

IN FAVOR OF AN IMMIGRATION DATA PROTECTION LAW IN INDONESIA AND ITS UTILIZATION FOR CONTACT TRACING

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Abstract

Immigration data form a substantial part of the border protection between countries. However, the quality and integrity of each country's immigration data varies greatly in terms of technology and regulation. A country that has a weak a legal framework on data protection has proven to be easily abused by irresponsible parties. Including when Indonesia tries to carry out tracing by synchronizing the data in the Peduli Lindungi application with immigration data, there will be a potential violation of the privacy rights of individuals. Hence, this study applies a normative and empirical (mix) legal research methodology to analyze two keys issues: what are the advantages of synchronizing the domestic tracing application called Peduli Lindungi to the immigration data? and what kind of legal framework to prevent the misuse of personal data in Indonesia? With regulatory and comparative approaches, this study concludes without powerful legal framework, there will be no legal assurance to the promotion of privacy rights in the synchronization and the use of immigration data for health tracing purposes. From the empirical side, Indonesian's current policy does not enable monitoring or evaluating authority to scrutinize ministerial activities in collecting and utilizing personal data. Moreover, by considering several problems of data breach in Indonesia, a single and unified data protection law is needed to integrate and provide uniformity of implementation for data protection.

Keywords: *data protection law, immigration, privacy rights.*

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A. Introduction

The Covid-19 pandemic has caused fundamental changes to human life. Considering the high level of infection, the WHO has recommended limiting the flow of people's movements in each region.³ In its study, the WHO stated that the regional restrictive policy must be accompanied by risk mitigation that was carried out systematically and routinely.⁴

The recommendations from the WHO were greeted with policies in almost all countries by tightening international travel inflows, carrying out tracing, and quarantine obligations for domestic and international visitors.⁵ With the modalities of technology, information systems have now been widely used to easily monitor the flow of human movement from one place to another.⁶ This tracing system has been very useful for tracing the origin of the spread of the virus easily and accurately.⁷

Especially in developed countries, the tracing system has been combined with their immigration systems.⁸ With this means, mapping the spread of the virus on a large scale is easy to know. As we know, the Covid-19 virus was thought to have originated in Wuhan, China. This virus has grown and spread transborder in many countries. Regulations and supervision of the movement of international travelers is very important. Hence, the immigration system plays an important role to uncover the spread of the virus.

Of course, an immigration system is very much needed in monitoring and taking action to prevent the spread of the virus. However, immigration data is very vulnerable to be hacked or used for irresponsible actions.⁹ Especially in Indonesia, there have been several times where data breaches have occurred, given the absence of more comprehensive legal regulations regarding data protection. In 2021, it was discovered that

³ Anita Suleiman and others, "Use of Movement Restrictions during an Outbreak of COVID-19 in Selangor, Malaysia" (2021) 12 *Western Pacific Surveillance and Response* 1, 1-2.

⁴ WHO, "Risk-assessment Approach to the Implementation of Risk Mitigation Measures for International Travel" (2020).

⁵ Robert Steffen, Stephan Lautenschlager dan Jan Fehr, "Travel Restrictions and Lockdown during the COVID-19 Pandemic - impact on notified infectious diseases in Switzerland" (2020) 27 *Journal of Travel Medicine* 1, 1-2.

⁶ Lama Bou-Karroum and others, "Public Health effects of Travel-related Policies on the COVID-19 Pandemic: A Mixed-methods Systematic Review" (2021) 83 *Journal of Infection* 413.

⁷ Michel Walrave, Cato Waeterloos dan Koen Ponnet, "Adoption of a Contact Tracing App for Containing COVID-19: A Health Belief Model Approach" (2020) 6 *JMIR Public Health and Surveillance*.

⁸ Hye Young Choi dan May Sudhinaraset, "Analysis of Attitudes About COVID-19 Contact Tracing and Public Health Guidelines Among Undocumented Immigrants in the US" (2021) 4 *JAMA Network Open*.

⁹ OECD, "Tracking and Tracing COVID: Protecting Privacy and Data while using Apps and Biometrics" (*OECD Policy Responses to Coronavirus*, 2020).

the data contained in the *Peduli Lindungi* application, an application used for tracing all people in Indonesia, was leaked to the dark web.¹⁰

To this day, Indonesia does not have legislation that comprehensively guarantees data protection.¹¹ The absence of a data protection agency as an independent supervisory unit related to data protection guarantees carried out by both private and public entities and provides recommendations and/or sanctions in the event of fundamental violations of data protection rights.

This research explains the latest developments of a tracing system for the spread of the Covid-19 virus, which currently must be integrated with the immigration data system. Of course, this development needs to be addressed in a normative manner. If viewed from the perspective of legislation, Indonesia does not yet have any special laws guaranteeing data protection. The process of synchronizing data in protecting and protecting immigration data has the potential to cause data leakage. Hence, in this research, legal recommendations will be given to prevent data leakage and violations of privacy rights.

B. Problem Formulation

As a limitation on the scope of the study in this study, two problem formulations will be used:

1. What are the advantages of synchronizing the domestic tracing application called *Peduli Lindungi* to the immigration data system?
2. What kind of legal framework is in place to prevent the misuse of personal data in Indonesia?

