

Approval of Realignment Flight Information Region 2022 Between The Republic of Indonesia and Singapore

Harry Purwanto^{1*} and Levina Yustitiani²

¹Gadjah Mada University, Yogyakarta, Indonesia

²Universitas Muhammadiyah Surabaya, Surabaya, Indonesia

*email: purwanto@mail.ugm.ac.id

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ABSTRACT

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The 2022 FIR Realignment Agreement between Indonesia and Singapore redefined the delegation of airspace management over the Natuna and Riau Islands. This study investigates Indonesia's legal responsibilities in providing air traffic services prior to the realignment and evaluates the country's readiness to implement the provisions of the agreement. Employing a normative legal research method, the study draws upon primary sources such as international treaties and national aviation laws, complemented by scholarly literature on air law. The findings suggest that the provision of air traffic services is a sovereign function, and the delegation to another country is permissible only for technical or operational reasons. The signing of the 2022 FIR Realignment demonstrates Indonesia's preparedness and sovereign capability to manage its airspace in accordance with international standards. As a manifestation of this commitment, the agreement has been ratified through Presidential Regulation No. 109 of 2022.

1. INTRODUCTION

On January 25, 2022, a bilateral meeting was held between the President of the Republic of Indonesia, Joko Widodo, and the Prime Minister of Singapore, Lee Hsien Loong, at The Sanchaya Resort, Bintan Regency, Riau Islands. The meeting resulted in the signing of three significant agreements covering the areas of politics, law, and defense, namely: the Extradition Agreement, the Flight Information Region (FIR) Agreement, and a Joint Statement by the defense ministers of both countries reaffirming their commitment to implement the Defense Cooperation Agreement.^{1,2}

Among these, the FIR Agreement marked an important milestone in the reorganization of responsibilities for managing a portion of the airspace above the Natuna

¹ Barry Desker, "Singapore-Indonesia Ties: Renewed Deal for A New Age," *RSIS Commentary* (S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, 2022).

² Sinatriagung Mintojati, "Effect of Re-Alignment Flight Information Region Above Natuna and Riau Islands to Indonesia's Sovereignty," *International Journal of Law, Tourism, and Culture* 1, no. 1 (2022): 1–17, <https://ejournal2.undiksha.ac.id/index.php/IJLTC/article/view/1241>.

and Riau Islands. The term *Flight Information Region* (FIR) refers to a defined area of airspace in which flight information and alerting services are provided to ensure the safety and efficiency of civil and military aviation. The designation and management of FIRs are coordinated by the International Civil Aviation Organization (ICAO).³

In the context of the 2022 agreement, Singapore formally delegated the responsibility for airspace services at altitudes above 37.000 feet to Indonesia, while retaining operational control below that threshold. Historically, however, the management of air traffic services in the airspace above the Riau and Natuna Islands has been conducted by Singapore since 1946. This arrangement emerged from an ICAO meeting in Dublin, Ireland, held in March 1946, at a time when Indonesia had just gained independence and lacked the capacity, both institutionally and technologically, to manage its own airspace. Indonesia's absence from that meeting, due to post-independence instability, enabled Singapore to assume responsibility over the affected airspace.⁴

The arrangement was later reaffirmed during the first ICAO Regional Air Navigation (RAN) Meeting for the Asia-Pacific region held in Honolulu in 1973, in which Singapore proposed to continue managing the FIR over the Natuna Islands. The proposal was accepted by both Indonesia and ICAO in view of Indonesia's continued limitations in terms of aviation infrastructure and trained personnel.⁵

However, such delegation does not diminish the sovereignty of the delegating State over its airspace. Rather, the delegated authority is restricted to technical and operational control, and must be governed by a formal agreement that outlines the scope of services, required infrastructure, and performance standards.

Following decades of reliance on Singapore's services, Indonesia and Singapore formalized the first realignment of FIR boundaries on September 21, 1995, through the *Agreement Between the Government of the Republic of Indonesia and the Government of the Republic of Singapore on the Realignment of the Boundary between the Singapore Flight Information Region and the Jakarta Flight Information Region*.

