THE EUROPEAN UNION'S AVIATION SECURITY POLICY EVOLUTION AND ITS IMPLICATIONS TO INDONESIA

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Abstract

Advances in aviation transportation have increased threats to security, prompting the European Union (EU) to take decisive actions. This research examines the evolution of the EU's aviation security laws and their implications for Indonesia. Using a normative legal research approach, the study finds that EU aviation security measures have been significantly influenced by external and internal factors. Key developments include the integration of aviation security post-9/11 with Regulation (EC) No. 2320/2002, its replacement by Regulation (EC) No. 300/2008, the near-ban on liquids after the 2006 Trans-Atlantis liquid bomb plot, the installation of security scanners following the 2009 underwear bomb plot, and the ACC3 system post-2010 Yemen incident that revoked Regulation (UE) No. 185/2010. Cyber threats are also a growing concern. This research is important as these EU measures impact Indonesia's national aviation security standards.

Keywords:

aviation security; european union; indonesian aviation

Abstrak

Kemajuan transportasi penerbangan di satu sisi juga menyebabkan meningkatnya ancaman keamanan, sehingga mendorong Uni Eropa (EU) untuk mengambil langkah-langkah perlindungan. Penelitian ini menganalisis evolusi hukum keamanan penerbangan EU dan implikasinya bagi Indonesia. Dengan menggunakan pendekatan penelitian yuridis-normatif, berdasarkan kajian ini ditemukan bahwa langkah-langkah keamanan penerbangan EU besar dipengaruhi berbagai faktor internal dan eksternal. Beberapa perkembangan utama termasuk integrasi keamanan penerbangan pasca-9/11 dengan EC No. 2320/2002, yang kemudian diubah dengan EC No. 300/2008, kebijakan larangan atas hampir seluruh pembawaan cairan setelah plot bom cairan Trans-Atlantis, instalasi alat pemeriksa keamanan setelah plot bom dengan pakaian dalam pada 2009, dan sistem ACC3 setelah insiden Yemen pada 2010 yang membatalkan ketentuan UE No. 185/2010. Ancaman dunia maya pun ternyata menjadi perhatian. Penelitian ini penting karena langkah-langkah EU ternyata berdampak pula pada standar keamanan penerbangan nasional Indonesia.

Kata Kunci:

keamanan penerbangan; penerbangan indonesia; uni eropa

Introduction

The advances in air transportation have made it one of the safest and most promising transports for people and goods, making the demand for air transportation high. In light of COVID-19, in August 2022, the total of European Union (EU) commercial flights was 596.930, 14% lower than in 2019, numbered 695.912 before the pandemic respectively happened.¹ Aviation allowed globalization to take place, mixing cultures and the flow of people and goods would be impossible without it.² Throughout the years, various efforts, policies, and regulations governing air traffic rules often formed internationally. Regulations regarding aviation were made to achieve high social security and welfare. However, threats to aviation security still exist. The aviation world has been continuously challenged by attacks and threats, becoming one of the world's most critical problems. The matter's importance has been raised at various levels through legislation and treaties. Commercial aviation has been one of the main targets of terrorism since 1960. The fight against terrorism was only conducted at the national level then.

International aviation security law was introduced in 1974 through the Chicago Convention Annex 17. The Chicago Convention, originally agreed upon in 1944, did not regulate aviation security. Over the years, international aviation organizations like the International Civil Organisation (ICAO), International Air Transport Association (IATA), and European Civil Aviation Conference (ECAC), were created to ensure air transport development. As it continues to develop, the threats to aviation security keep improving. Consequently, threats to aviation have kept on evolving throughout the years. Even though the security threats and challenges may look different before, during, and after the COVID-19 pandemic, the conventional threats remain, and the awareness of the importance the security assurance should not be compromised.³ It is certainly a challenge for the international world, especially the governments and other legislative authorities, to keep improving their guard towards aviation security.

One of the most coordinated and unified approaches towards aviation security amongst countries globally is recognized to occur within the EU.⁴ The EU was created based on the Maastricht Treaty and later integrated through the Lisbon

¹ Victoria Masterson, How Commercial Flights in Europe are Edging Closer to Pre-Pandemic Levels, <u>https://www.weforum.org/agenda/2022/09/europe-eu-flights-on-the-rise/</u>, accessed on 2 December, 2022.

² Elmar M. Giemulla & Ludwig Weber, International and EU aviation law: selected issues (Kluwer Law International BV, United States of America, 2011) p.3.

³ What you Need to Know About Aviation Security?. <u>https://www.iata.org/en/publications/newsletters/iata-knowledge-hub/what-you-need-to-know-about-aviation-security/</u>, accessed on 12 December, 2022.

⁴ Sarah Jane Fox, Past Attacks, Future Risks: Where Are We 20-years After 9/11, 14 Journal of Strategic Security. Pp 112-157, 2021.

Treaty. Before that, the EU was known and established as the European Coal and Steel Community and European Economic. Later shortened to the European Community in 1992 before it became the European Union.

