establishment and distribution of Indonesian and emergency passports was evaluated. Indonesian Immigration Act No. 6 of 2011 and the Regulation of Minister of Law and Human Rights No. 8 of 2014 also governed printing, distribution, security features, requirements, issuance and application process, passport cancellation and withdrawal, SPLP, and PLB (border crossing card or pass). This proved that national passports had two categories, namely regular (non-electronic) and electronic. SPLP was also issued to citizens, non-citizens, or foreign nationals, to replace stolen and lost passport. Although PLB was categorized as SPLP, Indonesian visa was not included in national travel documents and did not belong to the immigration documents. Under the ICAO Doc 9303 Part 7 about machine-readable visas, travel documents became an international standard of specification and compatibility. Figure 1 shows that the classification of documents did not comply with the international standard of papers in the ICAO Doc 9303.

Table 1. Discrepancies Between Indonesian Travel Document Regulations and Implementation

| Issue Category | Regulation | Implementation Gap |
|------------------------|--|--|
| Document Types | Indonesian Immigration Act No. 6 of 2011, Minister of Law and Human Rights No. 8 of 2014 | Non-alignment with ICAO Doc 9303's broader range of travel documents, including visas and border crossing TDs. |
| Technological Features | Minister Regulation No. 18 of 2022 revising earlier regulations for passport and emergency passports | Lack of updated security features like chip and polycarbonate biodata page, non-compliance with ICAO e-passport standards |
| Service Accessibility | Director General of Immigration Decision Letter No. IMI-0278. GR.01.01 of 2021 on service expansion | Continued preference for non-electronic passports among applicants, possibly due to lower costs |
| Security Standards | Indonesian standards for MRZ and security features as per national regulations | Non-electronic passports not fully compliant with ICAO MRTD standards; e-passports may lack comprehensive EAC and PKI features |

| | | |
|----------------------|--|---|
| Validity and Pricing | Differentiated passport validity and pricing based on age and marital status in national regulations | Potential for confusion and inconsistent applications, affecting the adoption of secure and standardized travel documents |
|----------------------|--|---|

Source: Authors, 2023

Table 1 reveals significant gaps between Indonesian national regulations for travel documents and their practical implementation, particularly when benchmarked against international standards such as the ICAO Doc 9303. The implications are complex, impacting not only the international interoperability of Indonesian travel documents but also the security and efficiency of Indonesia’s border management systems. Inconsistencies in technological features, such as the lack of biometric data inclusions and advanced security measures, could lead to vulnerabilities in border control and challenges for Indonesian citizens in international travel. The analysis underscores an urgent need for regulatory updates and rigorous implementation strategies to align with global practices and enhance the integrity of travel document management.

Figure 1. Comparison of Travel Document Types in Indonesia and ICAO Doc9303¹⁴

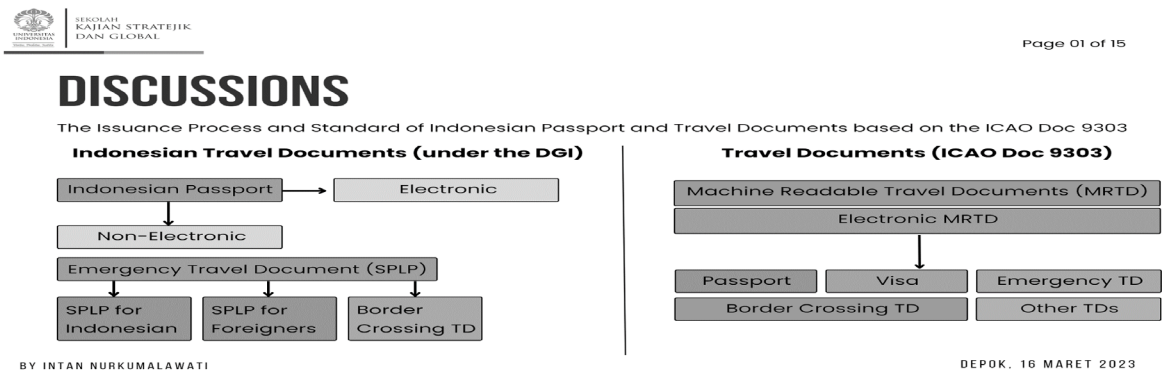


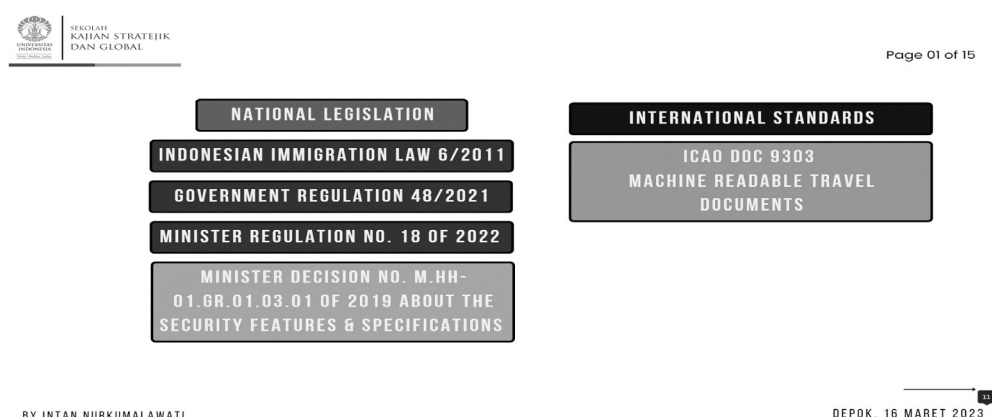
Figure 2 compares Indonesian Travel Documents with ICAO Document 9303 standards, highlighting differences in travel document types. Indonesian documents are categorized under the Directorate General of Immigration (DGI) as electronic and non-electronic passports, and Emergency Travel Documents (SPLP). In contrast, ICAO standards categorize documents as Machine Readable Travel Documents (MRTD) and electronic MRTDs, which include passports, visas, and various emergency and border crossing travel documents (TDs). The gap between national and international standards suggests a discrepancy in the categorization and potentially the technological features of Indonesian travel documents compared to the international specifications set by ICAO, which may impact the interoperability and recognition of these documents at the global level. The implications are twofold. Firstly, there may be operational challenges, as Indonesian passports may not fully comply with the latest ICAO standards for machine readability and electronic features, potentially complicating international travel for Indonesian citizens. Secondly, the divergence signifies a broader issue of alignment with international norms, which may affect Indonesia’s integration with global security frameworks, thus impacting border control efficiency and the facilitation of international mobility for its travelers.

