



Biological database of non-Thai citizens

Arunphon Nakhonphum

Forensic Science and Criminal Justice Program, Faculty of Science, Silpakorn University, Nakhon Prathom, Thailand

Abstract

Today many people are immigrating to Thailand unlawfully whether by means of settlement immigration or illegal smuggling. Some of them migrate to Thailand legally to travel and study but also aim for the benefit of long-term profession. With the globalization trends nowadays, many countries have to prepare to cope with non-tradition security problems, particularly transnational crime.

This research studied about biological database of non-Thai citizens. The objectives of this research were 1) to review the model of a biological database adopted in western countries 2) to review the utilization of biological data to maintain peace and order in western countries, and 3) to study and determine the model of a biological database for non-Thai citizens. Qualitative research method focusing on literature review was adopted in this study. The literature review analyzed the management guidelines of non-national groups' (stateless people, diaspora, immigrants, and refugees) adopted in western countries' contexts. The literature review aimed to determine management guidelines of non-Thai citizens who live in Thailand.

Nowadays, all countries are highly concerned with security and human rights issues. Circumscribed with the movement of people and data sharing under globalization trend, a mechanism or a database on migration management is urgently required, particularly in ASEAN countries, to detect and prevent transnational offences.

Keywords: database, nationality, biological data

Introduction

Stateless people in Thailand include people who have entered Thailand without legal status namely immigrants, marginalized groups such as ethnic or minority groups, stateless people, non-national individuals, non – national children or migrant workers. These non-legal status groups affect Thailand in various aspects as follows. Social impacts – problems related to national verification of a child born from non-legal status parents may increase the national budget burden and criminal problems in the future. National security and social security impacts. – Occurrence of conflicts among people with different races, languages, cultures, and beliefs may lead to self –autonomy with possibility of fighting and warfare which damage the nation. Economic impact and budget expenditure - The entry of non-legal status people will increase the number of public service users in the country. Thus, together with Thai citizen, this will increase the overall number of public service users, resulting in higher personnel and budget expenditure responsible by the government. Public Health impact - these people may be infectious diseases carrier which might eventually spread infectious diseases to the community. This circumstance inevitably affects the preparation of public health and administrative departments to prepare sufficient equipment, staff as well as clinics and hospitals.

Methodology

Document research was mainly adopted in this research. In order to analyze non-national groups' management patterns (non-national individuals, stateless people, diaspora, immigrants, and refugees) adopted in western countries, the researcher studied management patterns of each country including conventions on biological databases as well as

biological database of refugee and illegal migrants in European Union.

Data analysis was derived from literature review consisting of the concept of globalization, liberal democracy, nationality, non-national persons, stateless people and refugee. An analysis extended to theories of migration, citizenship, terrorism, forensic processes and personal verification, refugees and migrant's database, personal information sharing under Prüm Treaty as well as various studies conducted in Thailand and abroad. Aforementioned data analysis was used to analyze the model of biological databases of non-Thai nationals. The researcher determined research scope as followed.

1. Situation and forms of migration in Thailand
2. Global overview of migration situations and patterns
3. Biometric metric model in foreign countries
4. Utilization of biometrics data to maintain peace and order in western countries

Research Results

Situation and forms of migration in Thailand - According to the Thailand Migration Report 2019, it found that Thailand has been the path of migration in Southeast Asia for centuries. Many people have migrated and settled in Thailand long before an establishment of formal border transit control system. This situation has resulted in population diversity in Thailand comprising of Chinese, Malay, Karen, Shan, Mon, Khmer, Lao, India, and others. Further, an effort to build the nation in the late 19th century have led to the harmony of the people among different culture and languages.

During 1987 -1996, a large number of migrant workers entered Thailand due to the expansion of exports and foreign direct investment. Thus, economic growth attracted

migrants from neighbouring countries to work and settle in Thailand permanently later on. Even though migrants from neighbouring countries make up the largest migrant population in Thailand nowadays, the influx of migrants is still highly diverse and complex. Among migrant population, many of them are non-Thai national's namely stateless persons, refugees, asylum seekers, foreign professional, foreign investors, foreign spouses of Thai nationals, foreign student including retirees.

