IMMIGRATION BIOMETRIC DATA EXCHANGE AMONG ASEAN MEMBER STATES:
OPPORTUNITIES AND CHALLENGES IN LEGISLATIONS

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Abstract
Biometric data can be described as data containing human physical characteristics. They can be in the form of fingerprint data, retina scans, and voice recognition. The application of biometrics for immigration purposes reduce the number of terrorism case and illegal migrants in the European Union (EU) territory and the United States. In 2013, biometric data exchange in ASEAN was made possible with the Bali Process Protocol. By a qualitative research methodology, using the CIPP (Context, Input, Process, and Product) analysis, this research attempts to find the legal obstacles as the main barriers in implementing biometric data exchange in the ASEAN region. This study finds that not all ASEAN countries have laws on personal data protection, which affect the Standard Operating Procedures (SOP) related to how the biometric data will be retrieved, processed, and managed, as well as the actions required if there is a violation of the law related to the SOP. This study suggests that ASEAN can accommodate the EU’s framework, by using the General Data Protection Regulation (GDPR) as a single standard in the application of Data Protection regulations for the biometric data exchange system in ASEAN.

Keywords: ASEAN; Bali process; biometric data; data protection; immigration

INTRODUCTION
Immigration can be described as the voluntary or involuntary movement of people to a new destination, outside their origin countries, where they intend to settle for a certain period of time. Immigrant itself, according to the International Organization for Migration (IOM), is “any person who is moving or has moved across an international border or within a State away from his or her habitual place of residence, regardless of (1) the person’s legal status; (2) whether the movement is voluntary or involuntary; (3) the causes for the movement; or (4) the length of the stay.”. Furthermore, the migrant can be categorized as forced migrants (asylum seekers and refugees) and labor migrants (or economic) migrants (and family reunions).

Migration-related activities happen due to various push and pull factors. Those factors can be economic or non-economic reasons. A recent study confirmed that the economic-related pull factor, such as the hope to find a better job, higher wages, and decent living conditions still dominate as the most attractive factor to migrate today. On the other hand, politically related issues, such as conflict, unstable government, and unfair legal systems which created unsafety conditions also became the main push factor for people to move to other countries.3

According to the World Migration Reports 2022, more than 281 million people, or 3.6 percent of the world population are categorized as migrants, which means they lived outside their origin countries.4 Migration undoubtedly has economic benefits, such as remittances, which proved that the money sent from abroad to their origin countries has a significant impact on the home country’s economic development.

In the year 2021 only, the number of remittances sent by the migrants to their home countries increased to 7.3 percent or equal to US$589 billion compared to 2019 and it successfully maintains the origin country’s economic stability during the COVID-19 pandemic.5 Not only the positive effects, but also the negative effects of migration also happened at the same time, The Irregular Migrants, can be defined as a person who enters a country without paperwork, false documents, or unlawful crossing points, resides outside the home country by breaching visa or residence permit requirements, and works outside the home country without legitimate documentation,6 is increasing rapidly worldwide.

Irregular migrants are identified to have a significant impact on the increased number of human trafficking-related activities. Human trafficking activities are categorized into two main activities, which are: sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or the person induced to perform such an act is under the age of 18; or the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services through the use of force, fraud, or coercion for involuntary servitude, peonage, debt bondage, or slavery.7

Human trafficking is still becoming a challenge for many authorities today. In 2017, approximately, 24.9 million persons were trapped in modern slavery and 2.2 million of them were working in sexual slavery. In addition, it was found that many of those victims were transported by using ships.8 Surprisingly, the Asia Pacific region contributed the highest number of worldwide victims of human trafficking, accounted 15.7 million of the victims coming from the Asia Pacific region and it keeps showing an increasing trend.

The trends are rapidly upward because human trafficking is one of the most profitable businesses worldwide, generating US$ 150 billion every year. Lastly, the number of cases

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prosecuted by the law is initially very low. In 2016, there were only 14,894 prosecutions and 9,071 convictions for human trafficking worldwide. In some ASEAN countries, the high unemployment and unharmonized laws and regulations, both national and international in nature while still prioritizing national interests, still become a big burden in dealing with human trafficking-related cases.

In line with human trafficking, international crimes related activities have also increased rapidly in recent years. Especially those related to terrorism. Terrorism is typically regionally focused. In 2017, the Middle East, Africa, and Southeast Asia accounted for 95% of all fatalities. Accounted from 2007 to 2017, the victims and cases of terrorism always showed increasing trends, as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>Number of Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>2007</td>
<td>12824</td>
</tr>
<tr>
<td>World</td>
<td>2008</td>
<td>9157</td>
</tr>
<tr>
<td>World</td>
<td>2009</td>
<td>9273</td>
</tr>
<tr>
<td>World</td>
<td>2010</td>
<td>7827</td>
</tr>
<tr>
<td>World</td>
<td>2011</td>
<td>8246</td>
</tr>
<tr>
<td>World</td>
<td>2012</td>
<td>15497</td>
</tr>
<tr>
<td>World</td>
<td>2013</td>
<td>22273</td>
</tr>
<tr>
<td>World</td>
<td>2014</td>
<td>44490</td>
</tr>
<tr>
<td>World</td>
<td>2015</td>
<td>38853</td>
</tr>
<tr>
<td>World</td>
<td>2016</td>
<td>34871</td>
</tr>
<tr>
<td>World</td>
<td>2017</td>
<td>26445</td>
</tr>
</tbody>
</table>

On the other hand, the international terrorism Victim of Fatalities also shows the increasing trends in the Association of Southeast Asian Nations, or ASEAN territory, as follows:

Biometric data exchange becomes an administered solution to minimize the number of Irregular migrants, especially those related to human trafficking and terrorism activities worldwide. In the European Union (EU), EURODAC (European Dactyloscopy System) which was established in 2003, with the regulation of the EU No. 603/2013, and the General Data Protection Regulation (GDPR) as the legal data protection law, successfully recorded more than 2.3 million people who cross between the EU member countries, which can be shown as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Data Transmitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>756.368</td>
</tr>
<tr>
<td>2015</td>
<td>1.915.838</td>
</tr>
<tr>
<td>2016</td>
<td>1.641.377</td>
</tr>
<tr>
<td>2017</td>
<td>1.012.456</td>
</tr>
<tr>
<td>2018</td>
<td>879.072</td>
</tr>
<tr>
<td>2019</td>
<td>916.536</td>
</tr>
<tr>
<td>2020</td>
<td>644.926</td>
</tr>
</tbody>
</table>

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11 Hannah Ritchie et al., “Terrorism,” Our World In

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12 Ibid.

13 EURODAC, Eurodac 2020 Statistics Report
The Biometric Data exchange system in the EU territories has proven its effectiveness by decreasing the number of illegal border crossings in the EU territories by more than 73 percent and decreasing the number of terrorist actions after the Madrid and London attack, in 2013.\textsuperscript{14} In addition, the system is successfully integrating the refugee registration and resident permit system after the EU refugee crisis happened in 2015, resulting in faster asylum seeker status claims and supporting the EU quota system which helps relocate more than 125,000 refugees within a year\textsuperscript{15}.

In the United States of America, a similar system called the Transborder Biometric Information Flow (TBIF), which is administered under the United States Visitor and Immigrant Status Indicator Technology (US-VISIT), also proved its efficiency. The TBIF system has enabled faster visa approval, better asylum seeker application, and matching the data with the international watching list. The US-VISIT databases have successfully recorded more than 100 million data and matched more than 5 million watching lists, which decrease the number of transnational crimes, and potential terrorist attacks since 9/11\textsuperscript{16}. The cross-national biometric data exchange has already proven its effectiveness as already mentioned above.

Regarding Biometric Data Exchange from the ASEAN perspective, there is still a lack of legislative framework within ASEAN states to deal with the issue of irregular migration, compared with the EU and the United States; for example, the 2007 ‘ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers’ only applies to migrant workers. There were not any acknowledgments of migrants or asylum seekers. Furthermore, only two ASEAN countries (the Philippines and Cambodia) are signatories to both the 1951 Convention and the 1967 Protocol.

Although, the Biometric Data Exchange schemes were already established at the Bali Process conference. The Bali Process Working Group on Human Trafficking strives to encourage more effective and coordinated law enforcement and justice responses to human trafficking. The Working Group is co-chaired by Australia and Indonesia, and it reports to the Bali Process Ad Hoc Group on an annual basis. The Working Group was formed because of the Fifth Bali Process Ministerial Conference, which took place on April 2, 2013. With the Regional Biometric Data Exchange Solution (RBDES), which was initiated within the framework of the Bali process, legally, biometric data exchange in ASEAN territory is becoming possible\textsuperscript{17}. Furthermore, biometric data exchange also has a legal binding between the Interpol member countries, by Resolution no. 4/2016 of the International Criminal Police Organization (ICPO)-INTERPOL Concerning Biometric Data Exchange\textsuperscript{18}.

However, the Immigration Biometric Data Exchange in the ASEAN territory is not well established yet among the ASEAN member states until this research is conducted. One of the main reasons is that biometric data


exchange is relatively new, and not yet fully developed, especially for the ASEAN member states. This research will analyze the main burden of the implementation of the Immigration Biometric Data Exchange in ASEAN, by using the Context, Input, Process, and Product (CIPP) approach to understanding which stages are the main challenges.

Then, based on the research background as previously explained, the research questions are:

1. What are the main challenges and opportunities identified by the ASEAN member states in implementing the Biometric Data Exchange schemes?
2. What is the legal recommendation for the Biometric Data Exchange implementation between ASEAN member states?

This article is divided into three sections. First, it analyses the legal and technical challenges which become the main burden in each ASEAN member state in implementing biometric data exchange. The second section tracks and identifies the stages of the challenges in policy implementation by applying the CIPP method. In the third section, this paper will build a comprehensive policy brief to address the related problems in the ASEAN framework.

LITERATURE REVIEW

Biometric Data as an Immigration Identity

The automated identifying of persons based on biological and behavioral features is known as “biometric recognition”. The field is a subset of human identification science. Fingerprint, face recognition, hand geometry, voice recognition, and iris recognition are some examples of forms of biometric recognition. Some approaches (such as iris recognition) are more physiologically based than others (such as signature recognition), but all techniques are impacted by both behavioral and biological factors. There are no biometric systems that are solely “behavioral” or “biological.” “Biometric recognition” is sometimes referred to as “biometrics,” even though this latter term has historically been related to statistical analysis of generic biological data.

In the Immigration sector, biometric technology is used in several functions, which can be stated as follows:

1. Providing a biometric log-on option for government workers who issue passports, visas, and refugee passes, which results in improved security and a clear audit trail;
2. Incorporating biometric markers into the travel document application process, eliminating, or considerably lowering the potential of a single individual being given several immigration documents under various names, and enabling improved one-to-many checks against a pre-issuance watch list;
3. Eliminating the number of Irregular Migrants by identifying the identity of the travelers at the border.

The use of the biometrics system in Immigration control also becomes very common after the Immigration crisis of 2015. The Biometric system has been used by the EU to create identification databases for asylum seekers and refugees and to issue refugee cards. In the EU-Turkey relation for asylum seeker management, the biometrics system also has a role as a single identity increasing the access of the refugees to

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basic human rights, such as food, shelter, and education\textsuperscript{22}.