Aviation security was first introduced in 2002 as part of the EU transport policies, the former First Pillar of the Union before abolished by the Lisbon Treaty, with its supranational setting of legally binding tools and enforcement mechanisms.⁵ Since then, the European Commission (EC) has established common regulations in the civil aviation security field purposely to protect goods and people from unlawful acts.⁶ Until today, the EU has one primary regulation regulating aviation security, Regulation (EC) No. 300/2008. The initial framework for establishing common standards in civil aviation security initially was Regulation (EC) No. 2320/2002 before it was amended with Regulation (EC) 849/2004 and was later replaced with Regulation (EC) No. 300/2008. Before Regulation (EC) No. 2320/2002, aviation security was an individual state matter and ECAC, not the EU. There were no regulations regarding aviation security in the EU at that time. Every Member State decides how to regulate the matters with their sovereignty and is not directly binding to ECAC's decisions. Changes in the EU's attitude towards aviation, especially in the security field, do not happen for anything without a clear reason. The changes were caused by several factors which became the background for the EU's involvement in enforcing aviation security.

This research aims to analyze and identify the implication of the EU's aviation security law development throughout the years towards Indonesia. Before that, this research will focus on identifying what kind of changes the EU aviation security law and their implications for the aviation world. The background behind the regulations will be conducted with normative legal research methods, focusing on the applicable laws and regulations throughout the years. Behind Regulation (EC) No. 2820/2002, including the background behind the EU attitude change after many years of putting the matter's responsibility towards the Member States countries and government, will first be discussed. Later, we will also discuss the evolution of

⁵ Xianna Barros, EU Counterterrorism and Aviation Security: Supranational Rules But Intergovernmental Politics?, 17 (Special Issues) European Foreign Affairs Review. p. 54, 2012.

⁶ European Commission, Aviation Security, <u>https://transport.ec.europa.eu/transport-modes/air/aviation-security_en</u>, accessed on December 14, 2022.

the aviation security regulations in the EU throughout the years until Regulation (EC) No. 300/2008. In the last part, we will analyze the benefits or implications for Indonesia's interests in terms of aviation security, especially associated with cyber aviation threats.

Analysis

The Beginning of the EU's Aviation Security

Before 11 September 2001, the EU had no legislative competence in the field of aviation security, and it was the responsibility and sovereignty of each EU Member State.⁷ The EU's character in aviation security was limited to being an observer at ECAC. Air transport services were initially introduced as part of the single market. Based on Article 26 Treaty on the Functioning of the EU (TFEU), guarantees the creation of an Internal Market, where the Member States can fly in the EU area to establish or ensure the function of the internal market, in accordance with the relevant provisions of the Treaties.

On the other hand, the urgency for the EU to regulate aviation security was not raised until the terrorist attacks for using commercial aircraft as weapons of mass destruction above the United States' sovereignty. In response to the 9/11 tragedy, the European Council held an Extraordinary Meeting on 21 September 2001 and adopted the Conclusions and Action Plan on the Fight Against Terrorism.⁸ After the 9/11 tragedy, EU Member States decided that the absence of the EU in aviation security which left the Member States' sovereignty to regulate aviation security did not produce a sufficient level of protection and security, thus the EU needed to be involved.⁹ The 9/11 tragedy that happened on 11 September 2001 is believed to have been masterminded by Osama bin Laden, the leader of an extreme Muslim organization, Al-Qaeda, where 19 militants, who were allegedly part of Al-Qaeda, hijacked 4 commercial planes and carried out suicide attacks at several places in the United States.¹⁰ These attacks brought down the World Trade Center

⁷ European Commission, Aviation Security Policy, <u>https://transport.ec.europa.eu/transport-modes/air/aviation-security-policy en</u>, accessed on 2 December, 2022.

⁸ Conclusion and Plan of Action of the Extraordinary European Council Meeting On 21 September 2001, https://www.consilium.europa.eu/media/20972/140en.pdf, accessed on 3 January 2023.

⁹ Xianna Barros, supra no. 5.

Editor, History.com. "September 11 Attacks", <u>https://www.history.com/topics/21st-century/9-11-attacks</u>, accessed on 24 December 2022.

(WTC) building, known as the Twin Towers, the Pentagon Building in Washington DC, and crashed into a field in Shanksville, Pennsylvania. The 9/11 tragedy is one of the worst terrorist attacks in aviation history and has shaken the international world. This attack killed nearly 3,000 (three thousand) people and exposed the vulnerabilities of the threats by the terrorists by using airplanes as a mass destruction weapon. The event has raised awareness to heighten aviation security across the world.

Attention was also increased within the EU that a common approach is needed, and consideration should be given to the most effective method following the terrorist acts that significantly impact the transport field.¹¹ As a result, Regulation (EC) No. 2320/2002 was adopted to set rules and basic standards for aviation security after the terrorist attacks. Regulation (EC) No. 2320/2002 was made to establish common rules in aviation security and the EU's first legislative effort in the aviation security area. The essence of Regulation (EC) No. 2320/2002 was to protect civil aviation from unlawful acts and to prevent another 9/11 attack from taking place in Europe.¹² The architecture of European aviation security is essentially based on Regulation (EC) No. 2320/2002, which mainly goes back to ECAC Document No. 30 Part II.¹³ Document No. 30, also known as The Manual of ECAC Recommendation and Resolutions relating to facilitation and Security Matters, is a summary of recommendations and resolutions. The regulation was also built upon the ICAO Annex 17 and Annex 9. Annex 17 to the ICAO Convention regarding Aviation Security Safeguarding International Civil Aviation against Acts of Unlawful Interference contains standards and recommended practices regarding the security of international air transport and is regularly evaluated and amended to address the evolving threat which becomes the guidelines for the Aviation Security regulations across the world. Meanwhile, Annex 9 is about Facilitation.