Figure 2 also shows that the Minister Regulation about Indonesian and emergency passports was updated with the Regulation of Minister of Law and Human Rights No. 18 of 2022 on the Revision of Regulation of Minster of Law and Human Rights No. 8 of 2014 concerning Indonesian Passport and Emergency Passport.

14 ICAO, “Document 9303,” *Machine Readable Travel Documents* (Canada: International Civil Aviation Organization, 2015), <https://www.icao.int/publications/pages/publication.aspx?docnum=9303>.

However, the new regulation did not reflect a comprehensive change about the policy, management, and security features of national travel documents. This was due to the sole explanation of the new provision, where the expiry date of Indonesian passport had a 10-year validity for applicants above 17 years old or married. For the applicants under the age of 17, a validity of 5 years was issued for travel document date of expiration. Moreover, all travel documents under the regulation, including emergency passport, were not designed by considering more security features, such as chip-equipped passport and polycarbonate biodata page. The e-passport featuring an embedded chip is currently available in half of the immigration offices throughout Indonesia; however, the variant that includes a polycarbonate biodata page has not yet been issued in all immigration offices. This revised policy did not update the security features, machine-readable zone (MRZ) standards, distributions, and issuance process of Indonesian passport and travel documents. The categories of the documents also remained blurred and did not comply with the ICAO Doc 9303 accommodating visa in trip papers.

Figure 2. Legal Framework of Travel Documents

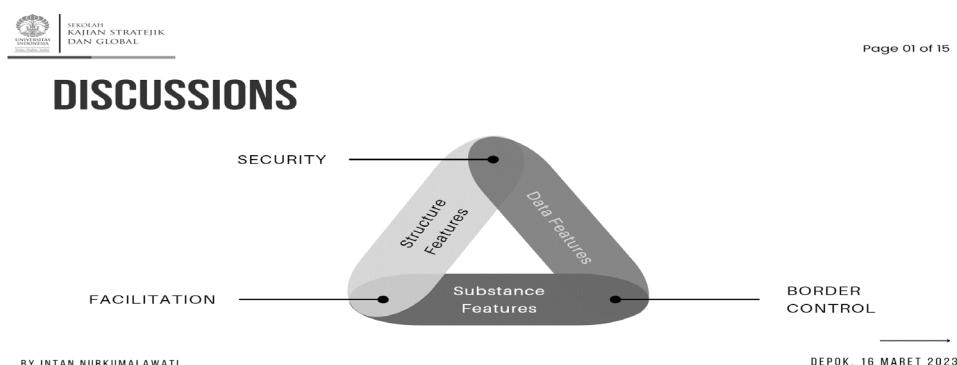


Source: Authors, 2023

According to Figure 1, non-electronic passport and electronic passport (e-passport) were described, including biodata, endorsement, and 48 visa pages. More immigration offices still issued an Indonesian non-electronic passport and an electronic passport with higher fee ~~a double fee~~. The electronic passport service was subsequently accessed by the wider community at more offices since December 28, 2021. In the Decision Letter of the Director General of Immigration No. IMI-0278.GR.01.01 of 2021, 52 offices presently provided electronic passport services than in pprevious years, where only 35 ~~units~~ immigration offices were in operation. Despite the regulation of the policy, people still applied for non-electronic passport costing Rp350.000. This was because most Indonesian passport applicants were pilgrim groups of Umrah or Hajj. For the ICAO Doc 9303 standard, non-electronic passport was MRTD (machine-readable travel document) with MRZ biodata page and specific security features. Meanwhile, e-passport (eMRTD) was commonly equipped with a contactless IC (integrated circuit) or chip within the file containing an algorithm and personal details, including the holder biometric data protected by the EAC (Extended Access Control) to support the PKI (Public Key Infrastructure)¹⁵. E-passport was capable of verifying and validating the bearer data authentication during border-crossing irrespective of the optional essence.

15 Ahmad Iqbal Hakim bin Suhaimi, Nurulhuda Noordin, and Mohd Faizul bin Ya'kub, "Assessment of Malaysian E-Passport PKI Based on ISO 27000 Series International Standards," *Journal of Physics: Conference Series* 1551, no. 1 (2020): 012003, <https://doi.org/10.1088/1742-6596/1551/1/012003>.

Figure 3. Concept of Travel Documents Issuance



Source: Authors, 2023

ICAO (2015)

The diagram in Figure 3 is a conceptual illustration of the elements involved in the issuance of travel documents, primarily focusing on e-passports. It presents three major components—security, facilitation, and border control—as integral parts of the process, with each intertwining to highlight the importance of their intersections. The interconnecting sections emphasize the necessity of incorporating structural features, data features, and substance features to ensure the robustness and efficiency of travel documents. Structural features likely refer to the physical and design aspects of the document, data features to the information and biometrics encoded within, while substance features may denote the materials and technologies used. The model underlines the e-passport’s capability to verify and validate bearer data, essential for secure and smooth border-crossing. It suggests that the issuance of travel documents involves a careful balance of these elements to ensure the documents’ integrity and functionality for border security and traveler facilitation.