Furthermore, the biometric use under the EURODAC system is proven to decrease the waiting time for the asylum seeker and refugees who join the Voluntary Return Policy which is administered by the UNHCR, and speed up the citizenship process for those who join the resettlement program\textsuperscript{23}.

**Biometric Data usage in Border Control System**

The European refugee crisis of 2015 has been categorized as one of the worst refugee crises of the century. Based on the experience of handling this crisis, the EU changed its migration policy rapidly. The new procedure applies in the EU member states that everyone from outside of EU territory is subjected to screening, photographing, and fingerprinting upon arrival in Europe by local law enforcement and FRONTEX.

Anyone who enters the European Union without a visa is classified as an “irregular migrant,” and their fingerprints are collected immediately upon admission, often under duress (EC 2016/0132(COD)). The Dublin Regulation is enforced using fingerprints. If they do not have any documentation proving their nationality, they are asked a series of questions regarding their country’s language, geography, history, and traditions. Under Danish law, immigration officers can ask asylum applicants for their social network passwords to verify their identity and nationality.

The data collected to enter the EU territory are consist of:\textsuperscript{24}

1. Name
2. Age
3. Place and Date of Birth
4. Fingerprints
5. Photograph
6. Nationality

However, those individuals who claim to the asylum seeker entering EU territory are required to provide the following details, under the Refugee Identification Procedure (RIP):

1. Name
2. Age
3. Gender
4. Document verification and nationality determination If the individual does not have any identity, they will be asked a series of questions regarding their nation, such as:
   a) language
   b) cultural customs
   c) National currency
   d) flag
5. A medical examination to determine the individual’s health status and to attempt to verify their age
6. Questions about the individual’s asylum claim determine the level of vulnerability, which are:
   a) women who are pregnant or nursing;
   b) single parents with children under the age of 18;
   c) unaccompanied minors;
   d) survivors of rape, torture, sex trafficking, female genital mutilation, or other physical or psychological violence; and
   e) those over 65, have a serious illness or disability, or suffer from post-traumatic stress disorder.

Furthermore, the procedures of biometric screening and managing the Biometric Data


in Border control are managed by the ICAO regulation, based on ICAO Doc 9303 and the ICAO TRIP Guide 2018. The biometric data exchange in International Airports, Sea Ports, and Land border are following these procedures:

1. **Data recording phase**
   This phase is conducted when a traveler enters the country’s border. The immigration officers are required to take the traveler’s biometric data at the counters by scanning the biometric-related data, which is in line with ICAO Doc 9303 and following the gorodnichy concept of Biometric Control.

2. **Verification Phase**
   This phase is conducted by matching the data, which are previously taken, with the photo that has been stored in the databases. This process can be conducted by matching the biometric data with the immigration documents brought by the traveler, as stated in the ICAO Doc 9303 and ICAO TRIP Guide 2018.

3. **Validation Phase**
   This validation phase is conducted by the Immigration officers by interviewing the traveler who will enter the border. The questions are mostly related to the aim of the stay, or even the sponsor who invited the traveler to validate if the information given is valid. If the Immigration officer decides all the traveler’s data are valid, the entry permit stamp will be given to the traveler.

4. **Repository Phase**
   The data of the traveler are stored in the data center, which is located in the destination country. The data will be stored for 5 to 10 years.

The biometric data phase explained above is already been used in the EURODAC system, US-VISIT, and the South American Integrated data Immigration system.

### Identifying Pros and Cons of the Biometric Data as an Immigration Control Mechanism

The use of biometric data for immigration purposes is slightly controversial. It has a positive and negative impact. The positive impact of the biometric data is that these data make refugee management faster and more effective, by using the proGres Refugee Registration Platform which was developed by Microsoft. In addition, biometric data used in the immigration process can contribute to the advancement of national welfare, and recognize valid concerns and ethical objections in asylum seeker registration.

In the next stage, the use of biometric databases also increases the security of the country’s border, and even the refugee camp, by minimizing fraud resistance. Recently, the biometric system also secured direct cash payments from the UNHCR to Ukrainian refugees.

However, there are also several potential negative effects of biometric usage for border control and immigration purposes. UNHCR uses the biometric system in Syria refugee management in Jordan for facilitating them with food and shelter. However, it violates human rights by using biometric data to control their movement. In addition, the EURODAC

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29 Beata Paragi and Ahmad Altamimi, "Caring Control or Controlling Care? Double Bind
system can be used as a tool for the EU member states to reject asylum applications and create many stateless people who are “waiting” for their status in several European cities, such as Paris. Furthermore, the use of biometric immigration registration, increased privacy intentions by 35.2 percent among airplane passengers in several airports in the United States.30

Partially, many of the refugees in Makassar city, Indonesia disobey the rules of the Director General of Immigration Number IMI-0352.GR.02.07 of 2016. They did the violation by working and earning wages secretly, and the biometric system can potentially be used to control those refugees.31 In addition, the biometric exchange system can prevent the movement of people internationally, in an emergency such as during the COVID-19 outbreak.32

RESEARCH METHODOLOGY

1. Approach

This study implemented the qualitative doctrinal research method. The study was not limited to case summaries or other conventional primary and secondary legal sources33. This research used literature reviews from primary sources, such as the Bali Process Documents and Guidelines, ASEAN rules and regulation databases, and INTERPOL-related documents.

2. Data Collection

In this study, literature review served as a method for gathering data and requires the identification, logging, comprehension, creation of meaning, and transmission of information.