The common standard on aviation security (Article 4) is measured with the ECAC Document No 30. The document includes security provisions at the national and airport level, including measures for airport security, aircraft, passengers, cabin

Regulation (EC) No. 300/2008 of the European Parliament and the Council, Whereas (3), March 11, 2008, OJ No. L 97 of 9 Apr. 2008.

¹² Christian Kaunert, Briony Callander & Sarah Léonard, The collective securitization of aviation in the European Union through association with terrorism, Global Affairs, 7:5, Pp. 678, 2021.

¹³ Elmar Maria Giemulla, supra no. 3, p.357.

and hold baggage, cargo and mail, inflight, and airport supplies.¹⁴ ECAC Document No. 30 is a classified document containing sensitive information regarding security measures and is not open to the general public. The common basic standards based on the Regulation (EC) No. 2320/2002 itself can be seen in the Annex, which are "airport security, aircraft security, passengers and cabin baggage, hold baggage, cargo, couriers and express parcels, mail, air carrier mail and materials, air carrier catering stores and supplies, air carrier cleaning, store, general aviation, staff recruitment and training, guidelines for equipment". In addition, based on Article 5, adopting a National Civil Aviation Security Programme (NCASP) and its appropriate authority responsible for coordinating and monitoring the implementation was the responsibility of the Member States. NCASP is also regulated in the ICAO Annex 17, Standard 3.1.1 to purposely protect civil aviation in the State with regulations, procedures, and other necessary safeguards.

The main concern regarding Regulation (EC) No. 2320/2002 was the regulation itself full of problems after being drafted quickly because ECAC Document No. 30, in the first place, was a non-binding recommendation and did not work effectively; hence the implementation of the regulation was problematic.¹⁵ One of the problems was restricted liquids carried by passengers at the EU Member States' national airports and the development and improvement of technology. Therefore, an implementing regulation was passed, the Commission Regulation (EC) No. 622/2003, to lay down the necessities needed for implementing and adopting the common standard regarding aviation security. Article 1 of Commission Regulation (EC) No. 622/2003 stated that the Annex of the regulation is set out outside the regulation, is secret, will not be published, and would be only available to the authorized person.

Until August 2008, Commission Regulation (EC) No. 622/2003 had been amended 14 times. Many amendments were kept confidential and left European citizens in the dark. The same with Commission Regulation (EC) No. 781/2005, where the regulation dealt with the specifications of x-ray equipment for baggage

ECAC, Security, <u>https://www.ecac-ceac.org/documents/10202/32924/ECAC+Premises-GoogleMap.png/14a32650-6c1d-41ec-9d61-90176c67b7cf</u>, accessed on 3 January 2023

¹⁵ Christian Kaunert, Briony Callander & Sarah Léonard, supra no. 13, p. 680.

screening but did not disclose it since the Annex was made confidential.¹⁶ The secrecy became the stumbling block, and the two regulations were later implicitly repealed by the Commission Regulation (EC) No. 300/2008.

Development Throughout the Years

Ever since the first framework came into force, many new regulations and amendments have taken place to continue adapting to the existing threats. After six years of becoming the initial framework on aviation security at the EU level, Regulation (EC) No. 2320/2002, with its numerous implementing and supplementing regulations, evaluated that harmonization and upgrading are needed. The regulations were later repealed by the new framework, Regulation (EC) No. 300/2008. This section will discuss the changes in Regulation (EC) No. 300/2008.

While on the other side, there was a major revolution and changes within the EU itself with the appearance of the Lisbon Treaty that came into force in 2009. The Lisbon Treaty forms the constitutional framework or basis for the EU with two treaties. This creates major changes within the EU, especially in policy-making and decision-making. This section will analyze the Lisbon Treaty to determine whether it impacts aviation security.

1) Harmonization Through Regulation (EC) No. 300/2008

Regulation (EC) No. 2320/2002 and its implementing regulations were repealed by Regulation (EC) No. 300/2008 in March 2008. The Council and the European Parliament mean to simplify, harmonize, and elevate aviation security levels by adopting Regulation (EC) No. 300/2008. Unlike the previous regulation, Regulation (EC) No. 22002, which is secretive towards the citizens and public in general, Regulation (EC) No. 300/2008 is much more transparent.

Regulation (EC) No. 300/2008 introduced measures to improve aviation security and simplify the older procedures. Some of the changes include:¹⁷

¹⁶ Thomas Ross, The EU Regulatory Framework Applicable to Civil Aviation Security, <u>https://airportfocusinternational.com/eu-aviation-security-drowning-in-red-tape-extended-version/</u>, accessed on 4 January 2023.

¹⁷ European Commission, Transport: EU updates aviation security rules to simplify and improve procedures, https://ec.europa.eu/commission/presscorner/detail/en/IP_10_479, accessed on 7 January 2023.

"1. Eliminating duplication of security controls. For instance, by cutting back on costly double inspections in strictly controlled EU airport areas where the entry is already thoroughly screened. These significant changes will bring benefits both to airlines and airports.

