

## Implementation Of The Flight Information Region Boundary Adjustment Agreement Between Indonesia And Singapore

Salsa Nur Ramadhani Hermandasari<sup>1</sup>; Herlita Eryke<sup>2</sup>.

Faculty of Law, University of Bengkulu, Indonesia<sup>1,2</sup>.

Email: (salsanurramadhani2@gmail.com, herlitaeryke@unib.ac.id)

Manuscripts received : 15/04/2026, Revision and Review : 15/06/2026, Approved 29/06/2026

### Abstract

*Flight Information Region (FIR) boundary adjustment agreement which was agreed upon by the Indonesian Government with the Singapore Government on January 25 2022, which was later ratified through Presidential Decree No. 109 of 2022, is the result of Indonesia's long struggle. In the implementation of the FIR boundary adjustment agreement, issues regarding Indonesia's sovereignty and the substance of the agreement are not in accordance with Indonesian national regulations, such as Article 2 of the FIR adjustment agreement, Indonesia is obliged to delegate management of Riau air to Singapore's FIR and Article 7 which states that the duration of this agreement is valid for 25 years. . This is not in line with the mandate of the Aviation Law which states that all flight navigation services managed by other countries must be completely taken over by Indonesia by 2024. So it is necessary to conduct research on the Implementation of the FIR Boundary Adjustment Agreement between Indonesia and Singapore. With analytical material based on the efforts of the Indonesian Government in resolving the Riau FIR problem and implementing the Indonesian FIR agreement with Singapore which was agreed upon by both parties. This research uses a juridical-normative legal research method with a historical approach, a statutory approach and a conceptual approach. The research results show that First, there is a long history of the Indonesian Government's efforts to take over air sovereignty and FIR management in the Riau Islands airspace. Second, the implementation of the FIR boundary adjustment agreement between Indonesia and Singapore has been implemented, but the Indonesian Government needs to re-evaluate the substance of the FIR Agreement.*

**Keywords :** Management, FIR, Agreements, Indonesia, Singapore, Air Sovereignty, Air Space, Flight Information Region, ICAO, International Aviation Law

### A. Introduction

The territory of a country is a geographical area subject to the jurisdiction and government of that country. The region has geographical boundaries determined by factors such as international treaties, history, and physical geography. In Article 1 of the 1933 Montevideo Convention, to be able to be said to be a complete country, it must have conditions, namely, permanent population, territory, sovereign government, and the ability to establish international relations with other countries. That if a country is established, then the country must have an area that will be a place for the development of a country. Therefore, territory is an important element in the establishment of a country.

State sovereignty is a state that has supreme *authority* free from the power of other

countries, free in the broadest sense both inward and outward, but nevertheless must still pay attention to international law and manners in international relations.<sup>1</sup> One of the constituent elements of a complete state must have a territory or a *defined territory*.<sup>2</sup> Every sovereign state has the authority to regulate land, sea, and air territory for the purposes of defense, security, aviation traffic safety and others.<sup>3</sup>

Regarding the sovereignty owned by a country, this is in line with Article 2 of the *United Nations Convention on the Law of the Sea* (UNCLOS) 1982, which states that the sovereignty of the country's territory is not only land territory, but also includes airspace and oceans which are an inseparable unit. Therefore, when the state already has a land area, the air automatically belongs to the state concerned based on the general law principle of "*cujus est solum ejus est usque ad coelum*". So that the sovereignty owned by a country is absolute sovereignty and all forms of management and utilization of a country's airspace are fully managed by that country.

One of the uses of air carried out by the state is through flights. 1903 was the first airplane invented by the *Wright* brothers that managed to fly to an altitude of 852 feet. Until the start of World War I in 1914, aircraft were operated internationally not only to carry cargo, but also as military assets. The use of aircraft then raises the question of air sovereignty. With the growing use of airspace in the aviation sector, the 1919 Paris Convention was born to answer the problem of air sovereignty and it was decided that every country has absolute sovereignty over the airspace that covers its territory and waters. Article 1 of the 1919 Paris Convention grants sovereign rights in airspace to a country whose sovereignty is complete and exclusive over its territory. The treaty sought to reduce the confusion of different ideologies and regulations in each country by defining certain principles and provisions, which were later replaced by the 1944 Chicago Convention which specifically regulated international civil aviation governing the status of the air. In 1992, Indonesia has established Law Number 15 of 1992 concerning Aviation and then replaced it with Law Number 1 of 2009 concerning Aviation which is considered more in accordance with the development of aviation and guided by the 1944 Chicago Convention.<sup>4</sup> Based on Article 1 number 1 of Law Number 1 of 2009 concerning Aviation, it is stated that:

"Aviation is a unit of systems consisting of the use of airspace, such as aircraft, airports, air transportation, flight navigation, safety and security, the environment, as well as supporting facilities and other public facilities".