The data used in this study were collected from several primary sources, such as:

1. The ASEAN rules and regulation databases, https://libguides.nus.edu.sg/ASEANlaw/ASEAN
2. Interpol rules and regulation databases, https://www.interpol.int/
3. Data Analysis

The data analysis was conducted by using the policy evaluation perspectives. Evaluation is a type of activity or process as material for consideration in making decisions or policies. It is done based on complete data and information about the object in the evaluation so that it will produce a product that has value. Evaluation is also a process of understanding, giving meaning, obtaining, and communicating information to decision-makers34. Then an evaluation is defined as “a process of identifying, gathering, and giving descriptive information, as well as generating value and utility judgments about goals, plans, performance, and results in order to guide decision making, provide accountability, and gain a better knowledge of the phenomena under”35.
This study used a research model developed by Stufflebeam, namely the CIPP Evaluation Model. The CIPP evaluation program belongs in the improvement/accountability category. It is one of the most widely applied evaluation models. The CIPP Stufflebeam evaluation model has been used and designed not only to prove a decision but also to act as a problem solver where information can be used as a guide for designing a program. The CIPP model is expected to delve into several different but interrelated aspects of a program. The CIPP consists of four components:

1. **Context evaluation** serves planning decisions. This evaluation context helps plan decisions, determine the needs to be achieved by the program and formulate program objectives. The main purpose of context evaluation is to find out the strengths and weaknesses of the evaluation. Context evaluation is the basis of evaluation whose purpose is to provide reasons for setting goals. The evaluator's attempts in evaluating this context are to provide an overview and details of the environment, needs, and objectives. Context evaluation includes describing the background of the program that is being evaluated, providing an estimate of program needs and objectives, determining program goals, and determining that this offer is responsive to the needs that have been identified. Context evaluation provides data on the reasons for establishing program goals and priorities for goals. This evaluation describes relevant environmental conditions, describes existing and desired conditions in the environment, and identifies unmet needs and untapped opportunities.

2. **Input evaluation** is an evaluation that aims to provide information on how to use available resources to achieve program objectives. Evaluation of program inputs provides data to determine how to use resources that can be used to assist the program. It has to do with relevance, practice, change, efficacy, and alternatives that may become more prevalent. Structuring a decision is the second stage of the CIPP model. The second stage is the evaluation of inputs. This process is aimed at the government's ability to implement the KIP program, which includes the mechanism for recruiting KIP recipients to disburse funds for reporting funds. The input evaluation components include 1) Human Resources, 2) Supporting facilities and equipment, 3) Funds or budgets, and 4) various procedures and rules required.

3. **Process evaluation** for implementing the decision. Process evaluation is directed at how far the activities in the program have been carried out according to plan. Product evaluation is directed at things that show changes that occur in inputs. Process evaluation emphasizes three objectives: 1) detecting or predicting the procedure design or implementation design during the implementation phase 2) providing information for program decisions and as a record or archive of procedures that have occurred. Process evaluation includes the collection of assessment data that has been determined and applied in program implementation practices.

4. **Product evaluation** for recycling decisions. Product evaluation helps further decisions, on what results have been achieved from product evaluation that can help to make further decisions, both regarding the results that have been achieved and what was done after the program was running.

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The systematical analysis by following the CIPP models will be used by analyzing the implementation of the CIPP method as the law-related policy evaluation. Several published journals used this type of analysis as follows:

**Table.3. Literature Analysis of the CIPP method for the law-related policy evaluation**

<table>
<thead>
<tr>
<th>Author Category Points of Analysis Context</th>
<th>Yusuf, et al, 2021(^{38}) Indicators for the policy evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal by Stufflebeam, founder of CIPP Model, 1951(^{37})</td>
<td>Context Program content; Requirements; objectives and goals</td>
</tr>
<tr>
<td></td>
<td>Input Financial allocation; Human resources; Courses and Training; Infrastructure and Equipment</td>
</tr>
<tr>
<td>Criteria for using the CIPP model</td>
<td>Process Method of Implementation; Types of Activities; Time period; Program design</td>
</tr>
<tr>
<td></td>
<td>Product Productivity; benefit; impact and changes</td>
</tr>
<tr>
<td></td>
<td>Process The service demand and circumstances, as well as the service aim domain</td>
</tr>
<tr>
<td></td>
<td>Input Budgeting, human resource management, facilities and resource management, service delivery, and content</td>
</tr>
<tr>
<td></td>
<td>Process Service performance, service satisfaction, and service assessment</td>
</tr>
<tr>
<td></td>
<td>Product Application of services, execution of services</td>
</tr>
<tr>
<td></td>
<td>Jung and Moon, 2013(^{39}) Indicators for the Law Institution</td>
</tr>
<tr>
<td></td>
<td>Context</td>
</tr>
<tr>
<td></td>
<td>Input</td>
</tr>
<tr>
<td></td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>Product</td>
</tr>
</tbody>
</table>

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Table 4. Categorized Evaluation following the CIPP models

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluated Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong></td>
<td>Availability of the related law requirements in the context of biometric data exchange between the ASEAN member states.</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>Legal basis availability to support the budgeting and Infrastructures for the biometric data exchange between the ASEAN member states</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Availability of the legal basis for the data recording, data verification, data validation, and Repository phase for the biometric data exchange process between the ASEAN member states</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>The potential impact which may happen if the biometric data exchange can be implemented widely in ASEAN</td>
</tr>
</tbody>
</table>

Source: Authors from Data Analysis

Based on the literature review about how to implement the CIPP method as a law-related policy implementation, the most important points that need to be evaluated are stated as follows:

RESULTS AND DISCUSSION

The literature analysis which already been conducted is arranged by using the CIPP analysis tools, which can be described as follows:

1. **Context Analysis**

The first legal basis for enabling biometric data exchange in ASEAN is the Bali Process. It was ratified in 2012 between the member states, by establishing the Regional Support Office (RSO). The RSO meeting titled “Roundtable on Biometric Data Exchange for Identity Verification” was conducted in Bangkok, Thailand on 15 and 16 October 2014, the meeting concluded several important points, which are:

42 Indriani and Paripurna, “Biometric Data Sharing in Addressing Irregular Migration and Security Issues within The Bali Process Framework for Indonesia and ASEAN Member States.”, *Journal of South East Asian Human Rights*, no. 4, 2

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member states must follow the standardized biometric system and capabilities, biometric policy, legislation, and data protection regulation; (2) Developing one system solution for combating people smuggling and transnational crimes; (3) Increasing the cooperation and assistance between the ASEAN member states, and RSO members, such as Australia Border Protection.

In terms of regulation, the RSO office issues the Guidelines on Information Exchange to Address People Smuggling, Trafficking in Persons, and Related Transnational Crime. These guidelines allow the ASEAN member states to share the biometric data, as long as data will be used as transnational crime evidence, which is facilitated by the single system called Regional Biometric Data Exchange Solution (RBDES).

The second legal basis is the International Civil Aviation Organization (ICAO) Border Control Management Guidelines. It enables Biometric Data Exchange between the ICAO member states, which includes the ASEAN member states. Based on the ICAO regulation, Annex 9 – Facilitation, Chapter 3. Entry and Departure of Persons and their Baggage are stated as follows:

3.11. All passports issued by the Contracting States shall be machine-readable in accordance with the specifications of Doc 9303, Part 4. Note.—This provision does not intend to preclude the issuance of non-machine readable passports or temporary travel documents of limited validity in cases of emergency.

3.11.1 For passports issued after 24 November 2005 and which are not machine-readable, Contracting States shall ensure the expiration date falls before 24 November 2015.

3.12. Contracting States shall ensure that travel documents for refugees and stateless persons (“Convention Travel Documents”) are machine-readable, in accordance with the specifications of Doc 9303. Note.—“Convention Travel Documents” are provided for in the 1951 Convention Relating to the Status of Refugees and the 1954 Convention Relating to the Status of Stateless Persons (cf. respective Article 28 of both Conventions).

3.13. Recommended Practice.—When issuing identity documents or visas accepted for travel purposes, Contracting States should issue these in machine-readable form, as specified in Doc 9303. …”

From those legal articles, all of the travel documents shall use the Machine-readable travel documents (MRTD) as stated in Annex 9, 2017 ICAO Trip Guide 2018. The other form of MRTD is the eMRTD. The contracting states should join the ICAO Public Key Directory (PKD) to validate the eMRTD in the border as the recorded identity which is used to validate the traveler which is also mentioned as the validation tool in the ICAO Traveller Identification Programme (TRIP). Furthermore, the use of biometric data in the travel document is still ongoing and needs to be implemented by the contracting states based on the Revised Implementation Roadmap for Member States, Version 3/December 2021. From the explanation above, it can be concluded that the use of biometric

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data becomes a mandatory requirement for travel documents, and the ASEAN member states should be ready for the implementation of the biometric data as the future Inspection Systems and Tools, as extracted from the ICAO Annex 9 – Facilitation, Chapter 3. Entry and Departure of Persons and their Baggage.

The third legal basis is the adoption of Resolution No.4/20164 (hereafter referred to as the ‘Bali Resolution’) to strengthen the implementation of biometric information exchange among ICPOINTERPOL members in dealing with terrorist mobility. Bali Resolution essentially encourages each member state to contribute as much as possible to ICPOINTERPOL’s attempts in compiling data related to terrorism, particularly in the matter of coordination with NCBs (ICPOINTERPOL members) through INTERPOL diffusions and international notice, as well as INTERPOL’s Crime Analysis File aimed at dealing with foreign terrorist fighters (hereinafter referred to as FTFs).

Through the ‘Bali Resolution,’ member states are also urged to do systematic cross-checks on the material already retained in the ICPOINTERPOL information systems and to send International notices and diffusions to INTERPOL. The systematic collecting and storage of biometric information is an essential component of the terrorist profiles supplied via the ICPO-INTERPOL channels. The unique identifying traits, such as fingerprints and DNA profiles of persons in the following categories, are the focus of the systematic collecting and storage of biometric information.

These include the face, iris, and voice recognition, fingerprint, hand geometry, thermogram, ear shape, body odor, and behavioral traits such as signature, handwriting, and stride. The RBDES and the Bali Resolution are the two most important tools in biometric data exchange. The goal of RBDES is to help address irregular migration, which may involve human trafficking, people smuggling, and other forms of transnational crime. RBDES enables law enforcement agencies to quickly and securely use biometrics data to authenticate the identity of travelers at borders. Meanwhile, the Bali Resolution (No.4/2016 of the ICP-INTERPOL) addresses terrorism and international crime. It is implemented by identifying and early detecting possible transnational criminal risks.

From the three related legal bases, the context analysis can be concluded in the following points:

<table>
<thead>
<tr>
<th>Available Legal Basis</th>
<th>Concluded Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bali Process Documents 2014, Guidelines on Information Exchange to Address People Smuggling, Trafficking in Persons and Related Transnational Crime</td>
<td>The biometrics data exchange in ASEAN aims to combat transnational crime, trafficking, and people smuggling. In addition, it provides the RBDES system to facilitate the biometric data exchange</td>
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<tr>
<td>International Civil Aviation Organization (ICAO) Border Control Management Guidelines</td>
<td>Biometric data storing and exchange become mandatory in the immigration documents issuance</td>
</tr>
<tr>
<td>ICP Interpol Resolution No.4/20164</td>
<td>Enabling the technical details of the biometric data exchange, and concluding if the biometric data can be used as evidence for the transnational crime</td>
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</tbody>
</table>

Source: Authors from data analysis

2. Input Analysis

In terms of resources, based on the Bali Process Guidelines on Information Exchange to Address People Smuggling, Trafficking in Persons, and Related Transnational Crime, the RBDES system runs with assistance from the RSO, which includes the governments of Australia, New Zealand, IOM, and UNHCR.