2. Procedures/Process simplification. For instance, establishing a single set of requirements for the documents you need to access the airports. The updated regulations specify the kind or forms of identification and authorization required to access different restricted areas. This system will clarify and make it simpler for the authorities to operate the system.

3. Procedures harmonization by establishing EU-wide protocols for identifying carriers of air cargo consignments. This will eventually be recognized and used by the carriers throughout the EU Member States. The harmonization will reduce the restrictions for carriers and the need for expensive cargo rescreening.

4. Introduction of minimum common standards regarding security training for staff that implement the security measures/controls."

Regulation (EC) No. 300/2008 recognizes and aims to elevate the 'one-stop security' goal for all flights around the EU and the third countries.¹⁸ The establishment of onestop security arrangements happened between the EU and non-EU countries.¹⁹ There are in total 8 (eight) countries arrangements for one-stop security; US, Canada, Montenegro, Faroe Islands (Vagar Airport), Greenland (Kangerlussuag Airport), Guernsey, Jersey, and Isle of Man. The one-stop security arrangement allows passengers arriving at EU airports to transfer to another country no longer need to be re-screened.²⁰ Therefore, it will make the connection times faster, cost lower, and create greater convenience for travelers. This regulation also requires the Member States to set up and ensure the implementation of the "National Civil Aviation Security Programme" (Article 10) and "National Quality Control Programme" (Article 11). In addition, there are also "Airport Security Programme" (Article 12) and "Air Carrier Security Program" (Article 13) that must be defined and implemented by the operators. As stated in Article 3, "operator means a person, organization, or enterprise engaged or offering services to engage in an air transport operation."

 ¹⁸ Commission Regulation (EC) No. 1546/2006 amending Regulation (EC) No. 622/2003, Laying Down Measures for the Implementation of the Common Basic Standards on Aviation Security, 4 October 2006, Whereas (20) and Article (20).
¹⁹ Supra no 6.

²⁰ Commission Regulation (EC) No. 1546/2006 amending Regulation (EC) No. 622/2003, Laying Down Measures for the Implementation of the Common Basic Standards on Aviation Security, 4 October 2006, Whereas (21).

According to Article 4, the basic aviation security common standards regulated in the Annex involve "airport security, demarcated areas of airports, aircraft security, passengers, cabin and hold baggage, cargo, and mail, air carrier mail, and air carrier materials, airport, and in-flight supplies, in-flight security measures, staff recruitment, and training, also security equipment." All passengers, staff, baggage, cargo, mail, and in-flight supplies must be screened before boarding and being loaded, except if they have been subjected to appropriate security controls.²¹ The common rules in aviation security also apply to Norway, Iceland, Liechtenstein, and Switzerland.²² Even though Norway, Iceland, and Liechtenstein, the three countries belong to the European Economic Area (EEC), making they in the same Internal Market as the EU Member States. Also, through bilateral treaties, Switzerland is part of the Internal Market. As part of the Internal Market, they must abide by the EU's rules.²³ Since air transport services were originally introduced as part of the internal market, the common rules in aviation security will also apply for the four countries to abide by.

Regulation (EC) No. 300/2008 acts as the latest framework regulation of aviation security until now. It has 4 (four) supplementing rules and 3 (three) implementing regulations:

1. Supplementing Regulations

a. Commission Regulation (EC) No. 272/2009 of 2 April 2009 supplementing the common basic standards on civil aviation security laid down in the Annex to Regulation (EC) 300/2008 of the European Parliament and of the Council.

This regulation has been amended 4 (four) times; Commission Regulation (EU) No. 297/2010, Commission Regulation (EU) No. 720/2011, Commission Regulation (EU) No. 1141/2011, and Commission Regulation (EU) No. 245/2013.

²¹ European Parliament, Air Transport: Civil Aviation Security, <u>https://www.europarl.europa.eu/factsheets/en/sheet/132/air-transport-civil-aviation-security</u>, accessed on 8 January 2023.

²² Supra no 6.

²³ Daniel K., Amelia H., Richard C. & John P., The European Union How Does It Work? (Oxford University Press, United Kingdom, 2022), p.170.

b. Commission Regulation (EU) No. 1254/2009 of 18 December 2009 setting criteria to allow Member States to derogate from the common basic standards on civil aviation security and to adopt alternative security measures.

Amended with Commission Regulation (EU) No. 2016/2096.

c. Commission Regulation (EU) No. 18/2010 of 8 January 2010 amending Regulation (EC) No. 300/2008 of the European Parliament and of the Council as far as specifications for national quality control programs in the field of civil aviation security are concerned.

2. Implementing Regulations

a. Commission Regulation (EU) No. 72/2010 of 26 January 2010 laying down procedures for conducting Commission inspections in the field of aviation security.

b. Commission Implementing Regulation (EU) No. 2015/1998 of 5 November 2015 laying down detailed measures for the implementation of the common basic standards on aviation security.

Amended with Commission Implementing Regulation (EU) 2015/2426, Commission Implementing Regulation (EU) 2017/815, Commission Implementing Regulation (EU) 2019/103, Commission Implementing Regulation (EU) 2019/1583.

Before the Commission Implementing Regulation (EU) 2015/1998 entered into force, there was Commission Regulation (EU) No. 185/2010 which was amended by Commission Implementing Regulation (EU) No. 859/2011 and Commission Implementing Regulation (EU) No. 1082/2012.

