



## Agreement On Settling The Flight Informtion Region (FIR) Boundary Line Between Indonesia And Singapore On Indonesia's Southernmost Island

Lenny Husna<sup>1</sup>, Ukas<sup>2</sup>

<sup>1-2</sup> Department of Law, Faculty of Social and Humanities, Universitas Putera Batam

**Abstract.** *The goal of this research is to determine how the legal position of Singapore returning Flight Information Region (FIR) over the Riau Islands is founded on international law, which is the basis for delegating authority to Singapore to manage FIR over the Riau Islands. International legal recognition of sovereignty in airspace is contained in Article 1 of the 1919 Paris Convention, which states that "The contracting States recognize that every state has complete and exclusive sovereignty over the airspace above its territory". Indonesia has the authority to manage the airspace, which is divided into two Flight Information Regions (FIR), which are managed by two air traffic service centers, the Jakarta Air Traffic Service Center for the Jakarta FIR, which covers an area of 2,593,150 km<sup>2</sup>, and the Makassar Air Traffic Service Center for the Ujung Pandang FIR, which covers an area of 4,946,543 km<sup>2</sup>. Yet, the management of FIR in these areas has never been within the control of the domestic government since Indonesia's independence. Based on international law, a judicial examination was conducted to examine Indonesia's agreement with Singapore over the takeover of the airspace service or flight information region (FIR) over the Riau Archipelago area. According to the research findings, certain articles in the FIR Agreement are quite burdensome to Indonesia. And this agreement must be thoroughly examined to determine whether it favors Indonesia or vice versa.*

**Keyword:** *International Agreement, Sovereignty, Flight Information Region.*

### 1. INTRODUCTION

The delineation of the Flight Information Region (FIR) boundary between Indonesia and Singapore in Indonesia's Southern Outer Island holds significant importance in the management and supervision of aerial navigation within that specific region (Humaira et al., 2021; Sudiro & Natawidjaja, 2020). The concept of the FIR boundary pertains to the delineation that establishes the jurisdictional airspace of individual nations, facilitating efficient coordination in the management of aerial navigation.

The Southern Outer Island, which is geographically situated as the southernmost island in Indonesia, is in direct proximity to Singapore, thereby sharing a contiguous border (Sudiro & Natawidjaja, 2020). The concept of the FIR boundary is specifically applicable to the region that includes the territorial waters surrounding Indonesia's Southern Outer Islands (Humaira et al., 2021; Surbakah, 2019). In this area, both countries share a common interest in guaranteeing the secure and effective movement of air traffic.

The concept of the Flight Information Region (FIR) is widely acknowledged on a global scale (Supriyadi et al., 2020). It involves the division of airspace into distinct regions, each of which is under the administration and regulation of the respective country or authorized aviation authority. The primary objective of the Flight Information Region (FIR) is to ensure the efficient functioning of air traffic control systems and establish a structured platform for effective communication and coordination among adjacent nations (Indrawati,

2022). Through the establishment of the Flight Information Region (FIR) boundary in the South Outlying Islands, Indonesia and Singapore have reached a mutual agreement regarding the demarcation of their individual airspace jurisdictions and the implementation of coordination mechanisms essential for ensuring the secure administration of air traffic within the area. The determination of the exact position of the FIR boundary is contingent upon bilateral agreements and consultations between the two nations, which must take into account various factors including geographical characteristics, adherence to international aviation standards, and the respective requirements of both countries.

The FIR boundary functions as a pragmatic instrument for the management of air traffic. The allocation of jurisdiction within the Flight Information Region (FIR) grants individual aviation authorities of each country the power to regulate their designated airspace (Dirwan, 2021; Hadisusilo, 2022). This includes the authority to govern flight routes, provide air traffic control services, and issue instructions to pilots operating within their respective regions. The boundary of the Flight Information Region (FIR) also serves to facilitate the exchange of pertinent information and data between the two nations, thereby ensuring smooth operations and improved safety within the airspace that is jointly utilized.

The delineation of the Flight Information Region (FIR) boundary between Indonesia and Singapore in the Southern Outer Island region represents the mutual dedication of both nations to adhere to global aviation norms, foster collaboration in air traffic control, and prioritize the safety and effectiveness of air travel within the area (Lestari, 2016; Utomo et al., 2017). Effective communication, collaboration, and adherence to established procedures within the Flight Information Region (FIR) boundary are key factors that contribute to the development of a strong and coordinated air traffic management system between two adjacent countries.