The RBDES will initially only contain anonymized biometric data, but it can later
be modified to contain additional data and biographical details. The transmitted data will be used to verify identities and establish borders. There is a policy framework that goes along with it that outlines the terms of use and specifies the safeguards expected for maintaining the privacy and protecting vulnerable people. The Bali Process Regional Support Office created the RBDES’s policy framework (RSO)\(^4\).

According to the Framework, the System will act as a simple way to quickly determine whether any Participating Members’ biometric data match one another, acting as the starting point for the identity verification process.

A “match,” “no match,” or “error” response will be returned because of the exchange method specified under the Framework. If the response is “match,” the responding member may divulge the matched person’s name, birthdate, country, and passport number. The Responding Member may additionally contribute additional information by arrangements made through this RBDES or other available mechanisms, using methods outside of the System\(^5\).

The input resources, which consist of budget and infrastructure in implementing the RBDES system are supported by the governments of Australia, New Zealand, IOM, and UNHCR. The Government of Australia is establishing the capacity to automate the exchange of non-FCC citizens’ biometric data with other FCC partners as part of the Five Country Conference (FCC) biometric data matching program. Australia and the USA and Australia and the UK have started automating the exchange of biometric data. All FCC partners will gradually receive full automation of biometric data exchange during the ensuing years, along with the corresponding regulatory requirements to carry out this exchange.

In terms of the budget that is fully supported by the Australian Government, to implement the regional biometric data exchange solution (RBDES) initiative, additional funds were given in December 2013. The RBDES will develop a regional system to ease the exchange of biometric data over several years in collaboration with the International Organization for Migration (IOM). The exchange between the interested Bali Process group members will take place via a secure mechanism and within a legal framework. In Bangkok, Thailand, a technical review committee was established and convened in December 2014 and February 2015. At these discussions, the proof-of-concept framework and system received approval. The Bali Process’ 9th Ad-Hoc Group Senior Officials Meeting (AHG SOM), held on May 6 in Wellington, praised the RBDES’ ongoing developments. In 2016-2017, AUD 53.567 million was budgeted to support the development of the RBDES system, and this continues to the next financial years, by budgeting AUD 49.119 million in 2017-2018, AUD 39.820 million in 2018-2019, and ongoing proposal for the further financial years\(^6\).

In terms of infrastructure, the implementation of the RBDES system was supported by IOM and UNHCR. The RBDES infrastructure is provided by the IOM and UNHCR to enable Bali Process participants to establish a secure internet connection and


send data (fingerprint biometrics) from one endpoint (a client making a request) to the second endpoint via the Hub (the RBDES central infrastructure, router) (receiving client).

The clients will give users a way to communicate with the RBDES Hub by sending and receiving messages. The Hub offers essential connectivity features and stores all pertinent transactional and access data for auditing and reporting purposes.

The RBDES Manager (without voting privileges) and 1 representative from each of the 5 Bali Process participants will establish the Oversight Committee. Meanwhile, for Participating Members, there will be a one-time startup cost and an ongoing license fee (depending on transaction volumes). As the number of Participating Members rises, economies of scale will occur because of the system architecture design.

IOM and UNHCR will oversee RBDES fees while coordinating them with the RBDES Oversight Committee. The essential RBDES hardware, bought for the kick-off workshop, will be given free of charge to the first five Participating Members who use the system. Then, RBDES also will work together with the existing legislative schemes previously developed, such as The RBDES. This cooperation will function alongside current data exchange channels open to Bali Process participants. These agreements include formal multilateral mechanisms like Eurodac, the Five Country Conference (FCC), Interpol’s Automated Fingerprint Identification System (AFIS) and i24/7 communication system, ASEANAPOL’s electronic ASEANAPOL Database System (eADS), the Agreement on Information Exchange and Establishment of Communication between some ASEAN countries, the UNODC Voluntary Reporting System – Migrant Smuggling and Related Crime (VRS-MSRC), and the APEC Regional.47

Therefore, in terms of the budget, infrastructure, and legislation instrument, there are not any problems found.

3. Process Analysis

To build on what has been established over the years in terms of political and security engagement, ASEAN Leaders have agreed to establish the ASEAN Political-Security Community (APSC). The APSC ensures that nations in the region live in harmony with one another and with the rest of the world in a basic, law-based, and acceptable environment. ASEAN member states rely entirely on peaceful processes to handle intra-territorial disputes and perceive security on a very fundamental level; related and bonded by a geographical region, common vision, and goals. Political advancement, standard-setting and exchange, conflict resolution, conflict prevention, post-conflict peacebuilding, and implementation methods are among the related parts.48 As a result, in the context of the RBDES concept, regional collaboration is essential.