Although FIR boundaries may intersect or diverge from the territorial boundaries of a State, they are not an indication of sovereignty claims. For instance, portions of Australian and Timor Leste airspace are managed by Indonesia's FIR, while Brunei Darussalam's airspace falls under the jurisdiction of Malaysia's FIR in Kinabalu. These examples demonstrate that air traffic service responsibilities can be geographically

³ Ramadhita Lestari, "Diplomasi Indonesia Dalam Menyelesaikan Sengketa Fir (Flight Information Region) Di Atas Kepulauan Natuna Dengan Singapura," *Jom Fisip* 4, no. 1 (2016): 1–23.

⁴ Yaries Mahardika Putro et al., "Indonesia-Singapore Realignment Agreement 2022: Quo Vadis Indonesia's Air Sovereignty, Defense and Security?," *Prophetic Law Review* 6, no. 2 (2024): 167–200.

⁵ Adhy Riadhy Arafah et al., "FIR Agreement Indonesia – Singapore: What Are the Legal Implications?," *Heliyon* 10, no. 8 (2024), <https://doi.org/10.1016/j.heliyon.2024.e29708>.

decoupled from sovereign airspace, as long as they are governed by mutual agreements under ICAO frameworks.⁶

In the case of Indonesia, the management of national airspace is currently divided into two FIRs: the Jakarta FIR for the western region and the Makassar FIR for the eastern region. The Realignment Agreement, signed in 2022, reaffirms Indonesia's sovereign right and operational capability to resume control over key portions of its airspace previously managed by Singapore.⁷

Given this background, this study seeks to explore the legal nature of Indonesia's responsibility in providing air traffic services over the Natuna and Riau Islands prior to the 2022 FIR Realignment. It further evaluates Indonesia's institutional readiness and technical capacity to implement the provisions outlined in the agreement.

2. METHOD

This research is classified as normative legal research, utilizing secondary data comprising primary legal materials such as the 1944 Chicago Convention, Annex 11 of the 1944 Chicago Convention, the 1969 Vienna Convention, and Law No. 1 of 2009 on Aviation. Secondary legal materials include scholarly books on air law, academic journals, and credible online sources. Data were obtained through a literature review, and the collected data were analyzed descriptively using statutory and conceptual approaches.

3. RESULTS AND DISCUSSION

3.1. State Responsibilities in Performing Aviation Traffic Services

3.1.1. FIR Delegation and Sovereignty

The Flight Information Region (FIR) is a division of airspace established for the purpose of managing aviation activities to ensure flight security and safety. FIRs provide essential services such as flight information and alerting systems, functioning as the foundational framework for air traffic services. These regions are designated by the International Civil Aviation Organization (ICAO) and are applicable to both civil and military aviation operations. FIRs are categorized into two types: national FIRs and international FIRs.⁸ Generally, FIRs manage air traffic up to an altitude of 20,000 feet. Above this threshold lies the Upper Flight Information Region (UIR), which governs

⁶ Naufal Faiz Muhammad, Atip Latipulhayat, and Garry Gumelar Pratama, "Realignment of Flight Information Region Agreement Between Indonesia and Singapore 2022: Unraveling Sovereignty and Ratification Issues for Indonesia," *Padjadjaran Jurnal Ilmu Hukum* 11, no. 1 (2024): 1–25, <https://doi.org/10.22304/pjih.v11n1.a1>.

⁷ Lestari, "Diplomasi Indonesia Dalam Menyelesaikan Sengketa Fir (Flight Information Region) Di Atas Kepulauan Natuna Dengan Singapura."