The delineation of the Flight Information Region (FIR) boundary line between Indonesia and Singapore in the Southern Outer Island of Indonesia can occasionally give rise to challenges stemming from multiple factors (Manumayasa Rumuat, 2018). One of the main factors contributing to this phenomenon is the possibility of divergent interests and varying interpretations regarding territorial demarcations (Husna & Riyanto, 2019b). Disputes concerning the precise demarcation of the FIR boundary may emerge, particularly in cases where there are conflicting assertions or historical contentions pertaining to maritime boundaries or the exercise of sovereignty over islands.

Moreover, the demarcation of the Flight Information Region (FIR) can give rise to disputes in cases where there exist disparities in air traffic management practices, regulations, or procedures between the involved nations (Rumuat, 2018). The presence of diverse strategies for airspace control, differing communication protocols, and language barriers can introduce complexities in coordinating and collaborating within shared airspace. These complexities may give rise to potential conflicts or misunderstandings.

The complexity of the FIR boundary issue can be further compounded by political considerations and national security concerns. The airspace located above the Southern Outer Islands holds potential strategic significance for both nations, thereby requiring the implementation of rigorous control measures and increased vigilance. These concerns have the potential to result in heightened scrutiny and potentially more stringent regulations, which could have an impact on the efficient operation of air traffic and necessitate careful negotiations to reach a consensus.

In addition, the significance of the FIR boundary is further enhanced by the existence of international commercial air routes and the high volume of air traffic in the region. Any form of disruption or disagreement pertaining to the boundary has the potential to significantly affect airlines, passengers, and the overall efficiency of air transportation services connecting Indonesia and Singapore.

## **2. RESEARCH METHOD**

The present study employs a qualitative methodology with the objective of comprehensively understanding, exploring, and elucidating phenomena or issues through the collection and analysis of descriptive, narrative, and non-numerical data. Qualitative research places emphasis on the analysis and interpretation of subjective meanings, individual perceptions, lived experiences, and the social contexts within which participants are situated in the research process (Huberman & Miles, 2012; Murray, 2010). The present study involves the examination of official documents, including bilateral agreements, memorandums of understanding, official communications, and government decisions pertaining to the FIR border between Indonesia and Singapore. The objective is to facilitate comprehension of the respective positions and legal justifications put forth by each party, while also tracing the historical context of negotiations and discussions that have transpired. In addition, the researcher also undertakes investigations pertaining to analogous border disputes involving other nations, examining the legal methodologies employed in

comparable instances. This analysis aims to enhance comprehension of the legal arguments, principles, and procedures that are pertinent to the resolution of FIR border disputes.

### **3. FINDINGS AND DISCUSSION**

The Flight Information Region (FIR) refers to the designated airspace delineated by a nation or aviation governing body, which assumes the responsibility of overseeing and managing air traffic within its jurisdiction. The FIR limits delineate the specific regions for which each country assumes the responsibility of overseeing and managing air traffic regulation within those designated areas.

The resolution of the FIR boundary line is achieved through the attainment of a mutually beneficial agreement on the delineation of FIR boundaries by the respective nations involved (Husna & Riyanto, 2019a; Silalahi, 2015). These agreements may encompass the establishment of conceptual or well-defined geographical demarcations, including those formed through bilateral agreements or pertinent international instruments (Hendrayady, 2018). During the negotiation and settlement process, the parties involved may rely on a range of legal sources and factors, such as national and international law, bilateral agreements, arbitration decisions, as well as seeking guidance from legal experts and pertinent aviation authorities. The primary aim of this agreement is to mitigate potential conflicts that may impede the security, safety, and effectiveness of air traffic within the designated region.

The Agreement on Settling the FIR Boundary Line represents a cooperative endeavour aimed at addressing and resolving concerns, as well as achieving mutually advantageous arrangements, among the nations engaged in air traffic control (Niam, 2011). The parties aim to achieve a consensus on the determination of FIR limits by engaging in a methodical negotiation process and fostering open dialogue. This consensus will consider various factors, including geographical, operational, legal, and interest-related considerations specific to each country involved. The agreement pertaining to the settlement of FIR limits holds significant implications for the regulation of air traffic, coordination between states, and the maintenance of aviation security (Tri Novianto, 2022). Through the establishment of a well-defined consensus, nations can collaborate to effectively safeguard the security, optimize the efficacy, and facilitate the seamless flow of air traffic within a

specific region. Additionally, this cooperative approach serves to mitigate the potential for conflict or tension arising from territorial disagreements.