This research offers several effective practices implemented by the government and corporate sector in building systems to address human trafficking issues. The Acknowledge, Act, and Advance Recommendations (AAA Recommendations) program were endorsed at the Nusa Dua Forum in August 2018. The Bali Process promotes collaboration between the corporate sector and the government. The commercial sector may help by spreading awareness of the problem and providing protection for victims. Furthermore, to trace ASEAN member states’ preparedness to

48 ASEAN Secretariat, ASEAN Political-Security Community Blueprint.
use technology and its relationship with the RBDES Policy, one must dig further into each Data Protection and Privacy Law. This legislation will reveal if states have suitable regulations to deal with cross-border data flows. The following are the data protection and privacy regulations of ASEAN member states:

Table 6. The Data Protection Law Availability between the ASEAN member states

<table>
<thead>
<tr>
<th>Country</th>
<th>Available Law</th>
<th>Remarks</th>
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| Indonesia          | Passed to the House of Representatives on September 20, 2022 | The most relevant regulations are:  
1. Law No. 11 of 2008 on Information and Electronic Transaction  
2. Government Regulation No. 82 of 2012 on the Implementation of Electronic Transaction System as amended by Government Regulation No.71 of 2019  
| Lao PDR            | Not Available                           | The most relevant law for the protection of personal information are:  
2. Law on Protection of Electronic Data (2017) |
| Cambodia           | Not Available                           | The most relevant law is the Union Parliament Law 5/2017 on the Protecting the Privacy and Security of Citizens.                      |
| Brunei Darussalam  | Not Available                           | An organization or association may transfer personal data overseas if: (a) it consents to the PDPA while the transferred personal data remains in its possession; and (b) the transferred personal data remains in its possession. |
| Singapore          | The Personal Data Protection Act 2012 (PDPA) | The Data Protection Authority does not impose any restrictions on the transfer of personal data overseas.                         |
| Myanmar            | Not Available                           | The most relevant law is the Union Parliament Law 5/2017 on the Protecting the Privacy and Security of Citizens.                      |
| Vietnam            | Not Available                           | The most relevant law is Law No. 86/2015/ QH13 (Law on Cyber Information Security/LCIS).                                             |
Based on the available legal basis between the ASEAN member states, the biometric data exchange based on the ICAO Doc 9303 and the ICAO TRIP Guide 2018, which consists of the Data recording phase, Verification phase, Validation Phase, and Repository Phase cannot be implemented equally among the ASEAN member states. The unequal data protection because of the availability of the data protection law makes biometric data exchange cannot be implemented effectively among ASEAN member states.

4. Product Analysis

Although the following set of legislation does not particularly address the issue of irregular migrants, in the context of the use of technology and RBDES, these regulations have become the benchmarks for assessing the preparedness of legal frameworks for personal data management. Personal data management involves the management of biometric data processing, which begins with the collecting stage and continues through data processing and data flow policies. The presence of these rules allows legal measures from each ASEAN member state to be arranged as a minimum legal standard for preserving and respecting human rights.

Based on the CIPP Evaluation Models in this study, the integrated data protection law is very beneficial to be adopted, for example from the European GDPR law. Meanwhile, there are several challenges to meeting the provisions and requirements pertaining to the processing of personal data of individuals in the European Economic Area (EEA). Despite these challenges, the overall benefits of the law are mostly positive. Here are a few of the good things GDPR has spawned since it is implemented: (1) Better security. Everyone’s data is now more secure. The law mandates that each organization has to have someone in charge of the data and audits become a regular process. Better security awareness and practices are gained by everyone. (2) Heightened confidence. The law extends faith to consumers that their information is indeed well protected. (3) Technology alignment. Complying with the law means upgrading and staying updated with the latest and greatest technologies. (4) Lower maintenance costs. The need to keep data inventory up to date reduces the cost of storing data.

DISCUSSION

Based on the CIPP analysis above, it can be deduced that there are gaps in data protection regulation from one state to the other. For example, Indonesia lacks adequate data protection legislation. The Ministry of Communication and Informatics adopted a Regulation on Personal Data Protection in Electronic Systems in 2016. It enforces the Information and Electronic Transactions (IET) Law and the Government Regulation on the Operation of Electronic Systems and Transactions. The rule includes specific instructions on the most effective way to collect, process, analyze, store, exhibit, report, transmit, disseminate, and/or furthermore grant access to, and delete individual information. The regulation also provides penalties for firms that fail to comply.

However, based on those regulations, if a data breach happens, there is no formal

accountability structure to which violations of data privacy can be submitted.\textsuperscript{50}

Furthermore, the IET law requires that complaints about criminal charges involving personal data can be forwarded to Ministry of Communication and Informatics officials. The difficulty with this regulation is that it is meant to control the Ministry internally. Consequently, the regulation may produce a technical problem in terms of bureaucracy because it is not interconnected with other governmental organizations. The policy issue on data protection faced by most ASEAN member states is not only at the national level but also at the regional level. In terms of internet privacy, ASEAN member states lag behind developed countries in protecting people’s online privacy. Singapore, Malaysia, Thailand, and the Philippines have committed to data protection and online privacy regulations among the ten ASEAN member countries. Since it is legal, Indonesia, Myanmar, and Vietnam are less concerned about information privacy rules.

These disparities may cause problems at the national level of each ASEAN member state. These difficulties occur because the work plan in the framework of the RBDES is based on data exchange. For example, if there is an issue with the transmission of (biometric) data, the legal principles used to settle the issue will be in question. This is a significant barrier to biometric data-exchange projects. To address such concerns, ASEAN approved the ASEAN Framework on Personal Data Protection in November 2016. This framework establishes a set of principles to govern the measure’s implementation at the national and regional levels to promote and improve personal data protection in the area. The issue with this paradigm is that the method is deemed inadequate.

The ASEAN ideals place a premium on agreement and sovereignty. ASEAN is always changing. Many experts, however, believe that their efforts to reform the organization and make its members more accountable to one another are bound to fail. As part of the ASEAN development plan, nations are striving to deal with the international system. As Greenleaf points out, their national laws take precedence, while international or regional conventions are pushed to the margins. As a result, ASEAN will continue to struggle with legislation harmonization.