⁸ NF Muhammad, A Latipulhayat, and G G Pratama, "Realignment of Flight Information Region Agreement Between Indonesia and Singapore 2022: Unraveling Sovereignty and Ratification Issues for Indonesia," *Padjadjaran Jurnal Ilmu Hukum* 11, no. 1 (2024): 1–25, <https://doi.org/10.22304/pjih.v11n1.a1>.

flights operating at higher altitudes. Since relatively few aircraft operate above 20.000 feet, most air traffic remains under FIR jurisdiction.⁹

The control of airspace within a country's territory is an inherent component of its full and exclusive sovereignty. However, airspace management may be delegated to another State under two circumstances: (1) to promote efficiency and ensure flight safety, or (2) due to the limited technical or institutional capacity of the sovereign State. Such delegation is strictly technical in nature and does not entail the transfer of sovereignty. For instance, while air traffic control in certain Indonesian airspace has been managed by Singapore, this delegation pertains solely to operational aspects and does not alter Indonesia's sovereign rights over that airspace.

It is essential to distinguish between delegation and sovereignty. Sovereignty remains undiminished even when control is temporarily exercised by another State.¹⁰ Several arguments underscore this distinction. First, if the airspace above Natuna, Tanjung Pinang, and Batam were not Indonesian territory, then there would be no legal basis to assert territorial integrity. However, under the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and as affirmed in Government Regulation No. 38 of 2002, these areas are part of Indonesia's archipelagic territory.¹¹ This is further supported by Article 5 of Law No. 1 of 2009, which affirms Indonesia's complete and exclusive sovereignty over its national airspace. The principle of exclusive airspace sovereignty is widely recognized under international law.¹² Second, the vertical boundaries of a country's airspace are understood to extend directly above its land and maritime territory. Third, under Chapter 2 of Annex 11 to the 1944 Chicago Convention, the delegation of airspace management to another country does not affect the sovereignty of the delegating State.

Fourth, Indonesia's efforts to reclaim the management of the Natuna FIR are a direct mandate of Article 458 of Law No. 1 of 2009, which requires the government to manage all sovereign airspace, including areas previously delegated to other States. In Indonesia's case, the only such delegation was to Singapore. Conversely, Indonesia has received FIR delegations from Timor Leste and Christmas Island, without affecting those States' sovereignty over their respective airspace.

⁹ A Dirwan, "Analisis Masalah Pengaturan Ruang Udara Di Atas Alur Laut Kepulauan Indonesia (ALKI)," *Jurnal Teknologi Kedirgantaraan* 6, no. 1 (2021), <https://doi.org/10.35894/jtk.v6i1.32>.

¹⁰ J E Alvarez, "State Sovereignty Is Not Withering Away: A Few Lessons for the Future," in *Realizing Utopia: The Future of International Law*, 2012, <https://doi.org/10.1093/acprof:oso/9780199691661.003.0003>.

¹¹ A H Oegroseno, "Archipelagic Sea Lanes Passage Designation: The Indonesian Experience," *Center for Oceans Law and Policy* 13 (2009): 385–91, <https://doi.org/10.1163/ej.9789004173590.i-624.123>.

¹² Endang Puji Lestari, "The Delegation of State Sovereignty over Air Space in the Implementation of Air Navigation: The Analysis of the Agreement between Indonesia and Singapore on Management of the Batam and Natuna Flight Information Region," *FIAT JUSTISIA: Jurnal Ilmu Hukum* 11, no. 2 (2018): 173, <https://doi.org/10.25041/fiatjustisia.v11no2.813>.

The signing of the 2022 FIR Realignment Agreement between Indonesia and Singapore concerning the airspace over the Natuna and Riau Islands reflects Indonesia's sovereign readiness to comply with international standards under Article 28 of the 1944 Chicago Convention and its Annex 11. This agreement should not be interpreted as a restoration of sovereignty, as Indonesia has never relinquished sovereignty over these areas. Rather, it represents Indonesia's assertion of its right to manage the airspace above its territory independently and in accordance with international norms.