In the context of the Agreement on Settling the Flight Information Region (FIR) Boundary Line, various challenges frequently emerge during the process of resolving these issues. One recurring issue that frequently arises pertains to the presence of disputes or disagreements concerning the delineation of FIR boundaries among the nations involved. Disputes of this nature may arise as a result of divergent interpretations of bilateral agreements, discord concerning well-defined geographical boundaries, or conflicting assertions pertaining to maritime sovereignty or territorial claims (Fahrazi, 2019; Setyadiharja, 2016).

Moreover, discrepancies in strategies or protocols for air traffic management can also give rise to complications. Differences in air traffic control practices, communication procedures, and language barriers among the participating countries can pose challenges to coordination and collaboration within a shared Flight Information Region (FIR). The presence of inconsistencies in policies and operational practices can give rise to operational challenges for both airlines and users of flight services.

In the context of Indonesia, various issues frequently arise in relation to the Agreement on Settling the Flight Information Region (FIR) Boundary Line, encompassing multiple dimensions. One potential concern arises from the establishment of FIR boundaries in certain areas, which may give rise to border disputes between Indonesia and its neighboring countries (KHAIRUNNISA, 2016). Disputes may arise as a result of varying interpretations of legal documents, historical assertions, or intricate geographical demarcations. Furthermore, the diverse strategies employed in the management of air traffic between Indonesia and its neighboring countries may give rise to potential challenges. Air traffic control policies and procedures vary among different countries, encompassing the establishment of flight routes, issuance of instructions to pilots, and utilization of radio frequencies. The misalignment of air traffic in the FIR border area has the potential to impact both the efficiency and safety of operations. Moreover, the coordination of air traffic control and surveillance systems among the participating nations presents significant challenges (Sofa et al., 2021). The complexity of communication, data exchange, and coordination among Indonesian aviation authorities and neighboring countries can be attributed to various factors such as language barriers, technological disparities, and infrastructure misalignment.

The signing ceremony for the agreement pertaining to the transfer of FIR control from Singapore was conducted by Minister of Transportation Budi Karya Sumadi and Singapore's Minister of Transport S. Iswaran, on Bintan Island, located in the Riau Archipelago. The agreement was witnessed firsthand by President Jokowi and Prime Minister Lee Hsien Loong of Singapore.

Despite the Government's assertion of assuming control over the Kepri-Natuna Flight Information Region (FIR), it appears that Singapore continues to maintain air space management in that specific area of the region. This pertains to the agreement concerning the Provision of Aviation Services (PJP) within the flight information area situated in the Indonesian FIR, which is in accordance with the boundaries of the territorial sea. Under this agreement, Indonesia has granted the provision of procedural and jurisdictional privileges (PJP) to Singapore within specific regions of the Indonesian Flight Information Region (FIR) that are adjacent to the Singapore FIR. The area that remained under the jurisdiction of Singapore was not referenced. Nevertheless, the delegation of flight services in specific regions was granted to the Singapore authorities by the Government, exclusively for flights operating within the altitude range of 0 to 37,000 feet. Flights operating at altitudes of 37,000 feet and higher have recently come under the jurisdiction of the Indonesian authorities. The issue at hand pertains to the infrequency with which traffic, specifically civil aviation traffic, exceeds an altitude of 37,000 feet. Typically, civil aviation operates at altitudes exceeding 37,000 feet for the purpose of traversing airspace. The Singaporean government has officially declared that the aforementioned agreement will facilitate the commercial expansion of Changi Airport. Based on reports from Singaporean media outlets, such as Channel News Asia, it has been stated that Indonesia granted the delegation for a duration of 25 years.

The ratification of the Agreement on Adjustment of the Flight Information Region (FIR) Boundary Line, signed on January 25, 2022, was officially announced by the Government of Indonesia on September 8, 2022, through Presidential Decree Number 109 of 2022. Subsequently, the release of the presidential regulation and the FIR Agreement ensued. These documents were provided as supplementary materials.