The failure of such harmonization is exemplified by the ASEAN Charter. There were several elements involved, such as each country’s level of democracy. According to Jones, the majority of the nations in the area are neither democracies nor have doubtful democratic credentials. This resulted in selective adherence to international human rights standards. The ASEAN Charter indeed has goals and values. However, in reality, they contradict one another. If all of the nations in the area agree on the preservation of human rights, enforcing such a legal process would be simple.

Furthermore, the challenges in this field include human rights and privacy violations committed by member states, differences in operational capacity among the member states to relevant government agencies, and insufficient funding, which may impede the full implementation of related measures in ASEAN countries.\textsuperscript{51}

Under ‘the Bali Process,’ Indonesia and ASEAN member states start working together to improve border administration, take a victim-centered approach, and encourage secure travel. It demonstrates that ASEAN


member states have launched and developed several types of cooperative structures to address threats to regional security. Most ASEAN member nations have also embraced these structures for executing cooperation, including action plans for linked areas. Ideally, after implementing such technology, regional cooperation on biometric data exchange will aid in improving national security by allowing governments to agree on standard data-exchange norms. Exchange biometric data may boost national security and address the issue of irregular migration.

On the other hand, the problem of legal harmonization between national and international regulation is not yet fully developed. Maladministration may happen in this case. For example in Indonesia, biometric border control is not entirely compatible with the international provisions of ICAO Doc 9303 and ICAO TRIP Guide 2018. Ministerial Regulation No. 28 of 2018 on Immigration Stamps, as well as Circular Letter No. IMI.1-UM.01.01-5.7755 should be reviewed and updated to include four stages of electronic stamp checking and system synchronization with automated machines. Maladministration does not only happen in the legal area but also in the implementation process. For example, several immigration checkpoints still do not have clear Standard Operation Procedures (SOP) and standardized equipment in supporting the biometric data exchange implementation, which is found in Juanda International Airport, Surabaya, and Halim Perdana Kusuma, Jakarta Immigration checkpoint. Furthermore, the standardization also needs to be carried out by the relevant Immigration working unit, because the unstandardized process can potentially lead to maladministration.

This study discovered inadequacies in data protection regulation across ASEAN member nations. Singapore, Malaysia, Thailand, and the Philippines are among the ASEAN member countries with data protection and online privacy legislation. Meanwhile, Indonesia, Myanmar, and Vietnam are less concerned with data privacy rules because it is only an element of their respective electronic transactions. Such gaps must be sorted out through the legal systems of ASEAN member states, resulting in improved cooperation and collaboration. However, the expectations for data exchange are lofty. Furthermore, disagreements persist among participants of ‘the Bali Process’ regarding regional disapproval and exchange of humanitarian responsibilities.

In the context of Indonesia, more technological utilization benefits Indonesian border control. For example, the use of a biometric system can help the foreigner supervision team (TIMPORA) after the issuance of Presidential Regulation 21/2016 about the visa exemption for 169 countries which increases the potential number of transnational crimes.

However, the majority of studies on privacy rights and the use of surveillance technologies, particularly biometric data systems in Indonesia, reveal many privacy

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53 Firdaus, “Implementation of the Clearance Settlement System for International Arrival and Departures of Immigration Juanda Surabaya.”
violations. The statute protecting private rights is deemed inadequate. The OECD’s privacy framework is used to determine this inadequacy assessment. Previous research demonstrates the difficulty in developing a balanced system for the appropriate use of monitoring technology while protecting citizens’ rights. Data privacy continues to be a major issue in encouraging the use of technology for security and border control in ASEAN.

CONCLUSION

The potential use of biometric data exchange for the ASEAN countries is undeniable. Moreover, the number of transnational-related crimes is showing increasing trends in the ASEAN territories.

However, the analysis shows several challenges related to biometric data exchange in the ASEAN context. First, in the context analysis, the regulation and legal basis are strong enough to bind the ASEAN member states in performing the immigration biometric data exchange. Second, the Input analysis finds that the ASEAN is supported by the Regional Support Office (RSO) which was built after the Bali process and funded by the Government of Australia and New Zealand which took place on April 2, 2013. Regarding the Regional Biometric Data Exchange Solution (RBDES) as concluded in the input analysis, ASEAN has the resources needed to build the system. Third, the biometric data processing, which contains several steps of Data Recording Phase, Verification Phase, Validation Phase, And Repository Phase, cannot be implemented yet, because not every member states have a data protection law or the law that will regulate how data will be exchanged between the member states. Fourth, the Product analysis shows if the RBDES has not run yet, although it has many legal bases to support the system. However, when the biometric data exchange is conducted, there are a lot of positive impacts, such as decreasing the number of irregular migrants, simplification of the passport and visa issuance process, and minimizing the terrorist potential threats.

Lastly, it can be concluded that the immigration biometric data exchange between the ASEAN member states is still an “on paper” project, mostly because of the unequal data protection issues. The suggestion in this study is that ASEAN can imitate the European Union (EU) which uses GDPR as a single standard in the application of Data Protection regulations.

RECOMMENDATION

Based on the analysis above, ASEAN should learn from other areas, such as the European Union (EU) and its General Data Protection Regulation (GDPR). This regulation was made to defend EU citizens’ rights by establishing a thorough and comprehensive data protection regime. GDPR is a regulation on Data Privacy (data protection) that is applied to all companies in the world that store, process, or process the personal data of residents from 28 countries that are members of the EU (European Union). This regulation has been approved by European authorities since April 2016 and became effective worldwide on 25 May 2018. The main function of GDPR is to give users control over their data which collected by the government and other third parties organizations.

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