C. Methodology

This research applied mix legal research, which is a combination of doctrinal and socio-legal research.¹² Thus, this research data sources are taken from primary and secondary data. Primary data was conducted by interviewing the immigration authorities in Indonesia to find the empirical conditions of the development of the immigration system in

¹⁰ Soumik Ghosh, “2 Data Leaks Reported in Indonesia’s COVID-19 Tracking Apps” (2021) <<https://www.govinfosecurity.com/2-data-leaks-reported-in-indonesias-covid-19-tracking-apps-a-17478>> accessed April 2, 2022; “Kominfo Ministry Shares Guide to Safely Using Peduli Lindungi App - News En.Tempo.Co” (2021) <<https://en.tempo.co/read/1504131/kominfo-ministry-shares-guide-to-safely-using-peduli-lindungi-app>> accessed April 2, 2022.

¹¹ Teguh Karo, Rizky Prasetyo, *Pengaturan Perlindungan Data Pribadi di Indonesia* (Nusa Media 2020) 119-128.

¹² Khadijah Mohamed, “Combining Methods in Legal Research” (2016) 11 *The Social Sciences* 5191-5194-5196.

Indonesia. In addition, interviews were also conducted with a team of experts familiar with the legislative process of drafting laws on data protection.

Secondary data was obtained from legal materials, both primary, secondary, and tertiary. Primary legal materials consist of: Law No. 11 of 2008 on Information and Electronic Transaction, Law No. 6 of 2011 on Immigration, and Decree of the Minister of Communication and Information No. 171 of 2020 on the Determination of the *Peduli Lindungi* application in the Context of Implementing Health Surveillance for Handling Corona Virus Disease 2019 (Covid-19). For comparative measures, this study also used primary materials from the South Korean Personal Information Protection Act of 2011 and its amendments.

Primary data and secondary data obtained in this study were arranged systematically and analyzed. Descriptive and qualitative analysis¹³ was carried out in this combined research using normative and empirical (sociology) by explaining in detail and depth to uncover events that occurred and to seek the meaning of the values contained therein.¹⁴

D. Discussion and Results

This research was aimed at providing legal arguments to address two main legal issues related to: (1) the advantages of synchronizing the domestic tracing application called *Peduli Lindungi* to the immigration data system; and (2) issues related the legal framework to prevent the misuse of personal data in Indonesia. Hence, in this part of the research, the researchers start to explain the importance of immigration data as well as its possible utilization for health tracing purpose. As such, this study provides legal analysis to address the legal issues related the current Indonesian regulatory framework whether in its application and in the immigration data system and health tracing system to strengthen the protection of privacy rights or vice versa.

1. The Importance of Immigration

Globalization is one of the main factors that encourages the movement of people from one region to another.¹⁵ Moreover, regional regimes such as the European Union and ASEAN provide an easy environment for the movement of people, goods and services,

¹³ Philip Langbroek and others, "Methodology of Legal Research: Challenges and Opportunities" (2017) 13 Utrecht Law Review 1 7–8.

¹⁴ Mukti Fajar dan Achmad Yulianto, *Dualisme Penelitian Hukum Normatif & Empiris* (Pustaka Pelajar 2015) 283.

¹⁵ Stephen Castles, "Migration and Community Formation under Conditions of Globalization" (2002) 36 International Migration Review 1143, 1148–1155.

capital, and finance among member countries.¹⁶ This practice further increases the number of people moving, which is generally still dominated by economic motives.

Freedom of movement from one region to another is fundamentally guaranteed by human rights jurisprudence. This right has been universally regulated under human rights treaties.¹⁷ Article 13 (1) of the Universal Declaration on Human Rights guarantee that “everyone has the right to freedom of movement and residence within the borders of each state.”¹⁸ This provision guarantees everyone freedom of movement without any barriers within the internal borders of states.¹⁹ They may choose their place of residence within state without barrier. A government may establish policies to designate special territories to maintain orderliness.

Freedom of movement is not given to individuals to move only within the state but also to another state. The provisions of article 13 (2) clarified that everyone can leave any country and return their home country at any time.²⁰ The language of this provision also ensures that everyone also have the right of return.²¹ It may also entitle a person to come to the country for the first time if they were born outside country.²²

Since it is a derogable right, state may establish policies to restrict the rights to freedom of movement. Such restrictive measures must be in accordance with the article 12 (3) of International Covenant on Civil and Political Rights.²³ Such measures must consider

¹⁶ Didier Bigo, “Immigration Controls and Free Movement in Europe” (2009) 91 *International Review of the Red Cross* 579, 579; Sofia Vasilopoulou dan Liisa Talving, “Opportunity or threat? Public attitudes towards EU Freedom of Movement” [2020] *Journal of European Public Policy* 805, 805–806; J Portes, “Labour mobility in the European Union” in Steven N Durlauf dan Lawrence E Blume (ed), *The New Palgrave Dictionary of Economics* (Palgrave Macmillan 2015); Flavia Jurje dan Sandra Lavenex, “ASEAN Economic Community: What Model for Labour Mobility?” (2015) 2015/02.

¹⁷ Francesca De Vittor, “Nationality and Freedom of Movement” in Serena Forlati dan Alessandra Annoni (ed), *The Changing Role of Nationality in International Law* (Routledge 2013), 96.

¹⁸ Universal Declaration of Human Rights 1948.

¹⁹ Rosalyn Higgins, “The Right in International Law of an Individual to Enter, Stay in and Leave a Country” (1973) 49 *International Affairs* 341.