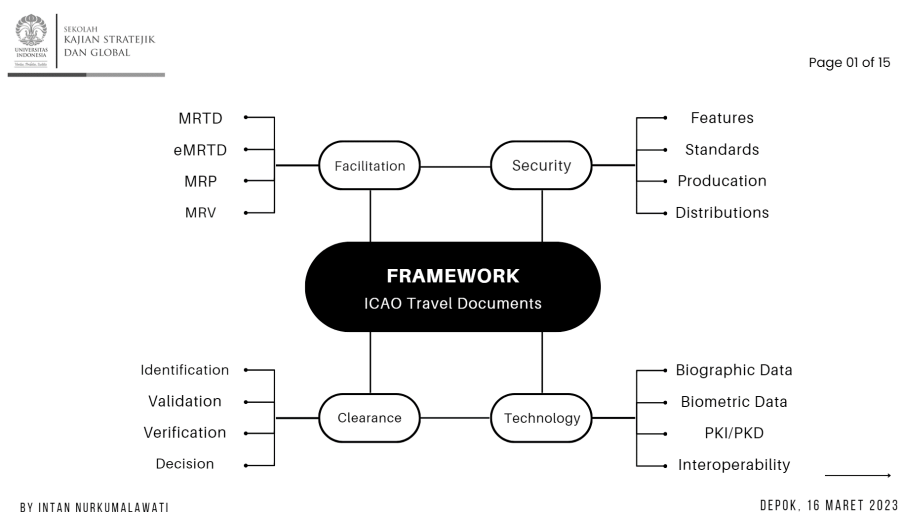
In Figure 3, the concept of travel documents issuance included facilitation, security, and border control, which prioritized substance, structure, and data features. This showed that e-passport was designed to increase the security system, enhance the effectiveness of document clearance, and prevent impostors from misusing the papers for fraud¹⁶. The DGI also constructed the PKI (Public Key Infrastructure) and PKD (Public Key Directory) to support the issuance process. In 2019, Indonesian e-passport subsequently obtained PKD Certificate from the ICAO¹⁷. According to the ICAO Doc 9303, the registration to obtain the ICAO PKD certificate was mandatory for countries implementing e-passport, to facilitate the exchange of digital data among member states. Indonesian passport policy disregarded security aspects, as the DGI continuously provided non-electronic papers lacking RFID technology and biometric data records. The interoperability and operational aspects¹⁸ of national e-passport and PKI and PKD were also not implemented and conformed with standards.

16 Taban Habibu, Edith Luhanga, and Anael Sam, “Evaluation of Users’ Knowledge and Concerns of Biometric Passport Systems,” *Data* 4 (April 29, 2019): 58, <https://doi.org/10.3390/data4020058>, p.14.

17 Luana Pascu, “Biometric Passports in Indonesia Now PKD-Certified by ICAO,” 2019, <https://www.biometricupdate.com/201910/biometric-passports-in-indonesia-now-pkd-certified-by-icao>, accessed November 25, 2023, 08.23 PM.

18 Antonia Rana and Luigi Sportiello, “Implementation of Security and Privacy in E-Passports and the Extended Access Control Infrastructure,” *International Journal of Critical Infrastructure Protection* 7, no. 4 (2014): 233–43.

Figure 4. Framework of ICAO Travel Document Issuance



Source: Authors, 2023, ICAO (2015)

Figure 4 presents a comprehensive view of the various aspects that contribute to the issuance of travel documents in accordance with ICAO standards. It showcases a central framework that integrates key elements such as facilitation, security, clearance, and technology, each of which is further connected to essential sub-elements. These sub-elements cover everything from the physical features and standards to the production and distribution processes, as well as the inclusion and management of biographic and biometric data. These elements are integral to the process, ensuring travel documents are produced and distributed efficiently (facilitation), maintain integrity and prevent fraud (security), accurately identify and validate individuals (clearance), and are technically compatible with international systems for verification (technology). Additionally, the framework emphasizes the importance of Public Key Infrastructure (PKI) and Public Key Directory (PKD) for ensuring interoperability and security in the validation and verification processes of travel documents.

Based on Figure 4, the framework of the ICAO travel document issuance had four dimensions, namely facilitation, security, clearance, and technology. This proved that the DGI effectively enhanced Indonesian passport security and immigration clearance at borders when widely adopted by citizens for e-passport. For example, the appearance of human intervention was less possible in bordering practices, as immigration officers were equipped with e-passport readers and scanners for data verification and validation¹⁹. In this case, the decisions made by immigration officers were ineffective on entry or exit permission of a person to a country through the implementation of e-passport, due to discretions, suspicions, and bureaucracy²⁰²¹. Besides data verification and validation, the biometric authentication of passport holders, such as fingerprints and face recognitions, also became part of the risk assessment and analysis, where four-fingerprint authorization was more beneficial than one²². The DGI subsequently deployed the automated border control (ABC) known as Autogates at Jakarta and Bali Airports, which were provided for Indonesian passport holders. In this case, the holders were more dominant for an immigration clearance than a manual process at counters by an immigration officer²³. However, the deployment of Autogate machines at national airports was unlikely to conform with

- 19 Arifin, "Assessing Border Control Management of Immigration Control at Airports in Indonesia: A Theoretical and Empirical Study." p.29.
- 20 Lisa Marie Borrelli, "The Border inside—Organizational Socialization of Street-Level Bureaucrats in the European Migration Regime," *Journal of Borderlands Studies*, 2019, 1–20.
- 21 Alexandra Hall, "Decisions at the Data Border: Discretion, Discernment and Security," *Security Dialogue* 48, no. 6 (2017): 488–504.
- 22 Axel Weissenfeld et al., "Towards Mobile Contactless 4-Fingerprint Authentication for Border Control," in *2018 European Intelligence and Security Informatics Conference (EISIC)* (IEEE, 2018), 73–76.
- 23 Bagas Hidayat Putra and Ridwan Arifin, "THE ADOPTION OF BORDER TECHNOLOGY OF IMMIGRATION

the standards of biometric border control (ABC) under the ICAO Doc 9303 and the ICAO TRIP Guide 2018²⁴. E-passport also expressed technical and ethical issues such as infrastructure and privacy data protection, irrespective of possessing the capability to prevent document fraud, impostors, and other cross-border crimes.