Upon initial examination, the ratification of the FIR Agreement appears to be a triumph for the Government of Indonesia, as it has successfully adhered to the prescribed deadline for assuming control of the airspace, as outlined in Article 458 of the Aviation Law (UU). Upon closer examination, it becomes evident that the FIR Agreement encompasses

several articles that impose significant burdens on Indonesia. An extensive examination of this agreement is necessary to ascertain its impact on Indonesia, determining whether it confers benefits or disadvantages to the country.

The agreement pertains to the Provision of Aviation Services (PJP) in the flight information area located in the Indonesian FIR. It confers procedural and jurisdictional privileges to Singapore in certain areas of the Indonesian FIR that are adjacent to the Singapore FIR. However, the precise geographical region falling within the jurisdiction of Singapore remains unspecified. The Indonesian government has granted exclusive authority to the Singapore authorities for flight services in specific regions, limited to flights operating within the altitude range of 0 to 37,000 feet. The Indonesian authorities have recently assumed regulatory oversight over flights conducted at altitudes exceeding 37,000 feet. The subject under consideration pertains to the scarcity of air traffic, specifically in the realm of civil aviation, surpassing an elevation of 37,000 feet within the designated areas. In the realm of civil aviation, it is customary for aircraft to operate at elevated altitudes in order to navigate through airspace. It is noteworthy that the Singaporean government has officially expressed that the agreement will effectively facilitate the commercial expansion of Changi Airport, highlighting the potential advantages derived from this particular arrangement.

In order to effectively tackle the concerns pertaining to the transfer of FIR control and the ongoing participation of Singapore in air space management within the Kepri-Natuna FIR region, it is imperative for the governments of Indonesia and Singapore to adopt proactive strategies. First and foremost, it is imperative to foster an environment of open and transparent communication in order to elucidate the stipulations and limitations of the agreement, thereby establishing a mutual comprehension of the rights and obligations held by each nation involved. This entails engaging in discussions and resolving any uncertainties or inconsistencies pertaining to the assignment of flight services and the particular areas falling within Singapore's jurisdiction. It is recommended that regular consultations and communication channels be established in order to effectively address emerging concerns and facilitate efficient coordination.

Furthermore, it is imperative for both governments to place a high level of importance on the synchronization of air traffic management practices and procedures. This involves the coordination of regulations, communication protocols, and operational standards in order to improve interoperability and efficiency within the shared airspace. Collaborative efforts such as joint training programs and exchanges of expertise among

aviation authorities have the potential to foster a shared comprehension and enhance the efficacy of collaboration in the realm of air traffic management.

In addition, it is imperative to establish and employ ongoing monitoring and evaluation mechanisms in order to effectively assess the execution and consequences of the FIR Agreement. Periodic evaluations can effectively identify areas for enhancement, mitigate any unforeseen repercussions, and uphold the ongoing pertinence and mutual advantages of the agreement for both nations. The process of evaluation should encompass pertinent stakeholders, such as governmental entities, aviation authorities, and industry representatives, in order to obtain a wide range of perspectives and valuable insights. It is imperative for both governmental entities to uphold a collaborative and diplomatic stance during the process of resolving these matters. In the event of any conflicts or divergences, it is imperative to resolve them through nonviolent diplomatic discussions and, if required, by utilizing established frameworks for resolving disputes. By cultivating an atmosphere characterized by trust, mutual respect, and proficient communication, governmental entities can strive to identify mutually agreeable resolutions that uphold the interests and sovereignty of both Indonesia and Singapore, all the while advancing the cause of secure and efficient air traffic management within the region.

#### **4. CONCLUSION**

The issues surrounding the transfer of FIR control and the ongoing involvement of Singapore in air space management require proactive measures and collaborative efforts from the governments of Indonesia and Singapore. To address these concerns, both nations should prioritize open and transparent communication to clarify the agreement's provisions and boundaries. Harmonizing air traffic management practices and procedures is crucial to ensure efficient coordination and interoperability. Establishing ongoing monitoring and evaluation mechanisms will enable both countries to assess the implementation and impact of the FIR Agreement. Regular reviews should involve relevant stakeholders to gather diverse perspectives and insights. Maintaining a diplomatic approach, resolving disputes through peaceful negotiations, and upholding trust and mutual respect are essential. By prioritizing these actions, the governments can work towards mutually beneficial solutions that uphold national interests, sovereignty, and promote safe and efficient air traffic management in the region.

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