²⁰ Universal Declaration of Human Rights (n 18) art.13(1).

²¹ Hurst Hannum, *The Right to Leave and Return in International Law and Practice* (M Nijhoff 1987) 189; The wording of article 12, paragraph 4, does not distinguish between nationals and aliens (‘no one’). Thus, the persons entitled to exercise this right can be identified only by interpreting the meaning of the phrase ‘his own country’. The scope of ‘his own country’ is broader than the concept ‘country of his nationality’. It is not limited to nationality in a formal sense, that is, nationality acquired at birth or by conferral; it embraces, at the very least, an individual who, because of his or her special ties to or claims in relation to a given country, cannot be considered to be a mere alien. Since other factors may in certain circumstances result in the establishment of close and enduring connections between a person and a country, States parties should include in their reports information on the rights of permanent residents to return to their country of residence.; UN Human Rights Committee, “General Comment No. 27: Article 12 (Freedom of Movement).”

²² UN Human Rights Committee (n 21) 5.

²³ International Covenant on Civil and Political Rights 1966 art.12(3)..

protecting national security, public order, and public health or morals or the rights and freedoms of others.²⁴ The same approach may also be applied under European Convention on Human Rights based on situations in time of war or other public emergencies threatening the life of the state.²⁵

The concept of freedom of movement is also regulated under Article 28E of the Indonesian Constitution.²⁶ This provision mentioned that “[e]very person shall be free to choose one's place of residence within the state territory, to leave it and to subsequently return to it.”²⁷ The right to leave and the right to return under this provision have been guaranteed if it is in accordance with the Indonesian national policy. This policy includes national-provincial-subregional space management policies²⁸ and immigration law.²⁹

In order to carry out the supervision and movement of people in Indonesia, Law No. 6 of 2011 on Immigration was enacted. This basic regulatory framework on immigration aims to promote human rights³⁰ and prevent transnational organized crime³¹ within the country. Based on human rights dimensions, every Indonesian citizen has the same right to enter and leave the territory of Indonesia. Foreigners also have the right to enter and leave Indonesia territory after fulfilling the requirements under Indonesian immigration law. Thus, Indonesian border control policy has been carried out by means of a selective policy by promoting human rights.

Immigration systems and institutions have established in Indonesia to maintain the legal authority and sovereignty of a country's territory. Immigration is a matter of movement of people entering or leaving the territory of Indonesia and its supervision to uphold state sovereignty. Immigration plays an important role as the gatekeeper of the country³² whose general task is to issue and verify travel documents as well as supervise everyone who enters and leaves the territory of Indonesia.

²⁴ International Covenant on Civil and Political Rights (n 23) art.12(3)..

²⁵ Convention for the Protection of Human Rights and Fundamental Freedoms 1950 art.15..

²⁶ 1945 Constitution art. 28E..

²⁷ 1945 Constitution (n 26).

²⁸ Law No. 26 of 2007 on Regional Space Management.

²⁹ Law No. 6 of 2011 on Immigration.

³⁰ Explanation of the Law No. 6 of 2011 on Immigration.

³¹ James Mitchell, “Transnational Organised Crime in Indonesia: the Need for International Cooperation” (2016) 3 Brawijaya Law Journal 176, 176–180.

³² Ramadhan K.H. dan Abrar Yusra, *Lintas Sejarah Imigrasi Indonesia* (General Directorate of Immigration, Indonesian Ministry of Law and Human Rights 2005) 4.

Immigration in Indonesia is carried out by the Directorate General of Immigration under Ministry of Law and Human Rights.³³ Based on article 549 of the Regulation of Minister of Law and Human Rights No. 29 of 2015, the Directorate General of Immigration carries out the following functions:

- a. Formulation of policies in the field of law enforcement and immigration security, immigration services and facilities, border crossings and immigration overseas cooperation, and immigration information technology;
- b. Implementation of policies in the field of law enforcement and immigration security, immigration services and facilities, border crossings and foreign immigration cooperation, and immigration information technology;
- c. Providing technical guidance and supervision in the field of law enforcement and immigration security, immigration services and facilities, border crossings and immigration overseas cooperation, and immigration information technology;
- d. Implementation of monitoring, evaluation, and reporting in the field of law enforcement and immigration security, immigration services and facilities, border crossings and immigration overseas cooperation, and immigration information technology;
- e. implementation of the administration of the Directorate General of Immigration; and
- f. implementation of other functions assigned by the Minister of Law and Human Rights.³⁴

According to Wijayanti (2011), there are four main functions of immigration which as follows:³⁵

- a. Public service function
Immigration enforcement is expected to deliver services to both Indonesian nationals and foreigners. Services for Indonesians include providing travel documents such as passports and travel documents in lieu of a passports (SPLP).³⁶ Services for foreigners include providing Immigration Documents (DOKIM) in the form of Limited Stay Permit Cards (KITAS), Permanent Stay Permit Cards (KITAP), and Special Immigration Facilities (DAHSUSKIM);³⁷ extending stay permits, such as tourist visit visas, socio-cultural visit visas, and business visit visas;³⁸ granting re-entry permits and leaving permits;³⁹ and providing entry and exit signs.⁴⁰

³³ Minister of Law and Human Rights Regulation No. 29 of 2015 on Organization and Structure of Indonesian Minister of Law and Human Rights.

³⁴ Minister of Law and Human Rights Regulation No. 29 of 2015 on Organization and Structure of Indonesian Minister of Law and Human Rights (n 33) art.549.