The Decision Letter of Minister of Law and Human Rights No. M.HH-01.GR.01.03.01 of 2019 about the Specifications and Security of Indonesian Passport and Travel Documents subsequently prioritized the designation of a new passport without the holder's signature column. Passport holders were capable of requesting for the column at Indonesian Embassy/Consulates or immigration offices, regarding the present issues of visa application refusal by several EU nations. As the reactive solution by the DGI, the column was also manually added on the endorsement page of passport, using the template stamp. However, the endorsement page was reserved for necessary information under the ICAO Doc 9303, such as the bearer status, visa expiry date corrections, entry eligibility, and observations. The regulations of Indonesian passport and travel documents did not categorize the specific functions of the page. Based on the results, four passports looking into the functions of endorsement pages in the US, Australia, UK, and Singapore were sampled. In the Australian Passport Act 2005, the government required an applicant to apply for a new passport when encountering the issues of data, name, or personal details transformation. However, free replacement was provided when a correction or minor mistake by an officer was observed in the production process, avoiding the need to reapply for a new travel document. Any changes to applicant personal details were also not added to the endorsement page of the Australian passport, which only included travel validity and eligibility, diplomatic or official duty status, and expiry date extension. In the UK Immigration Directorate's Instructions 1983, the endorsement page was only reserved for the relocation status of persons in other categories, such as British Overseas Citizens. For the 8 FAM 505.2-1 of 2022 about the endorsement code procedures in the US passport, the page only accommodated a specific status of the holder and other relevant information concerning the owners under the government law. Meanwhile, in the Singaporean Passport Act 2007, the ICA (Immigration and Checkpoints Authority) provided the endorsement sheet upon an applicant request, to indicate the previous travel document number.

According to the risk management in Indonesian passport issuance, the relevant policy required the applicants to fill in the application form in 1995, under the Decision Letter of the Director General of Immigration (Perdim 11). This form contained the personal details of applicants and the types of Indonesian documents selected for application. Immigration offices also required applicants to fill in other forms, such as the parent agreement (child applicants), additional names (Hajj or Umrah candidates), letter of authority for someone else to obtain a passport, etc. A passport applicant was expected to fill in several forms as a part of risk management. Although the DGI launched the M-Paspor app in 2022²⁵, Perdim 11 was still required to fill in when an applicant arrived at an immigration office for biometric data collections. Since the global issues in selecting eligible and ineligible applicant were continuously increasing, Perdim 11 was possibly expected to become irrelevant. In this case, Perdim 11 was not a risk assessment used as an uncertainty analysis, due to only including personal details of applicants rather than mandating the questions about backgrounds, social media accounts, travel history, criminal records, or other citizenships/passports.

From the descriptions, Perdim 11 was considered an outdated application form prioritizing a few functions and providing no significant analysis and results for officers. Indonesian passport issuance lacked a risk assessment and analysis, while most public organizations and law enforcement offices are requesting immigration offices to issue a passport for only eligible and lawful citizens. For example, illegal Indonesian migrant workers were categorized as high-risk candidates, enabling the immigration officers to verify and validate the identity and traveling purposes of the travelers. The Ministry of Manpower and Indonesian

CONTROL AND AUTOGATES IN INDONESIA," *SINTECH (Science and Information Technology) Journal* 3, no. 2 (2020): 137–48.

- 24 Gede Maha Aditya Pramana, Intan Nurkumalawati, and Ridwan Arifin, "Policy Evaluation on Immigration Electronic Stamp, Biometric Data, and Autogate Machines in the Context of Geopolitics," *Jurnal Ilmiah Kebijakan Hukum* 16, no. 1 (2022): 41–60.
- 25 Intan Nurkumalawati and Nussyura Divana Salsha, "Evaluation of M-Paspor Application in Indonesia: M-Government Concept Perspective," *Journal of Social and Political Sciences* 6, no. 4 (December 30, 2023), <https://doi.org/10.31014/aior.1991.06.04.459>.

Migrant Workers Agency also depended on immigration offices, to prevent illegal domestic employees from working unlawfully overseas. Furthermore, risk management of passport application process was not reflected in detecting the applicant background, including police criminal records, travel history, international crime, and other measurements. In immigration offices, passport application issuance process often recorded the applicant biometric data by obtaining fingerprints and face photographs, as regulated in the ICAO Doc 9303. This data collection process was conducted to determine the ownership status of an applicant, regarding the possession of an old Indonesian passport. From the description, citizens were commonly prohibited to possess two passports, as stipulated by the Regulation of Minister of Law and Human Rights 2019. The issuance information system was also responsible for comparing the biometric data with the information recorded in the database. This data-matching process was frequently carried out after recording the applicant biometric information, irrespective of the verification in the initial phase of passport documents lodgment. However, the process did not detect an applicant having another nationality or foreign documents, as Indonesian Citizenship Law 2006 stated that citizens were not allowed to possess dual or more nationalities. Passport issuance procedure also required online verification and biometric collection, reduced human interventions, promoted procedural simplification, and enhanced security²⁶. The verification and security became the fundamental aspect conducted in the first step of the document issuance process, to identify the eligibility of an applicant.

Indonesian passport was also issued outside of the country, as observed at the Embassy or Consulates (KBRI/KJRI), where only 22 immigration attachés were globally assigned. Biometric data collections of applicants were performed in all representative offices overseas. Other Embassy or Consulates also issued non-electronic passport and SPLP for Indonesian workers, investors, and students applying for a document renewal or replacement without a biometric information process. Moreover, Indonesian Consulate in Melbourne provided the SPLP for 1-year validity when a student applied for a renewal. Passport and travel documents management portrayed poor distribution and issuance processes at KBRI or KJRI. When processing a passport provision, KBRI or KJRI was subsequently unable to identify the nationality status of an individual, regarding the possession of dual or multiple foreign citizenships. Passport fraud also possibly occurred due to the assumption of minimum security features, biometric data records, issuance process, and distribution.