3.1.2. FIR and the Role of ICAO

Ensuring aviation security and safety is a fundamental objective of civil aviation activities. Airspace users expect to reach their destinations safely, while aviation authorities strive to maintain the orderly and disturbance-free operation of aircraft. One of the critical factors in achieving this goal is the proper regulation and control of airspace through air traffic services.¹³

Aviation safety governance is primarily rooted in the 1944 Chicago Convention and its 18 annexes, supplemented by additional regulatory instruments issued by the International Civil Aviation Organization (ICAO), such as the *Safety Management Manual (SMM)*, the *Safety Management System (SMS)*, and the *Civil Aviation Safety Regulations (CASR)*. Among the annexes, Annex 11 is particularly significant for the management of air traffic services (ATS), especially in preventing aircraft collisions. ATS routes are defined by designated waypoints, minimum altitudes, and reporting points that guide aircraft to or from specific positions.¹⁴

Annex 11 outlines five principal objectives of ATS:

1. To prevent collisions between aircraft;
2. To prevent collisions between aircraft and obstructions within maneuvering areas;
3. To expedite and maintain an orderly flow of air traffic;
4. To provide useful advice and information to support the safety and efficiency of flights;
5. To alert and coordinate with appropriate agencies for search and rescue operations.

Chapter 2 of Annex 11 mandates each ICAO member state to determine the extent of its airspace and aerodrome areas for which air traffic services are provided. In cases where such airspace lies over high seas or areas not under any state's sovereignty, international or regional agreements are required for proper delegation.

¹³ Irwan Triadi et al., "Pengawasan Lalu Lintas Udara Di Wilayah Perbatasan Negara," *Media Hukum Indonesia* 2, no. 5 (2025): 312–18.

¹⁴ A A Batalov, "Global Aviation Safety Oversight System: Challenges and Opportunities for ICAO and Its Member States," *Air and Space Law* 46, no. 1 (2021): 99–118, <https://doi.org/10.54648/aila2021005>.

Annex 11 also requires coordination between civil air traffic control units and military or other authorities whose operations may affect civilian aircraft. The goal is to ensure the exchange of flight plans and operational data to prevent accidental conflict or unauthorized airspace entry by civilian aircraft.

For international air navigation, ICAO designates several “airways” over sovereign and non-sovereign areas. Within sovereign territory, the state determines the routing of airways while complying with international safety standards. In non-sovereign regions, air routes are determined either by ICAO or through regional collaboration. For instance, in Europe, air traffic surveillance is coordinated through Eurocontrol in Maastricht, the Netherlands, an approach that can be paralleled with Indonesia’s coordination with Singapore and Malaysia in bordering airspace.¹⁵

Airspace itself is categorized as controlled or uncontrolled. Controlled airspace includes:

1. Control Area (CTA): provides guidance for aircraft at cruising altitude;
2. Terminal Control Area (TMA): manages aircraft during ascent, descent, and cruise phases near airports;
3. Control Zone (CTZ): oversees aircraft during takeoff and landing within proximity to airports;
4. Aerodrome Traffic Zone (ATZ): governs low-altitude airspace around airports for visual navigation.

Uncontrolled airspace, by contrast, offers only basic information and alerting services, which are typically delivered through the FIR structure. FIRs are the largest standardized airspace units in global aviation, existing since at least 1947 under ICAO coordination. ICAO currently divides the world into nine FIR regions: AFI, ASIA, CAR, EUR, MID, NAM, NAT, PAC, and SAM. Each region contains several FIRs, for which ICAO designates specific countries to provide air navigation services.¹⁶

FIRs are classified as either:

1. National FIRs: over sovereign territories, governed by domestic and international aviation law,
2. International FIRs: over international waters, delegated to neighboring states through international agreements.

There are ongoing debates regarding military aircraft operations in international FIRs, with some arguing that foreign military aircraft must comply with FIR procedures, while others claim such aircraft are not bound by coastal state regulations.