³⁵ Herlin Wijayanti, *Hukum Kewarganegaraan dan Keimigrasian* (Banyuwangi Publishing 2011).

³⁶ Law No. 6 of 2011 on Immigration art.24..

³⁷ Law No. 6 of 2011 on Immigration (n 37) art.48 (3)..

³⁸ Law No. 6 of 2011 on Immigration (n 37) art.38.

³⁹ Law No. 6 of 2011 on Immigration (n 37) art.68.

⁴⁰ Law No. 6 of 2011 on Immigration (n 37) art.10 and 15.

b. Law enforcement function

Law enforcement against foreigners addresses the following problems: falsification of foreign nationals' identities; registration of foreigners and the issuance of foreign supervision reports; abuse of residence permit; entering illegally / staying illegally; raid monitoring; and immigration vulnerabilities at geographical crossings.

c. Security function

Immigration is the first and last institution that filters the arrivals and departures of foreigners to and from the territory of the Republic of Indonesia. The implementation of this function is preventative. The security functions aimed at foreigners are: selecting each foreigner's arrival intention through examination of visa applications; cooperation with other state security apparatus specifically to provide surveys regarding immigration law enforcement; carrying out immigration intelligence operations in the interest of state security; and implementing prevention and deterrence, namely a prohibition on persons leaving the territory of Indonesia within a certain period of time and/or a prohibition on entering the territory of Indonesia for a certain period of time.

d. Facilitator function

This function focuses on economic development and the welfare of the Indonesian people. Immigration facilities provide support Indonesia's national development include providing immigration facilities for foreigners in the tourism sector in the form of the visa exemption policy (*Bebas Visa Kunjungan/BVK*) and visa on arrival (VoA), immigration facilities for foreigners who are in special economic zones (*Kawasan Ekonomi Khusus/KEK*) and providing a simpler procedure for issuing residence permits.⁴¹

2. Impact of the Covid-19 Pandemic on Immigration Policy

The Corona Virus Disease (Covid-19), which has spread very quickly throughout the world, has led to a change in immigration policy. Immigration enforcement bodies have the authority to screen the arrivals and departures of people to and from the territory of Indonesia. This means that if a person is found carrying an infectious disease and threatening national health, the Immigration Office has the right to refuse entry.

Immigration policies that have been applied during the pandemic are very selective and restrictive measures.⁴² The policies implemented must be effective, responsive, and

⁴¹ Pramella Yunidar Pasaribu dan Bobby Briando, "Pelayanan Publik Keimigrasian Berbasis HAM Sebagai Perwujudan Tata Nilai 'PASTI' Kemenkumham" (2019) 10 Jurnal Hak Asasi Manusia 39.

⁴² These criteria include: (1) Immigration restrictions and strict eligibility criteria for specific populations (including bans from high-risk areas); (2) Compulsory home notification and quarantine orders for newly admitted citizens, residents and visitors (regardless of government agencies, hotels or private residences); (3) Temporary suspension (possibly permanent cancellation) of existing visas issued prior to COVID 19 and suspension of issuance of new visas; (4) Introducing stricter eligibility criteria and application requirements for issuing visas (including suspension of visa exemption agreements and

adaptive. In addition, a policy must also always be based on the guidelines provided by the WHO⁴³ as well as the Committee for Handling Covid-19 and National Economic Recovery⁴⁴ which is organized under the Coordinating Minister for Economic Affairs.

Restrictive policies related to immigration during the pandemic often took into account the situation of the development of the rate of spread of the virus in Indonesia.⁴⁵ In early February 2020, the Indonesian Government issued Minister of Law and Human Rights Regulation Number 3 of 2020⁴⁶ to temporarily suspend granting visa-free visits and visas are granted to Chinese Citizens and Foreigners who had lived and/or visited the territory of the People's Republic of China within 14 (fourteen) days before into the territory of the Republic of Indonesia. This rule was the first regulation made related to immigration restrictions for Chinese citizens as a knee-jerk response to prevent the spread of the virus that originally came from Wuhan, China.

In the same month in 2020, the government issued the regulation of Minister of Law and Human Rights Regulation No. 7 of 2020⁴⁷ to replace Minister of Law and Human Rights Regulation No. 3 of 2020. The preamble to this regulation does not specifically mention the reasons for the revocation of Minister of Law and Human Rights Regulation No. 3 of 2020. In general, it only states that Minister of Law and Human Rights Regulation No. 3 of 2020 was not in accordance with the developments that existed at that time and needed to be replaced.⁴⁸ This new regulation allowed re-entry into Indonesian territory for Chinese citizens and foreigners who had lived and/or visited the territory of the People's Republic of China within 14 (fourteen) days prior to condition⁴⁹ that they must be free from the Coronavirus as shown by the results of the PCR test and carry out quarantine for 14 days.⁵⁰

improved documentation requirements for new applications). Ernst and Young Global Ltd, "How COVID-19 is Disrupting Immigration Policies and Worker Mobility: a Tracker" (2022).

⁴³ WHO, "Technical guidance" (2022).

⁴⁴ President Regulation No. 82 of 2020 on Committee for Handling Covid-19 and National Economic Recovery.

⁴⁵ Directorate General of Immigration, "Information on immigration regulations during the Covid-19 Pandemic" (2022).