2) The Entry to Force of the Lisbon Treaty

Initially, the EU was established through the Maastricht Treaty in 1992. The Maastricht Treaty introduced the three pillars of the EU that later were abolished with the Lisbon Treaty. The Lisbon Treaty came into force in 2009 seen as a significant milestone in the integration process and history, and also left the EU with two main treaties; the Treaty on the European Union (TEU) and the TFEU. TEU contains the basic principles, aims, and instruments of the EU with its provision on

foreign and security policy, while TFEU, on the other hand, contains detailed policy provisions and procedures.²⁴ In the pre-Lisbon Treaty era, The Lisbon Treaty also put security, freedom, and peace high on the fundamental EU's goals.

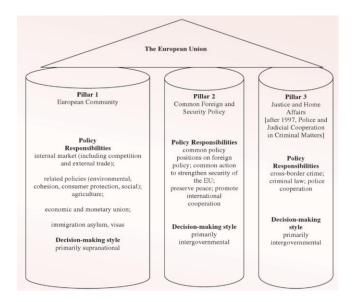


Figure 1: The European Union's Three Pillars Before the Lisbon Treaty²⁵

Aviation Security has always been a supranational decision rule since it belongs to the former First Pillar because air transport services were initially introduced as part of the single market. Hence, in the legislative policy area, regulations, or directives, the Commission holds a right to initiate, and co-decision is applied, while the European Parliament and the Council of Ministers are colegislators.²⁶ If additional regulations are needed, the implementing regulations will be adopted through the comitology procedure.²⁷ The Lisbon Treaty did not bring significant changes to the supranational area of air transport, but the comitology procedure was reformed.²⁸

Before 2006, according to Article 9(1) Regulation No 2320/2002, before adopting the proposed acts, the EC had to consult and receive Qualified Majority Voting (QMV) in a Comitology Committee of national experts on aviation security.

²⁴ Supra no 24, p. 10.

 ²⁵ Elizabeth B., John P. & Richard C. (Eds.), The European Union: how does it work? 5 (Oxford University Press, 2012)
²⁶ Xianna Baros sugra no 5 n 57

 ²⁶ Xianna Baros, supra no 5, p. 57.
²⁷ Filmar Maria Ciomulta and Ludwig V

²⁷ Elmar Maria Giemulla and Ludwig Weber, supra no 14, p. 360.

²⁸ Xianna Baros, supra no 5, p. 57.

After 2006, every proposal of the proposed acts received QMV, they also need approval from the Council of Ministers and European Parliament (EP). The comitology then was reformed based on the Council Decision 2006/512/EC. This often refers to the regulatory procedure with scrutiny as it gives the EP the right to veto, which is to accept or reject the proposed acts but cannot amend them.²⁹ Before the Lisbon Treaty entered into force, comitology was the method used to adopt executive law-making acts, implementing acts, and delegated acts³⁰. There was no differentiated the delegated and implementing acts. The Lisbon Treaty differentiated the delegated and implementing acts with TFEU, and the delegated acts are no longer adopted with the comitology procedure. Pursuant to Article 291 TFEU, the Commission has the power when implementing regulations that are legally binding acts are needed, and the Member States could adopt measures necessary to implement it.

Aside from the Treaty of Rome changes by changing its name to TFEU and changing the word 'Community' to 'Union', along with the reform of the comitology procedure, the Lisbon Treaty did not directly change or affect aviation security in content matters. The changes that the Lisbon Treaty makes only affect the policymaking procedure of the aviation security regulations.

EU's Aviation Security Changing Factors

Throughout the years, many implementing and supplementing regulations have been adopted and amended to ensure that aviation security is guaranteed. The driving factors were no other than terrorist attacks that took place all across the EU Member States' border. In this section, the changing factors of the aviation security regulations cover the Liquid Bomb Plot, Underwear Bomb Plot, and Yemen Air Cargo Bomb Plot.

²⁹ Micaela Del Monte and Rafal Mańko, Understanding Delegated and Implementing Acts, European Parliamentary Research Service, p. 3, 2021.

³⁰ Ibid.

1) Trans-Atlantic Liquid Bomb Plot 2006 in London Heathrow Airport

A terrorist plot to detonate liquid explosives inside airplanes traveling from London, United Kingdom, disguised as drinks, was foiled because a British undercover agent infiltrated the plan and gave tips to the authorities on the plan. The foiled liquid bomb plot in 2006 once again brought chaos, and they were almost entirely banned from being carried on planes. On 10 August 2006, British officials arrested 24 men, all British-born Muslims, who allegedly planned to blow up airplanes flying from Britain to the United States by carrying liquids and combining them into explosive cocktails to commit mass murder.³¹ Among those who were arrested, were a Muslim charity worker and an airport employee with an all-area access pass.³² The suspects are believed to have ties to Al-Qaeda. Three men were found guilty of planning to blow up airplanes with liquid bombs.³³

After the failed terrorist attempt on the liquids bomb plot in London Heathrow Airport in 2006, the EU banned liquids, aerosols, and gels (LAGs) from carry-on baggage with Commission Regulation (EC) No. 1546/2006. While the Annex should be secret and not published, the passengers must be informed of the rules on the prohibited items.³⁴ The exemptions on restrictions for passengers carrying liquids, aerosols, and gels (LAGs) in their hand luggage:³⁵