¹⁵ Primadi Candra Susanto and Yulianti Keke, “Implementasi Regulasi International Civil Aviation Organization (ICAO) Pada Penerbangan Indonesia,” *Aviasi : Jurnal Ilmiah Kedirgantaraan* 16, no. 1 (2019): 53–65, <https://doi.org/10.52186/aviasi.v16i1.23>.

¹⁶ West Sussex, “Airspace Fundamentals and the Future of Flight” (United Kingdom: UK Civil Aviation Authority, 2023).

In addition to FIRs, aviation operations also involve *Upper Flight Information Regions (UIRs)*, which cover altitudes above 20,000 feet. Due to the limited number of aircraft capable of flying at such altitudes, the number of UIRs is smaller compared to FIRs. The primary rationale behind FIR and UIR divisions is to ensure a structured and secure flow of air traffic based on safety considerations, flight types (civil or state), and designated air routes, including those over Indonesia's Archipelagic Sea Lanes (ALKI).

As a party to the 1944 Chicago Convention and an active ICAO member, Indonesia is committed to adhering to ICAO standards and recommended practices. Article 37 of the Convention mandates states to harmonize civil aviation management with ICAO regulations and to notify ICAO if they are unable to implement any provision. Accordingly, Indonesia's delegation of FIR responsibilities to Singapore for the Natuna and Riau Islands was justified by its limited technical readiness at the time. Singapore, as a capable neighboring country, was designated to manage the FIR until Indonesia could assume full control in accordance with international obligations.

3.2. Indonesia's institutional and operational preparedness to implement the provisions of the 2022 FIR Realignment Agreement

3.2.1. Aviation safety in the Indonesian national legal system

As a signatory to the 1944 Chicago Convention and a member of the International Civil Aviation Organization (ICAO), Indonesia has incorporated international provisions on air traffic services into its national legislation, particularly through Law No. 1 of 2009 on Aviation. This law outlines the core objectives of air traffic services in Indonesia, which include:

1. Avoiding mid-air collisions between aircraft;
2. Preventing aircraft from colliding with other aircraft or obstacles within maneuvering zones;
3. Ensuring a smooth and efficient flow of air traffic;
4. Delivering guidance and information to support safe and efficient flights;
5. Notifying relevant agencies for search and rescue operations when required.

To meet these objectives, aircraft operating within Indonesian airspace are supported with comprehensive flight navigation services, including:

1. In-flight navigational assistance;
2. Management and supervision of controlled airspace;
3. Participation in search and rescue missions and accident investigations;
4. Training and deployment of qualified aviation personnel;
5. Maintenance and inspection of navigation facilities and infrastructure.

The delivery of air traffic services in Indonesia takes into account several key operational factors, namely:

1. The nature and classification of air traffic;

2. The density and flow rate of aircraft movements;
3. The technological and geographical conditions of the airspace;
4. The availability and functionality of onboard navigation systems.

With respect to routes over the Indonesian Archipelagic Sea Lanes (ALKI), air traffic services follow the same regulatory principles as outlined in Article 278 of the Aviation Law. However, these services must also accommodate the specific characteristics of ALKI, which, under the 1982 United Nations Convention on the Law of the Sea (UNCLOS), were primarily designated for state aircraft, particularly military aviation. Although Article 53 of UNCLOS refers broadly to “all aircraft,” its interpretation has normatively permitted civil aircraft to exercise the right of archipelagic sea lane passage.

Ensuring the safety of flight operations is critical for both civil and military aviation, especially since both domains share similar technologies and operational platforms. Indonesia fulfills its obligations under ICAO’s safety framework by adopting internationally recognized standards and recommended practices (SARPs), which are implemented nationally through regulatory instruments such as the *Civil Aviation Safety Regulations* (CASR), formerly known as *Peraturan Keselamatan Penerbangan Sipil* (PKPS), first enacted by the Decree of the Minister of Civil Aviation No. T-11/2/4U in 1960.