⁴⁶ Minister of Law and Human Rights Regulation No. 3 of 2020 on the Temporary Termination of Free Visit Visa, Visa, and Granting of Forced Stay Permit for Citizens of the Peoples Republic of China.

⁴⁷ Minister of Law and Human Rights Regulation No. 7 of 2020 on Granting of Visa and Stay Permission to Prevent the Enty of the Corona Virus.

⁴⁸ Minister of Law and Human Rights Regulation No. 7 of 2020 on Granting of Visa and Stay Permission to Prevent the Enty of the Corona Virus (n 48) considerant.

⁴⁹ Minister of Law and Human Rights Regulation No. 7 of 2020 on Granting of Visa and Stay Permission to Prevent the Enty of the Corona Virus (n 48) art.2.

⁵⁰ Minister of Law and Human Rights Regulation No. 7 of 2020 on Granting of Visa and Stay Permission to Prevent the Enty of the Corona Virus (n 48) art.3(2).

The Minister of Law and Human Rights Regulation No. 8 of 2020 was then issued on March 19, 2020⁵¹ to accommodate foreign nationals who were affected by the lockdown policies imposed by the government so that they could obtain residence permits under coerced circumstances. On April 2, 2020, the government issued Minister of Law and Human Rights Regulation No. 11 of 2020⁵² to revoke Minister of Law and Human Rights Regulation No. 7 of 2020 and Minister of Law and Human Rights Regulation No. 8 of 2020. This regulation was issued when the number of Coronavirus cases of infection in Indonesia increased sharply, and it substantially and at least temporarily prohibited foreigners from entering/transiting the territory of Indonesia.

Changes to immigration policies had frequently taken place since the beginning of the pandemic until now. In 2022, when booster vaccinations had already been rolled out on a massive scale, health protocols are strictly enforced throughout the region, and the decline in the number of virus sufferers has prompted the Government to relax immigration policies. On April 5, 2022, the government through the task force for handling Covid-19 Circular number 17 of 2022 began to allow quarantine exemptions for both domestic and international travelers who visit Indonesia on condition that they have been fully vaccinated.⁵³

3. Synchronization of Personal Data for Contact Tracing Accuracy

In addition to the travel restriction policies, the government has also imposed an obligation to use information technology that has made it easier to carry out contact tracing.⁵⁴ This activity is certainly not only carried out by Indonesia. Many countries have carried out contact tracing to control the spread of the virus.⁵⁵ In this way, the public can easily be monitored and evaluated, especially when having made contact with Covid-19 patients.

This identification of people who have been in contact with positive Covid-19 patients is the basic concept of contact tracing. The idea behind this concept is to prevent the spread of infection to large communities by breaking the chain of infection. Contact tracing is the primary means of controlling the spread of infectious diseases such as

⁵¹ Minister of Law and Human Rights Regulation No. 8 of 2020 on the Provision of Free Visit Visa, Visa on Arrival and Granting of Force Stay Permit.

⁵² Minister of Law and Human Rights Regulation No. 11 of 2020 on the Temporary Prohibition for Foreigners entering the Territory of the Republic of Indonesia.

⁵³ Circulation Letter No. 17 of 2022 on Overseas Travel Health Protoco during the Covid-19 Pandemic.

⁵⁴ Jobie Budd and others, "Digital Technologies in the Public-health Response to COVID-19" (2020) 26 *Nature Medicine* 1183; Hsiang Yu Yuan dan Colin Blakemore, "The Impact of Contact Tracing and Testing on Controlling COVID-19 Outbreak Without Lockdown in Hong Kong: An Observational Study" (2022) 20 *The Lancet Regional Health - Western Pacific* 1.

⁵⁵ WHO, "Contact Tracing in the Context of COVID-19" (2021).

Covid19, HIV, H5N1, and Ebola. This concept is used to record the number of people infected after close contact with a positive case.

Contact tracing had proven to be effective in containing the spread of HIV.⁵⁶ It is a contagious virus that attacks the immune system. If this virus continues to attack the body, then the human body's defense systems will be weakened and more susceptible to other diseases. Transmission of the virus can only be done through bodily fluids such as blood, vaginal fluids, semen, and breast milk. Transmission can be through the use of unsterilized needles, unsafe sex, and breastfeeding. Only people who have intimate contact with people with the HIV virus have the potential to spread the virus again. Hence, it is very important to perform contact tracing aiming that this deadly virus does not spread quickly and cause many victims.⁵⁷

Contact tracing is an effective tool for controlling the spread of viruses. A manual method⁵⁸ and non-integrated contact tracing has no real effect on controlling the spread of the virus. This is because the coronavirus spreads very easily through the droplets (coughing, sneezing, or spattering saliva when speaking) and spreads very quickly. For this reason, in addition to implementing strict health protocols, digital contacts can quickly collect data about Covid-19 patients and provide an early warning system for the surrounding community limiting contact with affected people.

Contact tracing using digital technology is widely used in public health monitoring in many countries to support rapid reporting, data management, and analysis with the goal of increasing the effectiveness of healthcare systems. In South Korea, contact tracing technology has been introduced in a sophisticated and accurate manner, allowing for control the spread rate of the virus nationwide.⁵⁹ Korean authorities collect all possible personal data to find links between Covid-19 patients in order to slow the spread of the pandemic. Contact tracers also call anyone who comes into contact with a patient and advise them to self-quarantine and undergo preemptive testing.