- *"1. Liquids must be placed in containers of no more than 100 milliliters packed in one transparent (maximum 1 liter) plastic bag.*
- 2. Liquids used for medical purposes or special dietary requirements during the trip.
- 3. EU duty-free liquids obtained at EU airports or on board the aircraft of an EU carrier packed in a Security Tamper-Evident Bag (STEB) with the proof of purchase/invoice inside.
- 4. Duty-free liquids obtained or purchased at certain airports in Croatia, Malaysia, Singapore, or international airports in Canada or the United

Andrew Testa, Terror Plot Foiled; Airports Quickly Clamp Down, <u>https://www.nytimes.com/2006/08/11/world/europe/11plot.html</u>, accessed on 4 January 2023.
CNN Agent Infiltrated Terror Cell U.S. says. <u>https://edition.com/2006/US/08/10/us</u> security/index.html.

³² CNN, Agent Infiltrated Terror Cell U.S. says, <u>https://edition.cnn.com/2006/US/08/10/us.security/index.html</u>, accessed on 6 January 2023.

³³ Three Guilty of Airline Bomb Plot, <u>http://news.bbc.co.uk/2/hi/uk_news/8242238.stm</u>, accessed on 6 January 2023.

 ³⁴ Commission Regulation (EC) No. 1546/2006 amending Regulation (EC) No. 622/2003, Laying Down Measures for the Implementation of the Common Basic Standards on Aviation Security, 4 October 2006, Whereas (3).
³⁵ European Commission Liquida accessly and gala, https://two.neg.org/to.accessly.accessl

³⁵ European Commission, Liquids aerosols and gels, <u>https://transport.ec.europa.eu/transport-modes/air/aviation-security/aviation-security-policy/liquids-aerosols-and-gels_en</u>, accessed on 6 January 2023.

States packed in a Security Tamper-Evident Bag (STEB) with the proof of purchase/invoice inside."

2) Underwear Bomb Plot 2009

On 25 December 2009, Umar Farouk Abdulmutallab purposely smuggled a bomb in his underwear and attempted to blow up a commercial plane from Amsterdam (Schiphol Airport) to Detroit, United States. Pursuant to Part A of the Annex to Regulation (EC) No. 272/2009, methods of screening allowed to screen passengers before boarding the plane include "hand search, walk-through metal detection (WTMD) equipment, hand-held metal detection (HHMD) equipment, explosive detection dogs, explosive trace detection (ETD) equipment." Taking advantage of the loophole, Abdulmutallab could get away from the airport security in Schiphol by sewing powdered explosives into his underwear. As the plane began to descend into the Detroit Metropolitan Airport, Abdulmutallab detonated the bomb, but it did not fully explode, resulting in a fire.³⁶ After knowing what had happened, passengers quickly contained him and helped to put out the fire. The man has been sentenced to life in prison after he pleaded guilty to his role in what was later determined as an Al-Qaeda plot.³⁷

The attempted terrorist attack served as a reminder of a new type of threat, and measures at the airports currently are not effective in preventing unlawful interference. As a result of the failed bomb attempt, body security scanners to prevent the same or even worse things from happening once again were introduced with supplementing regulation, Commission Regulation (EU) No. 1141/2011 amending Regulation (EC) No. 272/2009. Pursuant to Annex in Regulation (EU) No. 1141/2011, security scanners that do not use ionizing radiation are added in Part A, first paragraph, subparagraph 1, security scanners are purposely capable of detecting metallic and non-metallic items in body or clothes.

³⁶ U.S. Immigration and Custioms Enforcement, 'Underwear Bomber' Umar Farouk Abdulmutallab sentenced to life, <u>https://www.ice.gov/news/releases/underwear-bomber-umar-farouk-abdulmutallab-sentenced-life</u>, accessed on 8 January 2023.

³⁷ David Ariosto & Deborah Feyerick, Christmas Day Bomber Sentenced to Life in Prison, <u>https://edition.cnn.com/2012/02/16/justice/michigan-underwear-bomber-sentencing/index.html</u>, accessed on 8 January 2023.

The new legal framework regarding the security scanner has also been integrated into Commission Implementing Regulation (EU) 2015/1998. Pursuant to Point 4.1.1.10 of the Annex, minimum conditions must be complied with for a security scanner with a human reviewer besides not using ionizing radiation, as follows:

- "1. Security scanners must not store, retain, copy, print, or retrieve images and the image must be deleted as soon as the passenger is cleared. Unauthorized access and use of the image are prohibited.
- 2. The human reviewer must be in a separate location so they cannot see the screened passenger.
- 3. Technical devices capable of recording images must not be allowed into the location where the image is analyzed.
- 4. The image shall not be linked to any data of the screened person and their identity must be kept confidential and anonymous.
- 5. Passengers can request the image of their body analyzed by a human reviewer of the gender of their choice.
- 6. The image shall be blurred to keep the identity of the passengers confidential."