In addition to the passport, Indonesian SPLP travel document was distant from the travel document standards of the ICAO Doc 9303. SPLP was reserved for citizens with a one-year validity to enter Indonesia, as a one-time replacement for stolen and lost travel documents. It also served as an exit document for non-Indonesian citizens leaving the country, as stipulated in Regulation No. 18 of 2022 by the Minister of Law and Human Rights. Meanwhile, the SPLP for foreign nationals was obsolete and not well-managed, as the issuance purposes remained unclear. From this context, the document was translated into the English language as “travel file in lieu of a passport” that was not a standard terminology stated in the ICAO Doc 9303 as an “ETD (Emergency Travel Document)”. The SPLP also lacked security features, MRZ biodata page, and MRTD capabilities, due to insufficient technology integration and not meeting the stipulations in the ICAO Doc 9303. The Seventh Edition of Doc 9303 Part 2 strongly suggested the incorporation of emergency passport with enhanced security features to prevent document fraud, regarding the adherence to the ICAO standards. Therefore, the immigration border officers often encountered difficulties in verifying and validating SPLP with the holders, as an auto-detection system was not determined in APK for falsified travel documents and files²⁷. A border officer was unable to verify eligible travelers when a non-standard travel document was used by an individual.

In addition to SPLP, PLB was issued to Indonesian dwellers inhabiting the border regions as a crossing travel document, to enter neighboring countries through relevant international border-crossing stations²⁸. This

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- 26 Hotniar Siringoringo and Hany Maria Valentine, “Electronic Passport System Acceptance: An Empirical Study from Indonesia,” *International Journal of Electronic Governance* 10, no. 3 (2018): 261–75.
 - 27 Wilonotomo Wilonotomo, Bagas Hidayat Putra, and Ridwan Arifin, “Rancangan Sistem Pendeteksi Palsu: Solusi Pemeriksaan Keimigrasian Di Indonesia,” *JUSTIN (Jurnal Sistem Dan Teknologi Informasi)* 8, no. 4 (2020): 409–17.
 - 28 Zaenal Mukarom, Sri Haryaningsih, and Abdul Rahim, “IMIGRASI DALAM PELAYANAN PENERBITAN PAS LINTAS BATAS (PLB) TEMAJUK KABUPATEN SAMBAS,” *GOVERNANCE-Jurnal Ilmu Pemerintahan* 8, no. 3 (2019): 1-14.

document was not valid for other international travels, with the holders designated to only cross international borders within residential areas. For instance, the PLB holder living in the Nunukan area was only permitted to enter Malaysia through the regional border crossing stations in North Kalimantan, as access to other provinces was prohibited. This cross-bordering practice was governed under the bilateral agreements known as BCA (Border Crossing Agreement) and BTA (Border Trade Agreement)²⁹³⁰. However, PLB was not designed under the stipulations in the ICAO Doc 9303, due to not being non-electronic MRTD with a manual photograph pasted on non-MRZ biodata page. An immigration clearance process at Indonesia border-crossing stations was a manual process, where officers approved the crossers with an entry or exit stamp.

3.2. The Management of Stolen and Lost Indonesian Travel Documents and the Interpol SLTD Database

Transitioning from the issuance process and standards of Indonesian travel documents, the significant role of international cooperation and technology was analyzed in reinforcing border security and combating cross-border crime. This was because the present dynamic development demanded increased cross-border and inter-institutional cooperation in contributing to the provision of security for all interested parties. National Central Bureau (NCB) Interpol also developed two systems for stopping international crime across the countries such as I-24/7 and I-Checkit. From this context, the Interpol I-24/7 was the global communication network known as the IGCS (Interpol Global Police Communication System), which worked 24 hours daily and 7 days weekly. It was also implemented as a means of exchanging information between the Interpol member countries³¹. The establishment of NCB in one country also based on Article 22 of the Constitution of ICPO-Interpol, where each member country assigned an agency as NCB. This activity was conducted to manage and build strategic relations with other national departments/agencies, NCB, and the Secretary General of ICPO-Interpol. One of the Interpol I-24/7 system features also contained SLTD database, to improve national security and cross-border crime through international borders³². Furthermore, the Interpol SLTD database was introduced to verify every traveller passport or travel document during border crossing. The database was also equipped with border control, for immigration officers to detect a traveller using SLTD to enter a country. This systematic adoption was initiated under national agreement between the Interpol and an immigration agency.

Indonesia was also one of 4 countries targeted by the US in improving access to the Interpol information resources. The collaboration of the Interpol with member nations, to regularly submit SLTD data to the database while integrating applications and services for border control and national network connectivity with the Interpol I-24/7 system. The program also improved immigration capabilities in using the Interpol data through the I-24/7 network for border screening. Furthermore, technical personnel was assisted from member states to integrate the network into national immigration services and boundary screening systems. In the Cross-Border Single Window Interoperability Framework³³, the I-24/7 system had a framework with five elements: mutual benefits, policy, human resources, process, and platform interoperability. The collaboration between the DGI Indonesia and the Interpol was also one of the strategic partnerships established in providing border security in 2016. This cooperation was initiated under the *Memorandum of Understanding between the Indonesian National Police and the Ministry of Law and Human Rights No. B/43/IX/2016 and IMI-UM.01.01-2850 on 13 September 2016 about the Adoption of the Interpol I-24/7 System in Immigration Clearance Process of People Movement at Immigration Checkpoints in the Territory of the Republic of Indonesia*. The MoU also accompanied Standard Operating Procedures (SOP), to integrate the DGI border control management system with the I-24/7 network for hit or alert. In this case, the border control system, APK, was incorporated with

29 Cindy Christina et al., "Pengaruh Border Trade Agreement (BTA) Dan Border Crossing Agreement (BCA) Sebagai Landasan Hubungan Diplomati Indonesia-Malaysia," *Jurnal Sentris*, 2021, 158–72.

30 Sandy Nur Ikfal Raharjo et al., "Strategi Peningkatan Kerja Sama Lintas Batas (Border Crossing Agreement) Indonesia Malaysia," *Jakarta: Lembaga Ilmu Pengetahuan Indonesia*, 2017.