⁵⁶ Haijiang Lin and others, "Tracing Sexual Contacts of HIV-infected Individuals in a Rural Prefecture, Eastern China" (2012) 12 BMC Public Health 1.

⁵⁷ K Ramstedt and others, "Contact Tracing for Human Immunodeficiency Virus (HIV) Infection" (*Sexual Transmission Diseases*, 1990) 37; Tom Winkins, "HIV 2: prevention, symptoms, diagnosis and contact tracing | Nursing Times" (2020) 116 Nursing Times 35.

⁵⁸ Mirjam E Kretzschmar and others, "Impact of Delays on Effectiveness of Contact Tracing Strategies for COVID-19: A Modelling Study" (2020) 5 The Lancet Public Health e452.

⁵⁹ Claire Seungeun Lee, "Contact Tracing Apps for Self-quarantine in South Korea: Rethinking Datafication and Dataveillance in the COVID-19 Age" (2021) 45 Online Information Review 810.

Recently, South Korea has switched its contact tracing model to scanning personal QR codes.⁶⁰ QR codes generated by mobile applications from ubiquitous companies such as Naver and Kakao including personal information such as name, address, phone number, places visited and vaccination status. Since 2021, such applications have been required in public places such as cafes, restaurants, and gyms to speed up contact tracing.⁶¹

The same model of mobile application has also been implemented by the Indonesian government. Indonesia obligates the self-check-ins for anyone entering a public area by using a scanned QR code. The application used is known as *Peduli Lindungi*. This application includes the e-HAC (Electronic Health Alert Card), which is an electronic health awareness application aimed at all domestic and international travelers during the Covid-19 pandemic. This application is separate from the immigration data system and is managed directly by the Ministry of Health.

In its implementation, the e-HAC menu in the *Peduli Lindungi* application has problems in the field, including:⁶²

1. Citizens' discipline is still very low to do self-check-in, especially filling in data on e-HAC. At airports that conduct very strict supervision, the discipline of citizens to fill out this application is very high. Meanwhile, at airports with low surveillance systems, the discipline of citizens filling out this application is very low. The Covid-19 pandemic has had an impact on the airport resource management system, so that at an airport with a very minimal number of passengers, it also has an impact on the supervision system provided.
2. The e-HAC data is not integrated with the existing data center system for the airlines and the immigration data system, so that the data entered by the passengers may result in misinformation. Considering the model used is self-filling, the e-HAC system cannot detect errors entered by passengers.
3. E-HAC is a contact tracing system for travelers that is controlled and supervised directly by the Ministry of Health. The data accuracy and data protection systems are very different from what the immigration system has.

By considering the mitigation of the weaknesses of the e-HAC system, the research proposes synchronization of data both on the immigration system and on the airline system. This synchronization is very important for testing the quality of the existing data in the e-HAC system. The preventive pattern that is carried out can be specific, measurable, and complete.

⁶⁰ Ichiro Nakamoto and others, "A QR Code-Based Contact Tracing Framework for Sustainable Containment of COVID-19: Evaluation of an Approach to Assist the Return to Normal Activity" (2020) 8 *JMIR Mhealth Uhealth* 1.

⁶¹ Uichin Lee dan Auk Kim, "Benefits of Mobile Contact Tracing on COVID-19: Tracing Capacity Perspectives" (2021) 9 *Frontiers in Public Health* 1, 2-3.

⁶² Interview Report with the Representative of Immigration Office in Yogyakarta, 16 April 2021.

Here, coordination is needed between the Directorate General of Immigration, Ministry of Health, Ministry of Communications and Information Technology, and Airlines. To avoid issues related to such integration, this must be an integrated effort and monitored regularly. We can learn from South Korea's coordination pattern, where several government agencies, including the Ministry of Food and Drug Safety (MFDS), the Korea Society for Laboratory Medicine, the Korean Association of External Quality Assessment Service and the Korea Centers for Disease Control and Prevention (KCDC) have designed rapid response processes for emerging infectious diseases.⁶³ This type of collaboration among institutions will truly enhance the system that is being utilized and developed.⁶⁴

The data on the e-HAC system must be synchronized with the data on the immigration system. This will be very useful in providing comprehensive immigration information to be used quickly for handling health, especially those that are cross-border. The immigration system already has demonstrated a pattern in terms of coordination with immigration systems in other countries. This coordination is generally carried out to prevent transnational crimes.⁶⁵ For this reason, considering that virus transmission is cross-border, this kind of coordination pattern needs to be adopted and developed.

The data on the e-HAC system must also be synchronized with the data on the airlines. Passenger data⁶⁶ starting with names, flight numbers, and seat numbers are vital to be synchronized so that there is data accuracy for every traveler to and from Indonesia. It is very important to enter the passenger seat number to carry out accurate contact tracing with surrounding passengers who have the potential to be infected with the Coronavirus.

4. Potential Security Breaches and the Need to Protect Privacy Rights

Personal data is required for digital contact tracing technology to execute tracking with precision. Personal data requested is comprised not only of standard personal information, but also visited locations and personal health status. In terms of advantages,

⁶³ Joon-Young Hur dan Kyung Woo Kim, "Crisis Learning and Flattening the Curve: South Korea's Rapid and Massive Diagnosis of the COVID-19 Infection" (2020) 50 *American Review of Public Administration* 606; Asian Development Bank, "Assessment of Covid-19 Response in the Republic of Korea" (2021); European Medicines Agency, "EMA and Korean Ministry of Food and Drug Safety to Share Confidential COVID-19 Information" (2020).