3) Yemen Air Cargo Bomb Plot in 2010

On 29 October 2010, 2 (two) cargo packages containing Improvised Explosive Devices (IED's) shipped from Yemen with a final destination to Chicago, United States, were seized. The tip was received from Saudi Arabian intelligence officials to the US Authorities about a terrorist plot by Al-Qaeda. The plot was thwarted, and the US Authorities found PETN and lead Azide PbN6 packaged into ink cartridges.³⁸ The first package was intercepted in Dubai, while the second was at the East Midlands airport.³⁹ The incident involving explosive devices concealed in an air cargo consignment from Yemen to the US by transferring in Europe showed that EU rules and implementation had to be enhanced regarding shipments from third countries.⁴⁰ In response to the incidents, the EU Presidency was requested to

³⁸ HSDL Staff, Looking Back: Air Cargo Bomb Plot Foiled on October 29, 2010, <u>https://www.hsdl.org/c/looking-back-air-cargo-bomb-plot-foiled-on-october-29-2010/</u>, accessed on 8 January 2023.

³⁹ Toni Männistö, Revisiting the Yemen Bomb Plot of 2010, <u>https://www.cross-border.org/2016/03/07/yemen-bomb-plot-in-2010/</u>, accessed on 8 January 2023.

European Parliament, Directorate-General for Internal Policies of the Union, Marc Thomas, The EU Regulatory Framework Applicable to Civil Aviation Security, <u>https://data.europa.eu/doi/10.2861/24226</u>, accessed on 8 January 2023.

represent the EU Council and the Commission to find ways to elevate air cargo security by setting up a High-Level Working Group, which later presented their report and action plan.⁴¹ The action plan⁴² proposed a new harmonized EU cargo and mail security controls, EU coordination, and a global approach.

Aside from the action plan, the previous implementing regulation, Commission Regulation (EU) No. 185/2010 of 4 March 2010, was amended with Commission Implementing Regulation (EU) No. 859/2011 and Commission Implementing Regulation (EU) No. 1082/2012 after the incident. The amended regulations introduced the implementation of ACC3 (Air Cargo or Mail Carrier operating into the EU from a Third Country Airport)⁴³. From February 2012, all importing cargo carriers from third countries into the EU (except Iceland, Norway, and Switzerland) must be granted an ACC3 by the authority responsible for the aviation security of the Member States involved. As stated in Annex Part B Point 6.8.1.4., the ACC3 is granted for a maximum period of 5 (five) years. Before February 2012, security controls were only applicable for cargo and mail being loaded into aircraft at airports within the EU.

Since 1 July 2014, the validation of the EU aviation security for the ACC3's cargo and mail operations done on-site at every departure airport bound for the EU is mandatory. The EU ACC3 program was run by risk-based measures (EU Risk Assessment), divided between low and high risk of cargo and mail. The EU ACC3 does not apply to cargo and mail originating from robust aviation security measures and is considered low-risk, while additional rules apply to cargo and mail identified as high-risk cargo and mail.⁴⁴

The appropriate authority or the regulated agent (RA3) is exercising the EU aviation security validation, and the EU Aviation security validator is responsible for deciding whether the air carrier can be designated with ACC3. The ACC3 program

⁴¹ European Commission, Report from the Commission to the European Parliament and the Council 2010 Annual Report on the Implementation of Regulation (EC) No. 300/2008 on Common Rules in the Field of Civil Aviation Security, <u>https://www.europarl.europa.eu/registre/docs_autres_institutions/commission_europeenne/com/2011/0649/CO_M_COM%282011%290649_EN.pdf</u>, accessed on 8 January 2023.

⁴² European Commission, A European Action Plan to Strengthen Air Cargo Security, <u>https://ec.europa.eu/commission/presscorner/detail/en/IP 10 1651</u>, accessed on 8 January 2023.

⁴³ Annex Part C Point 6.8.1.1. of Commission Implementing Regulation (EU) No. 859/2011 and Annex Part C Point 6.8.1.1. Commission Implementing Regulation (EU) No. 1082/2012

⁴⁴ European Commission, From Non-EU Countries, <u>https://transport.ec.europa.eu/transport-modes/air/aviation-security/air-cargo-and-mail/non-eu-countries_en</u>, accessed on 9 January 2023.

was implemented by the Commission Implementing Regulation (EU) No. 859/2011 and Commission Implementing Regulation (EU) No. 1082/2012 but later repealed by Commission Implementing Regulation (EU) 2015/1998. In 2017, Commission Implementing Regulation (EU) 2015/1998 was amended with Commission Implementing Regulation (EU) 2017/815 and Commission Implementing Regulation (EU) 2019/103, meant to clarify, harmonize and simplify aviation security measures. Pursuant to Annex Point 19 Point (b) of Regulation (EU) 2017/815, the aviation security validator, to assess the applicant, shall make use of what is contained in Attachment 6-C of the Annex as a guideline. The Attachment 6-C itself is about the validation checklist for the carriers, validators, and for the ACC3.

Cyber Security in the EU

Even though the EU has made regulations and action plans to ensure security in the aviation sector, there are still many challenges and threats going on around. There are many types of threats in the aviation industry, even though historically, the biggest threat was terrorism, as civil aviation is one of the main targets for terrorist attacks. Over the years, technology has developed and improved fast and has become one of the important things in daily life. New threats develop as Information and Communication Technology (ICT) keeps on developing, which often refers to cyber threats. Cyber threats affect many fields, not only aviation security, and the EU needs to become cyber-resilience to operate smoothly. Hence in February 2013, the Commission adopted a joint communication with the High Representative of the Union for Foreign Affairs and Security Policy for a Cybersecurity Strategy⁴⁵ of the EU for open, safe, and secure cyberspace. Seven years later, a new EU Cybersecurity Strategy⁴⁶ was presented.