Internal migration and international migration to Thailand have played crucial roles since they were triggered by unequal development between rural and urban areas of Thailand. The lack of livelihood opportunities in rural areas resulted in higher number of non-Thai nationals labour from approximately 3.7 million people in 2014 to 4.9 million people in 2018. Most of migrant labour came from Cambodia, Lao People's Democratic Republic, Myanmar and Vietnam. This showed that migrant workers accounted for 10 per cent of Thailand's total labour population. The country's demographic data found that Thailand still demanded for migrant workers constantly. As a result, Thailand needs long-term planning to manage the migration of these migrant workers. (International Organization for Migration, 2019) ^[5]

Global overview of migration situations and patterns - As of 2019, the number of migrants worldwide was approximately 272 million people which accounted for 3.5% of the global population. Most of migrant populations were working-age male aged between 20-64 years. The overview of migrant statistic found that Indian nationals accounted for the highest number of migrant population with approximately 17.5 million, followed by Mexican nationals, about 11.8 million, and Chinese nationals, approximately 10.7 million. During the period of 2013-2017, the number of migrants slightly dropped in high-income countries, from 112.3 million to 111.2 million. However, middle-income countries saw an increase migrant numbers from 17.5 million to 30.5 million people. (International Organization for Migration, 2019) ^[5]

Biometric metric model in foreign countries - The researchers studied the model of refugee and migrant database adopted in European Union. The biometric model/database is operated under the Dublin Regulation to provide the E.U.'s fingerprint database called The Eurodac System or European Dactyloscopy. The database records fingerprints of asylum seekers and illegal migrants aged over 14 years old. However, it is advised to record fingerprints of asylum seekers and illegal migrants aged over 6 years old. These fingerprints are digitally transmitted to the central administration of European Commission for automatic verification. This process not only facilitates the management of information for refugees and illegal immigrants, it also benefits the verification of asylum seekers' application in European Union member states and illegal smuggling. If fingerprint is recorded in other member states, asylum seekers need to be deported to respective countries.

In term of information recorded in the Eurodac database under the Dublin III Agreement, it consists of fingerprint of an individual, state of origin, place, date of the international protection request (if applicable), gender as well as reference number. In conclusion, following Eurodac standard of identification of persons, fingerprint comparison is conducted without recording personal information (name,

place of birth, date of birth). Further, the database, will not show personal photograph and facial recognition system. The survey from THALES Group has ranked ten countries of origin for asylum seekers application in 2019 consisting of Syria, Afghanistan, Venezuela, Colombia, Iraq, Turkey, Pakistan, Georgia, Nigeria, Iran, and Albania respectively. Eurodac's data protection system under the Dublin Regulation, is under the control of the European Data Protection Supervisor (EDPS) and the Data Protection Officer (DPO), the European Union Agency for the Operational Management of Large-Scale I.T. Systems in the Area of Freedom and Security and Justice (EU-LISA). Herewith, the EDPS has set audition standards in which fingerprints storage of individual has different storage period. The fingerprints of asylum seekers will be stored in the system for ten years while the fingerprints of illegal migrants will be archived for 18 months. In 2019, fingerprinting data of asylum seekers accounted for 97%. For fingerprint data retrieving, it is ranked from the highest retrieving rate as follows - France, Germany, Spain, Greece, and Italy respectively. In term of fingerprinting retrieving among illegal migrants, the data was retrieved in Greece at the highest rate followed by Spain and Italy respectively. Moreover, fingerprints data retrieving rate of illegal residents residing in E.U. member countries is most highly retrieved in Germany followed by Greece, Belgium, Italy, and France respectively. Herewith, individuals whose fingerprint are retrieved can request to access his personal data. (EU-LISA, 2020) ^[2]