⁶⁴ Soonman Kwon, Tae-jin Lee dan Chang-yup Kim, "Republic of Korea Health System Review" (2005).

⁶⁵ Warisul Ambia, Mayang Dinda Doranti dan Panca Wani, "Peran Keimigrasian serta Upaya Hukum Keimigrasian Dalam Menghadapi Kejahatan Transnasional di Indonesia" (2021) 8 *Jurnal Hukum dan Keadilan Mediasi*.

⁶⁶ Chris Woodyard, "Coronavirus: Tracing COVID-19-Infected Airline Passengers Isn't Easy" (*Airline News*, 2020); Thai Quang Pham and others, "Timeliness of Contact Tracing Among Flight Passengers during the COVID-19 Epidemic in Vietnam" (2021) 21 *BMC Infectious Diseases* 1.

this technology makes it simpler to track locations where patients are in the incubation phase, and it can detect Covid-19 patients within a particular radius, as well as users who have been in close vicinity to persons who have been proven positive for COVID-19. This will be useful if a person cannot recall their travel history or who he was in contact with.

The *Peduli Lindungi* application along with the e-HAC that is in it, on the one hand, helps the government in efforts to prevent Covid-19. Despite the inclusion of new functionalities, this program still relies on community engagement to exchange location data with one another when traveling in order to perform contact tracing with Covid-19 patients. However, information security must also be considered.⁶⁷ Because the program requires users to enter personal information, it assures that the application provider is a trustworthy entity who will not use the data for reasons other than pandemic control.

The weak data security protection system makes it easy for data to leak and be misused for illegal actions.⁶⁸ In August 2021, approximately 1.3 million user's data from the e-HAC application were hacked.⁶⁹ The hacked data includes not only Covid-19 tests (queue number, selected hospital, type of test, place and time of the test, and test results), but also personal data related to passengers (such as flight code, passport photo, and resident identification number). The data is traded on *raidforum*,⁷⁰ the dark web that hackers often use to exchange their hacked data. This leaked data can potentially be misused by hackers, for example to break into bank accounts and credit cards.

Disseminating someone's personal data without consent is a violation of privacy rights. According to Warren and Brandeis, privacy is the freedom to enjoy life and the right to be alone, and this evolution of the law is unavoidable and in need of legal sanction.⁷¹ Many international treaties safeguard the right to privacy. Despite being included in the rule of derogable rights, the right to privacy is an essential component of individual freedoms and dignity. Personal data must be protected because it is part of a person's dignity.

⁶⁷ "Data eHAC Milik 1,3 Juta Penggunanya Dilaporkan Bocor, 'Keamanan Data Tidak Prioritas'" (2021).

⁶⁸ Hendro Wijayanto, Daryono Daryono dan Siti Nasiroh, "Analisis Forensik Pada Aplikasi Peduli Lindungi Terhadap Kebocoran Data Pribadi" (2021) 9 Jurnal Teknologi Informasi dan Komunikasi (TIKoSIN) 11, 15-18.

⁶⁹ Voice of Indonesia, "EHAC Application Data Allegedly Leaked, What About Peduli Lindungi?" (2021) <https://voi.id/en/news/81071/ehac-application-data-allegedly-leaked-what-about-Peduli_Lindungi> accessed April 10, 2022.

⁷⁰ Raka Ibrahim, "Indonesians' Data 'just sitting there', Hackers Say" (2021).

⁷¹ Samuel D Warren dan Louis D Brandeis, "The Right to Privacy" (1890) 4 Harvard Law Review 193, 193-194.

The Indonesian constitution guarantees the right to protect oneself, one's family, honor, dignity, and property under his control. This constitutional right has also been further elaborated in Article 26 (1) Law No. 11 of 2008 on Information and Electronic Transactions which regulated that "the use of any information through electronic media concerning a person's personal data must be carried out with the consent of the person concerned."⁷² The provision further stipulates that "everyone whose right to privacy is violated may file a lawsuit for the loss caused."⁷³ With this regulatory concept, when a person's right to privacy is violated, he or she can file a lawsuit as regulated in article 1365 of the Civil Code.⁷⁴ However, this arrangement is still too abstract because there is no precise definition of privacy, which in some cases is often happened that a violation of privacy rights as a form of defamation.⁷⁵

An effective contact tracing system must provide high security protection for personal data. All incoming personal data can be very easily accessed by the government considering that the server is focused on the infrastructure owned by the government.⁷⁶ For this reason, it is necessary to maintain a network with full security system and quality resources to ensure the protection of personal data. Furthermore, existing law does not provide a legal framework for the use of data protection by the government. The absence of this provision can trigger negligence in maintaining the confidentiality of personal data used for the benefit of the state.

The WHO provides guidelines to ensure that contact tracing implementation considers data protection and data privacy. The guidelines suggest that:⁷⁷

- a. Safeguards must be in place to guarantee privacy and data protection in accordance with the legal frameworks of countries where systems are implemented;
- b. All parties involved in contact tracing must adhere to ethical principles of handling personal information, to ensure responsible data management and respect for privacy throughout the process;

⁷² Law No. 11 of 2008 on Information and Electronic Transactions art.26(1).