Although CASR is designed for civil aviation, Article 3(d) of the 1944 Chicago Convention obligates member states to consider civil aviation safety in formulating rules for state aircraft. The Indonesian Air Force (TNI-AU) has institutionalized this mandate by applying CASR standards to military operations through the Decree of the Chief of Air Force Staff No. Kep./21/IV/1975, dated April 30, 1975.

The decree establishes the following provisions:¹⁷

1. CASR standards are applicable to TNI-AU operations within FIRs and controlled airspace, as long as they are compatible with military functions;
2. Any provisions that cannot be enforced due to operational constraints must be reported to the Directorate General of Civil Aviation for appropriate action;
3. Military and civilian flights operating from airbases under TNI-AU control are subject to PKPS regulations;
4. Military rules and procedures should be harmonized with CASR Part 37 on air traffic rules to the extent feasible.

These regulations illustrate the active coordination between civil and military aviation sectors in Indonesia, particularly in upholding national aviation safety standards.

3.2.2. Implications of the Indonesia-Singapore FIR 2022 Realignment Approval

¹⁷ International Civil Aviation Organization, “Annex 2 - Rules of the Air,” Tenth Edit, 2005.

As discussed earlier, the management of Indonesian airspace over the Riau and Natuna Islands had been delegated to Singapore since 1946. This long-standing arrangement, although initially driven by Indonesia's post-independence limitations in air navigation capability, posed several challenges to Indonesia's sovereignty and operational control. These challenges included the requirement for Indonesian aircraft to obtain clearance from Singaporean air traffic control (ATC) when entering their own national airspace, creating an operational dependency on foreign authority.

In practice, while Indonesia retained de jure sovereignty, de facto control over this segment of airspace resided with Singapore. This situation restricted Indonesia's autonomy in air defense and law enforcement, particularly for the Indonesian Air Force (TNI-AU), which often encountered constraints in conducting patrols or other sovereign duties due to Singapore's prioritization of civilian aviation traffic serving Changi Airport.¹⁸

Technical disruptions, such as failures in Singapore's Automatic Message Switching Center (AMSC), have also caused operational delays at Indonesian airports like Hang Nadim in Batam. Moreover, Indonesia lacked the authority to levy overflight or navigation service charges in this airspace, which undermined potential economic benefits.

Recognizing these limitations, the Indonesian government deemed it necessary to reclaim management of the airspace over Natuna and the Riau Islands. To support this transition, Indonesia invested in the installation of advanced navigation systems—such as DVOR/DME, VSAT communication links, and radar surveillance systems—on Natuna Island and in Tanjung Pinang. Notably, three Monopulse Secondary Surveillance Radar (MSSR) Mode-S units located in Natuna, Pontianak, and Tanjung Pinang have been integrated into the Jakarta Air Traffic Service Center (JATSC), thereby enhancing national surveillance capacity. These upgrades replaced outdated systems and now enable comprehensive monitoring of aircraft traversing western Indonesian airspace.¹⁹

Indonesia has also made strides in human resource development, training aviation personnel for both lower and upper airspace operations using technology on par with that of Singapore and Malaysia. Currently, Indonesia manages two FIR zones: the Jakarta FIR (covering the western region, supported by 16 radar stations) and the Makassar FIR (eastern region, supported by 23 radars). This institutional readiness formed the basis for

¹⁸ Andri Wahyudi, Chomariyah Chomariyah, and Wisnu Aryo Dewanto, "Indonesia's Airspace Sovereignty and FIR Management with Singapore: Kedaulatan Wilayah Udara Indonesia Dan Pengelolaan FIR Dengan Singapura," *Indonesian Journal of Innovation Studies* 26, no. 1 (2025): 1–10, <https://doi.org/10.21070/ijins.v26i1.1322>.