Also, the Prüm Treaty is a collaboration among seven E.U. member states: Belgium, Germany, Spain, France, Luxembourg, the Netherlands, and Austria. Its objective is to exchange information about combating terrorism, transnational crime and illegal immigration. The treaty is operated under the legal framework of the European Union. The contracting parties signed this Convention at Prüm, Germany on 27 May 2005. Later on, in 2008, the Council of the European Union enacted two agreements (Prüm Decisions) and revised the convention as part of the E.U. legal framework. The convention requires member states to provide their national DNA databases for criminal investigation and process the recorded information in compliance with regulations of each country. In term of data storage, the recorded DNA and fingerprints are required to provide reference data, which make up from an unencrypted DNA data. (COUNCIL OF THE EUROPEAN UNION, 2005) ^[1] The reference data must not contain any information that can identify individual ownership of DNA and should not be traceable. Besides, the contracting parties need to establish a national contact point which will monitor database retrieving and database comparison among contracting parties. The comparison process is performed by matching machines from computer systems in the contracting party. Through this, the countries requesting for data retrieving can search required information automatically. In term of formal requests through the national liaison, the Parties will send an e-mail requesting for information. Later on, officials of requesting country will search for information from the national liaison body. If the requested information (hit) is available, the staff will provide references data (specific number) in which the requesting agency can use information to retrieve data from the collected DNA or fingerprints. Most importantly, the queries must comply with internal laws, including national

regulations (Luif, 2007) ^[6]

Utilization of biometrics data to maintain peace and order in western countries. The literature review found that globalization has played critical role in international community. The fast-paced communication technology systems have resulted in tremendous changes in people's lives. To elaborate, communication has changed from frustrating system, whether by means of using communicative pigeon, mailing, telegraph, telephone, and the Internet, to wireless communication system nowadays. As a result, the territorial boundary is blurred since physical remoteness is not regarded as communication barrier. Further, business transaction can be operated in a multinational manner instantly. Thus, globalization is the starting point of changes on a global scale. With liberal democracy trends, globalization has resulted in a stream of protection of human rights, civil rights, civil liberties, and political freedom. From aforementioned situation, non-state persons are denied from human rights, citizenship rights, freedom to travel, educational opportunities, including rights or healthcare services. For refugees who leave country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, they will inevitably face with livelihood difficulties living abroad.

The aforementioned issues have brought the connection between scientific framework with political system in order to analyze Biological / Genetic Citizenship. The utilization of biological/genetic citizenship can be seen from fingerprints, including DNA in the juristic process. In term of nationality, citizenship and nation-state perspective, the idea of race and demography are linked to the beliefs of citizens and humans' biological existence as an individual (family members) and family's lineage as community members. For citizenship perspective, biological citizenship is transforming its scope to the new territories in compliance with local, national and transnational levels. (Rose and Novas, 2014) ^[8] Moreover, in order to maintain order and national security, forensic science has been applied for identity verification of individuals. It is also applicable for family reunification which refers to the process that family members, especially children, spouses, and dependent elders have the opportunity to live together as a family. Family reunification concept is respected to people's fundamental rights, as stated in Article 16 of the Universal Declaration of Human Rights, Article 8 of the European Convention on Human Rights, the European Social Charter (Revised in 1996), European Convention on the Legal Status of Migrant Workers 1977 and the Order of The E.U. Directive on the right to family reunification. Besides, the Parliamentary Assembly of the Council of Europe: PACE, supported family unification right by stating in recommendation 1686 and a position paper on family reunification in 2012.

DNA testing has been used primarily for Family Reunification since the use of personal document for interpersonal relationships verification may be insufficient or, in some cases, unreliable. Those unreliable cases are commonly found in an application from African, Asian, and Southeast Asian countries since false personal document verification are prevalent in aforementioned countries. Unreliable cases also include some countries with political asylums, such as Somalia, Eritrea, and Myanmar. Therefore, it is necessary to use DNA to verify a personal relationship

accurately (Torsten Heinemann and Thomas Lemke, 2014) ^[3]. Several European countries and the United States have established policies on family reunification as follows.

In Germany, there was a study on the investigation of kinship relations by adopting a scientific process in order to prove personal relationship. During 1990, many countries have initiated DNA analysis to solve these problems. If the applicant's information on family relationship is unclear, a kinship test will be conducted to assist immigration decision-making. German's immigration process is conducted in compliance with the Resident Act, which is part of the Immigration Act. The Resident Act is an amendment from the Aliens Act 2005 which adopted related details from The Council Directive 2003/86 / E.C. as domestic law. Concerning family reunification, Chapter 6, Sections 27-36 of the Resident Act specifies the right to family reunification. It intends to protect the family with fundamental laws by requiring both German-national spouses and non-German national spouses, who are temporarily or legally live in Germany, to be able to support applicants for family reunification rights. However, the sponsor must be married legally with sufficient household income. For refugees and recognized asylum seekers, a preparation on income and housing is not required. Herewith, within the period of 3 months after the Federal Office for Migration and Refugees has accepted application, family members requesting family reunification in Germany must prove their personal status with official documents.