Aside from the EU effort on the Cybersecurity Strategy, the EU has also adopted Commission Implementing Regulation (EU) 2019/1538 for detailed measures on the aviation security common standards implementation, especially

⁴⁵ Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Cybersecurity Strategy of the European Union: An Open, Safe, and Secure Cyberspace, <u>https://eeas.europa.eu/archives/docs/policies/eu-cyber-security/cybsec comm en.pdf</u>, accessed on 11 January 2023.

⁴⁶ Joint Communication to the European Parliament and the Council, The EU's Cybersecurity Strategy for the Digital Decade, <u>https://digital-strategy.ec.europa.eu/en/library/eus-cybersecurity-strategy-digital-decade-0</u>, accessed on 11 January 2023.

regarding cybersecurity measures. In Regulation (EU) 2019/1538, an appropriate authority shall be established to assist national authorities/agencies, airport operators, air carriers, and other entities to conduct practical security risk assessments relating to their operations and implement measures against the threats. Also, the appropriate authority shall ensure that critical information and communication technology systems and data are protected from cyber-attacks that could affect civil aviation security. It also must be identified the airport operators and air carrier security programs contain detailed methods to protect, detect, respond to, and recover from cyber-attacks.

The cyber-threat regulation in aviation security is insufficient to tackle the existing threats. It is also important to realize cyber threats as the EU's aviation security challenges and the EU needs to address them correctly. The EU may face many unseen or unknown future challenges or threats. For instance, there are strong possibilities on how terrorists shift their method of attack and combine it with technological advances. In other words, there are possibilities that terrorist attacks will be combined with cyber threats to get away from security in airports by hacking the security system.

Analysis of the EU Aviation Security Implications for Indonesia's Interest

Indonesia's interest in aviation security itself is driven by the importance of ensuring security measures and compliance with international standards. The EU aviation security development could have a significant degree of implications for Indonesia's interests. Indonesia can enhance the consistency and effectiveness of its regulatory framework by studying the EU's comprehensive regulatory framework of aviation security.

It is visible that the development of the EU's aviation security is mostly a reactive action towards threats and focuses on addressing the threats faced. Similarly, Indonesia can learn from the EU's fast reaction in addressing the threats and making sure the regulation is sufficient to prevent from it happening again. On the other side, Indonesia could benefit from the development by conducting studies on the EU's legal framework and adapting it to its own regulation to mitigate potential threats. In terms of anticipating cyber security, Indonesia's commitment

can be seen through the Cyber Security in Aviation Conference in December 2018 which involves representatives from ICAO, IATA, and other cyber security stakeholders who are expected to contribute and have a positive impact on the future of the global aviation industry.⁴⁷ To address this challenge, the government needs to be consistent in its efforts to combat it and also with collaboration from private actors and citizens.

Conclusion

Before 2002, aviation security was not one of the EU's agenda to regulate. The matter was considered to be the Member States' area of sovereignty, and it is left up to the individual states how they regulate it. On the other hand, ECAC published Document No. 30 as non-binding guidelines and recommendations on aviation security that can be a reference for the Member States. The first driving force for the EU to raise its awareness on the importance of regulating aviation security within the organization was the terrorist attack on 11 September 2001 in the United States. After the accident, in 2002, the EU adopted its first framework on aviation security.

The EU's initial framework on aviation security was Regulation (EC) No. 2320/2002 later on repealed by Regulation (EC) No. 300/2008. Throughout the years, the EU has successfully been reactive to the problems, threats, and challenges regarding aviation security by adopting and amending regulations. Almost all of the EU's regulations concerning aviation security were adopted after certain accidents or plots took place, except for Regulation (EC) No. 300/2008, which was adopted to harmonize all previous regulations. Implementing and supplementing regulations were often based on some accidents that took place, such as the Trans-Atlantic Liquid Bomb Plot, Underwear Bomb Plot, and Yemen Air Cargo Bomb Plot. While it is a good thing that the EU is reactive and agile towards the threats by adopting new regulations to prevent them from happening again, it is also important for the EU to be able to address the challenges or threats they face in the future and prepare and

⁴⁷ Ministry of Transportation Republic of Indonesia Directorate General of Civil Aviation, Kemenhub Perkuat Keamanan Siber Penerbangan Melalui Cyber Security in Aviation Conference, <u>https://hubud.dephub.go.id/hubud/website/berita/4480</u>, accessed on 22 March 2024.

be ready for them. The importance of the EU being ready for future challenges is also a preventive step, preventing other accidents from ever happening. On the other hand, the entry of the Lisbon Treaty did not bring many significant changes to aviation security, and it did not directly affect aviation security regulations. The changes only affect the policy-making procedure of aviation security regulations.

On the other hand, the development of the EU aviation security regulations can shed light on the broader context of Indonesia's interest in addressing security challenges. By studying and incorporating lessons learned from the EU's aviation security laws and practices, Indonesia could strengthen its aviation security legal framework, and contribute to the international effort to combat aviation-related challenges and threats.

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