31 Asiana, "The Use of Information Technology in Searching Transnational Crime." p.37.

32 Joel Wagner, "The European Union's Model of Integrated Border Management: Preventing Transnational Threats, Cross-Border Crime and Irregular Migration in the Context of The EU's Security Policies and Strategies," *Border Security*, 2022, 76–100.

33 U N ESCAP, "Cross-Border Single Window Interoperability: A Managerial Guide," 2018, p.14

the Interpol I-24/7 consisting of SLTD database³⁴. This program possibly leveraged the clearance process and security at points of entry across the Indonesia boundaries.

Compared to SLTD database, a Nominal list commonly indicated the fugitive or the Interpol. The database was concerned missing documents, with the Nominal list prioritizing the people globally declared as “wanted criminals”. The initial phase of screening individuals in the list was also in line with the records of SLTD program. In this case, the frontline immigration officer often accompanied the passenger to the supervisor in an interview room when the Interpol Nominal hit was detected. The supervisor subsequently verified the passenger travel documents and communicated the results obtained to NCB Interpol through a WhatsApp group, sharing passport and boarding pass photos, I-24/7 system hit outcomes, and passenger pictures. This verification process frequently posed potential security vulnerabilities warranting consideration. In contrast, the immigration officers at Indonesia borders lacked the capability and knowledge about bordering practices, specifically in the arrangement of an individual listed in SLTD database and Nominal list³⁵. Therefore, the clearance process did not include the risk analysis for high-risk passengers when preventing the border crossing crime.

The MoU on the integration of APK and the Interpol I-24/7 was also written for 5 years of cooperation and duly signed without being revised and updated by two parties. This proved that the present policy was limited to the implementation of SOP, concerning the arrangement of the individual refused entry or exit by SLTD database. The technical measures of verified foreign nationals or Indonesian citizens under specific notice categories were also not formally regulated. For example, in cases where a passenger was flagged with a red notice by the Interpol, immigration officers were commonly requested to detain the individual and await the arrest by the appropriate party. However, border officers often experienced delays in the arrival of the Interpol officials to arrest the flagged individuals. These criminals were not always confined to a room during the waiting period, enabling the possibility to freely use electronic devices, such as mobile phones or laptops. In this case, the immigration officers were unable to conduct interrogations, body searches, luggage checks, or seizures regarding the alerts, due to the absence of official procedures. Security measures beyond formal regulations was also unable to be implemented because of inadequate established procedures. According to the law enforcement, the clearance practices in Indonesia frequently disregarded the quality of government aspects during bordering processes³⁶, such as border integrity, rule of law, international regulation promoting economic growth, national security, and political interest. This condition showed that the management and arrangement of SLTD database and the international wanted persons were not comprehensively conducted during a clearance process at the airport. Communication and coordination between the airport immigration officers and the Interpol personnel were also not professionally and effectively performed in continuously examining the passengers detected on SLTD and wanted person (red notice) lists. Moreover, the implementation of the international SLTD and red notice systems were not fully implemented at airports, seaports, and land borders across Indonesia. This was because the communication and information system for the arrangement of flagged passengers were adopted through the WhatsApp group, not in an integrated application platform. From the descriptions, an acceleration of people movement was possibly delayed because an airport border control needs to facilitate mobility towards seamless immigration control. In this case, the affected officers often selected only eligible individuals or “desirable travellers” to enter the jurisdiction³⁷.

34 Ridwan Arifin, Intan Nurkumalawati, and Bobby Briando, “The Theoretical Perspectives of Immigration Controls: Immigration Clearance Process, Selective Policy and Security Apporach at Airports in Indonesia,” in *Second International Conference on Multidisciplinary Academic Research* (Sydney: Asia Pacific Institute of Advanced Research, 2019), 251–60.

35 Ridwan Arifin and Intan Nurkumalawati, “Kebijakan Pemeriksaan Keimigrasian Di Indonesia: Bentuk Pelayanan Publik Dan Profesionalisme Petugas Imigrasi,” *Jurnal Ilmiah Kebijakan Hukum* 14, no. 2 (2020): 243–62, <https://doi.org/http://dx.doi.org/10.30641/kebijakan.2020.V14.243-262>.

36 Ridwan Arifin and Sri Kuncoro Bawono, “The Quality of Government of Immigration Control at Airports: Principles, Perspectives and Practices,” *International Conference on Social Science & Humanities (ICSSH)* (Jakarta: Global Research and Development Services, 2019), <https://sshraweb.org/wp-content/uploads/2019/09/SSHRA-International-Conference-Jakarta-September-2019.pdf> p.3.

37 Andrew Crosby and Andrea Rea, “The Irregularization of Mobility: Performing Border Control at the Airport,”

Based on stolen and lost Indonesian passport and travel documents, applicants need to follow a different application process, compared to those applying for new papers or renewals. This was because the application for SLTD was regulated in the Regulation of Minister of Law and Human Rights No. 18 of 2022 on the Revision of Regulation of Minister of Law and Human Rights No. 8 of 2014 concerning Indonesian Passport and Emergency Passport. In this case, applicants were required to present a police-issued letter detailing the lost passport, a requirement highly upheld for the submission of applications to the immigration office. This was accompanied by an interview or interrogation process (BAP) conducted by relevant officers, where the events concerning the lost documents were expected to be provided. In this case, a penalty for replacement was often upheld for losses or thefts due to negligence, not for damages or deficits regarding natural disasters.

According to the condition of stolen and lost Indonesian passport, relevant significant issues caused the policy and management of SLTD. This led to the DGI reflection of the poor management in immigration offices and Indonesian representatives overseas. For instance, officers often required the copy or number of a lost passport during the lodgment of a complaint by an affected individual at the police station. In this case, most holders were possibly without a copy of the documents or did not remember the numbers. Furthermore, the arrangement of stolen and lost Indonesian passport was limited to the repository phase only recording the holder data. This showed that the data of SLTD were not commonly delivered to the Interpol database, due to non-distribution of the documents to all immigration border controls in Indonesia and other country entry points. From this context, the officers at national entry or exit points were unable to verify the legal and illegal statuses of various travel documents.