Israel is regarded as the homeland of Jewish people, which upholds the principle that all Jews hold Israel's citizenship. According to the Citizenship Law in 1970, the meaning of citizenship was revised as follows. By law, "Jews" refers to a person born from a Jewish mother. Alternatively, an individual has changed to Judaism whilst he is not a member of another religion. This also extends to the descendants of the Jews—Jewish spouse and spouse of Jewish offspring. Nonetheless, the scope excludes Jews who converted to other religions. Besides, Israel has two justice systems: civil judicial and religious lawsuits. Israeli laws cover the right to private life, such as marriage and divorce. These legal matters are also considered as parts of religious principles which only Jews must adhere to religious law. Therefore, as stated in Israel's Law of Return, individuals entering the country or wishing to become citizens of Israel must undergo a DNA testing process, especially those who are from Russia. This rule stipulates that all persons claiming to be Jewish must be proven to be genuinely Jewish. Consequently, the Minister of the Interior of Israel has determined that the DNA testing of a person who wishes to become Israeli citizen is performed to examine personal relationship to claim citizenship only (McGonigle and Herman, 17 June 2015) ^[7]

Finland is among the first countries to initiate DNA testing in Family Reunification. It is one of the first countries to compile legal testing regulations and establish immigration management standards. Its operation is implemented under Aliens Act 2000 (SDK 301/2004). In 2006, an application called Finnish System was developed to centralize immigration management, issuing a residence permit, asylum request, and ordering a DNA. This act is also the source of introducing the immigration/family reunification system. The Aliens Act (SDK 301/2004) indicates that applicants with insufficient documentation and evidence are required to perform a DNA test without charges exclude

those cases of false information declaration. (Wahlbeck, 2008) [9].

Thailand adopts genetic testing (or DNA testing) as a scientific process to prove the relationship between parent, child, and kinship. The genetic material testing procedure is operated under the Thai Civil Registration Act. The guideline states that Thai nationals whose names are not registered in housing certification can request for date of birth and name registration to the district registrar or the local registrar of the area where the applicant domicile. In the process, individuals must provide related evidences on personal verification. Then, if reliable, the registrar will report date of birth or name registration. In case of insufficient or unreliable evidence, yet kinship witness is referred, the process Thai nationality and genetic material verification (DNA) is conducted to confirm the kinship relationship. If the kinship relationship with referring relative is verified, the registrar will use the examination result to support date of birth announcement and name registration in civil registration document along with assigning the national identity number to the status of Thai nationals.

Conclusion

From the literature review, within the context of social science theories, it found that collecting biological information of individuals are implemented under laws, conventions, and international agreements. Since biological information represents individual identity, a database for biological information retrieving is required. According to the literature review, many European countries have applied scientific processes to prove their identity to benefit the management of refugees and illegal immigrants, prevent transnational crimes and terrorism. There are two types of databases for collecting biological information of individuals as follows.

Database for refugees and illegal immigrants – It is implemented under the Dublin Regulation, operated by a system known as Eurodac which stores fingerprints of refugee, asylum seekers and illegal migrants aged over 14 years old (advised to record fingerprints of those over 6 years old). The information stored in the Eurodac database is subject to the Dublin Agreement Third (Dublin III): Ten fingerprints, information from country of origin, place and date of international protection request (if applicable), gender and reference number. Eurodac's standard identification process compares fingerprints to verify on stored database automatically. The authorities can determine an application of asylum seekers to E.U. member states and illegal smuggling through other E.U. member states. If fingerprints are recorded in other member states, asylum seekers need to be deported to countries of origin. The system does not store personal biographies such as name, place of birth, and date of birth. It does not reveal personal images and facial recognition system to ensure the verification of personal history is implemented by authorized authority only.