⁷³ Law No. 11 of 2008 on Information and Electronic Transactions (n 72) art.26(2).

⁷⁴ Indonesian Civil Code art.1365 (any violation of law that results in loss to another person can be the basis for a cause of action to compensate the person for the loss). Unlawful acts and criminal acts can often be brought together. A criminal act is always an act against the law (unlawful act). The scope of unlawful acts (in the context of civil law) is wider in scope than criminal acts.; Rachmat Setiawan, *Tinjauan Elementer Perbuatan Melanggar Hukum* (Bina Cipta 1991) 3.

⁷⁵ District Court of South Jakarta No515/PdtG/2010/PNJktSel.

⁷⁶ Teresa Scassa, Jason Millar dan Kelly Bronson, "Privacy, Ethics, and Contact-tracing Apps" in Colleen M Flood (ed), *Vulnerable: The Law and Politics of COVID-19* (University of Ottawa Press 2020).

⁷⁷ WHO, "Contact tracing in the context of COVID-19" (*Interim Guidance*, 2020).

- c. There must be a protocol for how data will be handled, stored, and used needs to be communicated to those concerned in a clear and transparent manner. This is important for buy-in and engagement as well as to avoid misperceptions that could jeopardize the effectiveness of a contact tracing program; and
- d. Digital tools used for contact tracing should be assessed before use to ensure safeguarding data protection according to national regulations.

Given that the *Peduli Lindungi* application is under the control of the Ministry of Health – which institutionally does not have sufficient resources in the IT field – it is very necessary to establish a Personal Data Protection Commission. This Commission at least must have the authority to:⁷⁸

- a. Monitor compliance of all parties related to the protection of personal data to the laws and regulations regarding the protection of personal data, including personal data protection measures used and recommend the necessary steps in order to meet the minimum standards in the protection of personal data;
- b. Receive complaints, facilitate dispute resolution, and provide assistance to data owners in the event of a violation of laws and regulations related to personal data protection;
- c. Coordinate with other government agencies and the private sector to formulate and implement plans and policies to strengthen the protection of personal data;
- d. Regularly publish guidelines for personal data protection measures and coordinate with relevant agencies; and
- e. Provide recommendations to law enforcement regarding prosecutions relating to the protection of personal data.

The current bill on personal data protection in Indonesia (2020) does not include the establishment of a commission.⁷⁹ The political situation in the legislation provides more room for supervision for each processor of personal data.⁸⁰ This kind of monitoring system is less integrated and tends to expose uncertainty in law enforcement.

Unlike Indonesia, South Korea has established a Personal Information Protection Commission. This commission was formed through the Personal Information Protection Act establishing the central administrative agency responsible for the protection of personal information under the South Korean Prime Minister.⁸¹ The authority of this independent agency includes:⁸²

⁷⁸ Draft of Law on Personal Data Protection (2015 Version) art.31(2).

⁷⁹ Draft of Law on Personal Data Protection (2020 Version).

⁸⁰ Draft of Law on Personal Data Protection (2020 Version) (n 79) art.43-46.

⁸¹ South Korea's Personal Information Protection Act (2011) art.7.

⁸² South Korea's Personal Information Protection Act (2011) (n 81) art.8.

- a. Matters concerning the improvement of law relating to personal information protection;
- b. the establishment or execution of policies, systems or plans relating to personal information protection;
- c. investigation into infringement upon the right of data subjects and the ensuing dispositions;
- d. Handling of complaints or remedial procedures relating to personal information processing and mediation of disputes over personal information;
- e. Exchange and cooperation with international organizations and foreign personal information protection agencies to protect personal information;
- f. investigation and study, education and promotion of law, policies, systems and status relating to personal information protection; and
- g. support for technological development and dissemination relating to personal information protection and nurturing of experts.

Indonesia's immigration data system has been fortified with improved infrastructure and security technology. The server is likewise located in Indonesia and includes strong security measures,⁸³ ensuring that even if there is physical, non-criminal acts, the protection of existing personal data is assured.

Efforts to connect current data on immigration and airlines into the *Peduli Lindungi* system must be accompanied by the development of a secure system. As a result, it is critical to maintain a consistent security system among Indonesian government internal organizations to secure personal data. Implementation of this proposal appears to be difficult if Indonesia does not establish a Personal Data Protection Commission, as other nations have.

E. Conclusion

Providing data accuracy and speed to prevent the spread of Covid-19 in Indonesia, the government through the Ministry of Health requires the use of e-HAC, which is one of the menus in the digital contact tracing application of *Peduli Lindungi*. Contact tracing related to domestic and international mobility carried out in this application is still in the form of self-filling. In practice, this incoming data is still less accurate due to the lack of public awareness and discipline. For this reason, in this study, it is recommended that all data held by the Directorate General of Immigration and airlines should be synchronized into the contact tracing application carried out by the Ministry of Health.

⁸³ Interview Report with the Representative of Immigration Office in Yogyakarta (n 62).

The data synchronization carried out must be balanced with the data security system. The absence of regulations regarding the protection of personal data and the commission for the protection of personal data in Indonesia makes synchronization efforts useless considering that to this day there are still many data leaks, especially data that has been collected by the government. For this reason, this study provides recommendations for regulations regarding the protection of personal data be immediately formed and ratified and establish a Personal Data Protection Commission whose task is to conduct supervision, law enforcement and ensure that there is a uniform data security system in every institution, both public and private in Indonesia.

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