The analysis of the findings suggests that while Indonesia has made strides in border security through partnerships with Interpol and the implementation of the I-24/7 system, there are notable gaps in the execution. The cooperation has led to significant advancements in data sharing and border screening capabilities, yet the lack of comprehensive integration across all ports of entry and the reliance on informal communication channels highlight systemic weaknesses. This partial implementation could impede the swift and secure processing of individuals at borders, potentially compromising the integrity of immigration control. The implications of these findings are multi-layered. On one hand, there is a clear acknowledgement of the need for enhanced border control systems that are uniformly integrated across the country. On the other hand, there is an immediate need for updated procedures and training for immigration officers to manage and utilize international databases effectively. The ability to respond proactively to alerts and maintain security while ensuring the facilitation of legitimate travel is crucial. Bridging these gaps is essential for upholding national security and for enhancing the reputation of Indonesia's commitment to international border security standards.

3.3. Future Infrastructure of the Security, Cooperation, and Management of Stolen and Lost Indonesian Passport and Travel Documents

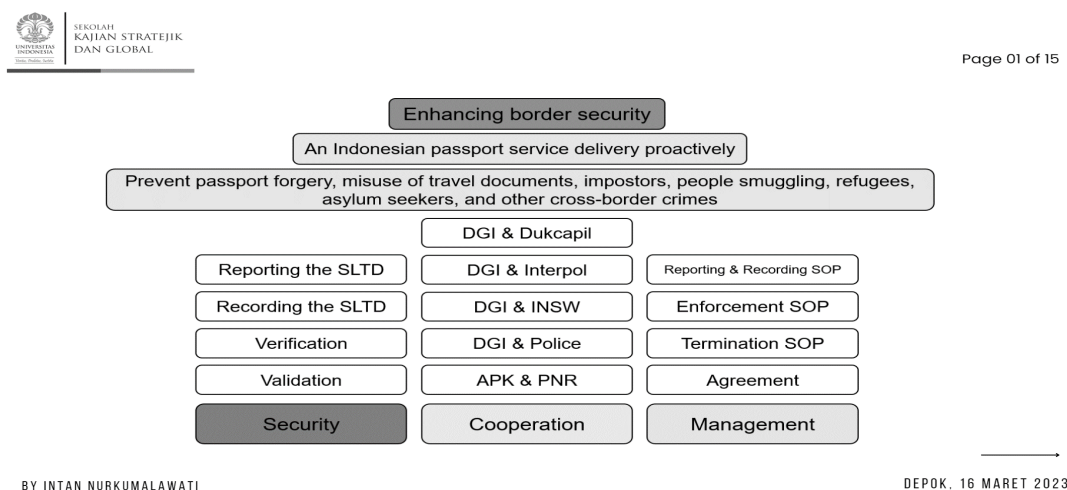
This section was responsible for constructing the significant development of security infrastructure, cooperation, and management strategies in Indonesia, to effectively address relevant issues. The development processes were urgently initiated for appropriate designation and implementation. The infrastructure was constructed to prevent passport forgery, misuse of travel documents, impostors, smuggling, refugees, asylum seekers, and other cross-border crimes. Building infrastructure should also be started by issuing passport process at immigration offices, verifying documents at border controls, performing clearance process, and controlling Indonesian citizens overseas. To increase national bordering practices, the following steps were recommended, (1) strengthening internal institutions, specifically at airport controls, (2) assigning knowledgeable and skilful officers, and (3) improving the facilities and infrastructure of border-crossing stations³⁸. Furthermore, the development of Indonesian SLTD infrastructure included three significant pillars: security, cooperation, and management. These pillars were useful as guidelines in proactively providing an Indonesian passport service delivery and considerations for appropriate decision-making processes by immigration officers (Figure 5). Considering the enormous territory of the country, the infrastructure subsequently reflected the DGI

Migration Control in Practice: Before and Within the Borders of the State, 2022, p.103.

38 Insan Firdaus, "Optimalisasi Pos Lintas Batas Tradisional Dalam Pelaksanaan Fungsi Keimigrasian Studi Kasus Imigrasi Entikong," *Jurnal Ilmiah Kebijakan Hukum* 12, no. 1 (2018): 57–71.

participation in enhancing border security in bilateral, regional, and multilateral coverage, through air, sea and land borders.

Figure 5. Three Pillars in Infrastructure of SLTD Indonesia



Source: Authors, 2023

Figure 5 illustrates the strategic framework for enhancing border security in Indonesia. It emphasizes proactive Indonesian passport service delivery to prevent various illegal activities. The first pillar, Security, involves critical phases such as reporting and recording incidents within the SLTD database, followed by thorough verification and validation processes. The second pillar, Cooperation, emphasizes the collaborative efforts between agencies like DGI & Interpol and the use of APK & PNR systems for effective information sharing and coordination. The final pillar, Management, focuses on the implementation of Standard Operating Procedures (SOPs) to streamline operations. Together, these pillars and their components actively work to prevent cross-border crimes and ensure proactive passport service delivery, ultimately reinforcing Indonesia's border security infrastructure.

In the construction of SLTD landscape, the pillars possessed respective indicators to measure the success of a program. Firstly, in practice, SLTD security indicator included the process of reporting stolen and lost travel documents to the immigration office and Indonesian representatives overseas. This process was accompanied by recording the lost and stolen travel document into the databases of the DGI and the Interpol systems. In issuing new passport, the verification and validation of holders or lost and stolen travel document were also observed regarding SLTD database and nominal list at the immigration office. Moreover, a verification and validation phase of passport and travel documents holders was determined when entering and leaving the country, concerning the Interpol SLTD network and Nominal list at the border controls. This database system was similar to the auto-detection platform of fraudulent passport³⁹, due to recording unlawful and invalid documents for officers to detect an ineligible person or impostors at the borders.