National DNA Database Under the PrÜm Treaty aims to build cooperation among seven member states - Belgium, Germany, Spain, France, Luxembourg, the Netherlands, and Austria. Its objectives aim to develop information sharing on anti-terrorism, transnational crime and illegal migration. The Convention sets out the requirement that member states provide their national DNA databases for the benefit of

criminal investigations in compliance to regulations of each country. Mentioning stored DNA data, as well as fingerprint data, the contracting parties need to provide reference data generated from an unencrypted part of the DNA. The reference data must not contain personal information of an individual and must not be traceable. Moreover, the contracting parties need to set up national contact point which monitors an investigation and database comparison of contracting parties through fingerprint matching machine. Through this, the countries requesting for data retrieving can search required information automatically. In term of formal requests through the national liaison, the Parties will send an e-mail requesting for information. Later on, officials of requesting country will search for information from the national liaison body. If the requested information (hit) is available, the staff will provide references data (specific number) in which the requesting agency can use information to retrieve data from the collected DNA or fingerprints. Most importantly, the queries must comply with internal laws, including national regulations.

For the application of forensic process to maintain peace and order, the researchers studied the family reunification process. The DNA testing to prove interpersonal relationships is adopted in four countries: Germany, Israel, Finland and Thailand. According to the study, an application of DNA testing is used to monitor personal relationship for the benefit of family reunification. For Thailand, DNA testing application is used to verify interpersonal relationships between individuals to determine date of birth, provide names registration in the registration documents accurately, and issue identification numbers in Thai national status. DNA testing process is conducted legally in aforementioned countries. For example, DNA testing in Germany is operated under the Resident Act of, Citizenship Law in Israel, Aliens Act 2000 of Finland (SDK 301/2004) and Registration Act B.E. 2534 (1991) and amendment in Thailand.

Table 1: Establishment of personal biological database.

Database	Applicable Regulations	Stored Data
1.Database for refugees and illegal immigrants (Eurodac)	(Dublin Regulation III)	Fingerprints of persons 14 years and older
2. National DNA analysis files	PrÜm Treaty	Store personal DNA

Table 2: Summary of legal supporting the Family Reunification process

Countries	Applying law
1. Germany	Resident Act
2. Israel	Citizenship Law
3.Finland	Aliens Act 2000 (SDK 301/2004)
4.Thailand	The Registration Act B.E. 2534 (1991) and as amended

From the aforementioned conclusions, it is explicit that all countries focus on security and human rights issues. Together with people movement, including information sharing under globalization trends, mechanisms or databases on the management of people movement are required. These mechanisms and databases are used to organize people crossing border, especially in ASEAN countries, to detect and prevent offences of transnational crimes effectively.

Reference

1. Council of the European Union, 2005. <https://ec.europa.eu/>. Retrieved from <https://ec.europa.eu/anti-fraud/sites/antifraud/files/docs/body/prumtr.pdf>
2. eu-Lisa. *Eurodac – 2019 Annual Report*. European Union Agency for the Operational Management of Large-Scale It Systems in the Area of, 2020.
3. Heinemann, Torsten and Lemke, Thomas. *The Biology of Citizenship: Immigration, DNA Testing, and the State*, 2014. Retrieved from viewpointmag.com: <http://viewpointmag.com/>
4. <https://www.thalesgroup.com>, 2020. Know Your Customer in banking. Retrieved from <https://www.thalesgroup.com/en/markets/digital-identity-and-security/banking-payment/issuance/id-verification/know-your-customer>
5. International Organization for Migration. *World migration report 2020*. Switzerland, 2019.
6. Luif, Paul. *The Treaty of Prüm: A Replay of Schengen?* European Union Studies Association, Canada, 2007.
7. McGonigle, Ian V. and Herman, Lauren W. Genetic citizenship: DNA testing and the Israeli Law of Return. *Journal of Law and the Biosciences*, 2015:469-478.
8. Rose, Nikolas and Novas, Carlos. *Biological citizenship*. London, 2014.
9. Wahlbeck, Östen. *Citizenship and immigration in Finland: The Nationality Act 2003 in context*. *Canadian Diversity*, 2008:47-50.
10. Chairat Charoensin-o-larn. *Nation-State and the New World (Dis) Order*. Vibhasa publisher, 2010.
11. The Bureau of Registration Administration. *Guide to Reading Genetic Material Test Results*, 2014.