¹⁹ Khairi Rahmi and Rizky Octa Putri Charin, "The Return of Indonesia's Political Will: Implications of Takeover the Flight Information Region (FIR) Natuna's Airspace from Singapore," in *Proceedings of the International Conference Social - Humanities in Maritime and Border Area (SHIMBA 2023)*, *Advances in Social Science, Education and Humanities Research*, vol. VIII, 2023, 1–2, https://doi.org/10.2991/978-2-38476-150-0_1.

the signing of the FIR Realignment Agreement with Singapore on January 25, 2022, which was ratified through Presidential Regulation No. 109 of 2022. The agreement allows for a review every five years, offering a mechanism for gradual transition.

The agreement reflects not only compliance with Law No. 1 of 2009 on Aviation but also Indonesia's commitment to its obligations under the Chicago Convention and ICAO frameworks. The successful realignment expanded the Indonesian FIR by 249,575 km², now internationally recognized as part of the Jakarta FIR. It also granted Indonesia greater autonomy in managing commercial and military air traffic, including the authority to station Indonesian air traffic personnel within Singaporean ATC operations and to collect overflight service fees for aircraft traversing the reassigned airspace.

However, the realignment remains partial. As of now, approximately 29% of the airspace below 37,000 feet continues to be managed by Singapore, primarily due to technical constraints and existing legal arrangements.²⁰ According to Indonesia's Ministry of Transportation, this is because the airspace forms part of Singapore's terminal area used for standardized approach procedures, which cannot yet be transferred without compromising safety.²¹ Thus, full control remains aspirational, pending further technological upgrades and regional coordination. The current arrangement aligns with Article 263 of Law No. 1 of 2009 and ICAO Annex 11, Article 2.1.1.

Another critical aspect concerns the bundling of the FIR Realignment Agreement with two unrelated instruments: the Extradition Agreement and the Defense Cooperation Agreement. While this trilateral package was signed simultaneously, the substance of each agreement is independent. This raises legal concerns regarding compliance with Article 2(1)(a) of the 1969 Vienna Convention on the Law of Treaties, which stipulates that related agreements may be concluded in multiple instruments only when their content is interrelated. In this case, the three agreements appear substantively distinct, raising questions about the formal integrity of the treaty-making process.²²

4. CONCLUSION

In light of the foregoing analysis, the following conclusions can be drawn regarding the signing of the FIR Realignment Agreement between Indonesia and Singapore: First, every sovereign nation possesses full and exclusive control over its airspace. As a sovereign state, a contracting party to the 1944 Chicago Convention, and a member of ICAO, Indonesia is obliged to implement the provisions of Article 28 and

²⁰ Rohannisa Naja Rachma Savitri and Adya Paramita Prabandari, "TNI Angkatan Udara dan Keamanan Wilayah Udara Indonesia," *Jurnal Pembangunan Hukum Indonesia* 2, no. 2 (2020): 236–45, <https://doi.org/10.14710/jphi.v2i2.236-245>.

²¹ Andika Immanuel Simatupang, "State Responsibility Over Safety and Security on Air Navigation of Civil Aviation in International Law," *Indonesian Journal of International Law* 13, no. 2 (2016): 275–95, <https://doi.org/10.17304/ijil.vol13.2.649>.

²² Anthony Aust, *Modern Treaty Law and Practice*, 3rd editio (London: Cambridge University Press, 2013), <https://doi.org/10.1017/cbo9781139152341.005>.

Annex 11 of the Convention. These obligations include ensuring the provision of air traffic services both independently and, where necessary, in coordination with other states, as a means to safeguard aviation safety. Second, the 2022 FIR Realignment Agreement signifies a significant milestone in the assertion of Indonesia's sovereign rights and technical capabilities. The reallocation of 249,575 km² of airspace, previously managed under Singapore's FIR, has been internationally recognized as part of Indonesia's Flight Information Region (FIR Jakarta). This achievement not only reflects Indonesia's growing compliance with international aviation safety standards but also affirms its capacity to maintain service integrity, avoid fragmentation, and manage inbound and outbound traffic in line with ICAO mandates. As a formal step in the implementation of this agreement, the Government of Indonesia has enacted Presidential Regulation No. 109 of 2022.

AUTHOR DECLARATION

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