Secondly, cooperation reflected relevant integration and enhanced interoperable systems when supporting the stages of recording, validation, and verification of passport issuance. This pillar should start by collaborating with the Interpol to connect all SIMKIM (Immigration Management Information System) applications with the I-24/7 SLTD system and Nominal list. Collaborating with the Department of Population and Civil Registration should also be initiated for the connection of SPRI system (passport application system) and population database systems⁴⁰. Furthermore, cooperation initiatives need to be carried out with Customs

39 Wilonotomo, Putra, and Arifin, "Rancangan Sistem Pendeteksian Paspor Palsu: Solusi Pemeriksaan Keimigrasian di Indonesia." p.416.

40 Fitrah Maulana Nugraha and S H Harun, "Efektivitas Layanan Permohonan Paspor Online (Studi Kasus di Kantor

and Excise to improve border security, as well as connect APK to the INSW (Indonesian National Single Window) system and the NLE (National Logistics Ecosystem)⁴¹. The integration initiation of the DGI and Indonesian customs agency was also capable of strengthening border security and maximizing national economic growth⁴². APK should subsequently be connected to the Passenger Name Records (PNR) system by initiating cooperation with transport operators, such as an airline or shipping agency⁴³. Regarding the reports of lost documents, the cooperation with the regional police station needs to be established for the connection of immigration offices databases to National Police system. In addition, the integration of information technology into passport service at immigration offices enhanced both the efficiency of issuing travel documents and the relevant security measures⁴⁴. An integrated system among agencies led to seamless border inspections without staff replacements, due to reducing human interventions and discretionary decisions.

Thirdly, management was considered a fundamental guideline for immigration organizations and officers, to enhance the security and cooperation in SLTD arrangement. In the establishment of legal standings, this pillar included several policies, as arranged in the regulations issued by the DGI. Several regulations also stated that the immigration clearance process at Indonesia borders should consider the balance system of public service and security approach. This was because of the implementation of social values in public sectors, due to border security, management, and technology⁴⁵. Furthermore, management prioritized the policies on procedures for reporting and recording stolen and lost passports or travel documents in an internal database. The enforcement regulations and procedures should also include prioritized follow-up measures for document holders listed in the Interpol database and SLTD database at immigration offices and borders. The management of applicants or holders in the Interpol Nominal list subsequently needs to be highly considered. In addition, collaborative management regulations should integrate a policy for recording stolen and lost passports in the Interpol SLTD database.

The analysis of the SLTD landscape reveals that security, cooperation, and management serve as key pillars with distinct indicators to gauge the efficacy of the program. Security is critical, ensuring prompt reporting and recording of lost or stolen documents, which feeds into both national and Interpol databases, facilitating accurate verification and validation at passport issuance and border checkpoints. This robust system aids in preventing the passage of unauthorized individuals. Implications indicate the necessity for a seamless integration of systems across various agencies to bolster cooperation, which is crucial for the efficacy of recording, validation, and verification stages. Management underpins the entire structure, emphasizing the need for clear policies and regulations that guide the immigration clearance process, balancing public service with security. These findings suggest a potential paradigm shift towards a more interconnected and less human-dependent system for border security and document issuance.

4. CONCLUSION

The Indonesian travel documents issuance has not been appropriately managed, and it has not considered the security aspects and international standard of travel documents specifications and issuance. This study argued that Indonesian travel documents issuance was inappropriately managed without considering the security aspects and international standard of relevant specifications and allocation. In this case, passport and other travel documents were yet to conduct a comprehensive evaluation and design a strategic plan regarding

Imigrasi Kelas I TPI Surakarta)" (2020), p.51.

- 41 Nofie Iman, Muhammad Tafdhil Amanda, and Jovita Angela, "Digital Transformation for Maritime Logistics Capabilities Improvement: Cases in Indonesia," *Marine Economics and Management*, no. ahead-of-print (2022), p.197.
- 42 Ridwan Arifin and Intan Nurkumalawati, "Towards an Integration of Immigration and Customs Agency in Indonesia: A Step-by-Step Process," *Journal of Government and Civil Society* 5, no. 1 (2021): 127–44.
- 43 Lena Ulbricht, "When Big Data Meet Securitization. Algorithmic Regulation with Passenger Name Records," *European Journal for Security Research* 3, no. 2 (2018): 139–61.
- 44 Wilonotomo Wilonotomo and Koesmoyo Ponco Aji, "Pelayanan Pembuatan Paspor dalam Kajiannya Terhadap Teori Manfaat Teknologi Informasi," *Jurnal Ilmiah Kebijakan Hukum* 12, no. 2 (2018): 163–78.
- 45 Ridwan Arifin and Intan Nurkumalawati, "Indonesia's Immigration Control at Airport: Impediments of Knowledge Management Practices," *Committee*, 2020, 341.

security, management, standards, and technological advances. The present management of Indonesian passport and travel document issuance was not in full compliance with the ICAO Doc 9303 standards, lacking in systematic security measures and technological integration. Since then, Indonesian passport and other travel documents have not been conducted a comprehensive evaluation and designed a strategic plan in the context of security, management, standards, and technological advances. Despite rapid changes in Indonesian passport service, it has not responded to the current issues of Indonesian passport issuance and is likely to show little satisfaction from passport applicants. The Indonesian passport issuance program focuses more on public service delivery over security considerations and technology adoptions. It means, the focus of the DGI was also misinterpreted towards public service, ignoring the strict verification processes needed to uphold national security and international law at border crossings. Based on the results, a comprehensive overhaul was recommended, advocating for the mandatory use of e-passport, the discontinuation of non-electronic passport, and a reconfiguration of travel documents to incorporate advanced security features, including microchips. The initiation of a risk assessment form was also recommended at the outset of passport issuance process, mandating the recording of stolen and lost documents in the Interpol SLTD database, and ensuring early verification against various security platforms. Furthermore, the establishment of a strong infrastructure was suggested for security and cooperation, strongly promoting the integration of the Interpol I-24/7 system with national programs to prevent document fraud and related transnational crimes. Regulatory frameworks and interoperable systems were also suggested across border agencies, to minimize human error and discretionary practices, as well as reinforce boundary integrity.

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6. CONFLICT OF INTEREST

There is no conflict of interest and any funding to disclose.

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