*The International Civil Aviation Organization* hereinafter referred to as ICAO was formed in 1947 administering the administration and governance of the 1944 Chicago Convention. ICAO's mandate to date has been to help countries achieve the highest possible level of uniformity between countries regarding civil aviation regulations, standards,

---

<sup>1</sup> H.K. Martono and Amad Sudiro, *National and International Public Air Law*, PT Rajagrafindo Persada, Jakarta, 2012, p. 64.

<sup>2</sup> Samidjo, *State Sciences*, CV. Armico, Bandung, 1997, p. 31. In Adri Patton, *Indonesian Regional Law*, UB Press, Malang, 2011, p. 18.

<sup>3</sup> H.K.Martono and Amad Sudiro, *Loc.cit*

<sup>4</sup> Alfaris, "Juridical Analysis of Supervision and Control of Indonesian Aerospace Areas on Foreign Aircraft Traffic Reviewed from International Law", *Hasanuddin University Journal*, 2014, p. 58.

procedures, and organizations.<sup>5</sup> And to support flight traffic regulation, for the sake of safety and security in flight, the determination of the *Flight Information Region* is further called an FIR by ICAO.

Based on Annex 11 of the 1944 Chicago Convention, the definition of FIR is "*an airspace of defined dimensions within which flight information service and alerting service are provided*". In other words, the FIR serves to provide information about flights and warnings aimed at passing aircraft so that there are no collisions or other technical errors. When a country does not have the ability to regulate FIRs over its territory, Annex 11 stipulates that the state can delegate the management of FIRs to other countries that are more competent. The management of Indonesian airspace to provide information services in Indonesian airspace is divided into 2, namely the *Jakarta Air Traffic Service Center* for Jakarta FIR covering an area of 2,593,150 Km<sup>2</sup> covering the island of Sumatra, Java Island and part of the island of Kalimantan and *Makassar Air Traffic Service Center* for Ujung Pandang FIR covering an area of 4,946,543 Km<sup>2</sup> covering the island of Sulawesi, Kalimantan Island, the island of Bali, Nusa Tenggara Island, Maluku Island and Papua Island,<sup>6</sup>



Figure 1. Indonesian FIR

But part of Indonesia's airspace over the Riau Islands is still controlled by Singapore. Thus, it requires civil and military flights in Indonesian airspace to report with an FIR from Singapore or Malaysia even though they are in Indonesian territory, for example, flights from Natuna to Tanjung Pinang must first report to the Singapore FIR which holds flight navigation in the Riau and Natuna Islands areas.<sup>7</sup> This happened because at the ICAO meeting in 1946 in Dublin, Ireland, the ICAO appointed the United Kingdom to manage the Riau and Natuna Islands based on Annex 11 2.1.1:

*"Contracting States shall determine, in accordance with the provisions of this Annex and for the territories over which they have jurisdiction, those portions of the airspace and those aerodromes where air traffic services will be provided. They shall thereafter arrange for such services to be established and provided in accordance with the provisions of this Annex, except that, by mutual agreement, a State may delegate to another State the responsibility for establishing and providing air traffic services in flight information regions, control areas or control zones extending over the territories of the former".*

<sup>5</sup> The Ministry of Foreign Affairs of the Republic of Indonesia, "*International Civil Aviation Organization (ICAO)*", retrieved June 10, 2026 from [https://kemlu.go.id/portal/id/read/4255/halaman\\_list\\_lainnya/international-civil-aviation-organization-icao](https://kemlu.go.id/portal/id/read/4255/halaman_list_lainnya/international-civil-aviation-organization-icao)

<sup>6</sup> AirNav Indonesia, "*Airspace Services*", accessed on June 10, 2026 from <https://airnavindonesia.co.id/air/space>

<sup>7</sup> Nanda Indrawati, "*Opportunities and Challenges in the Signing of the Flight Information Region (FIR) Adjustment Limit Agreement between Indonesia and Singapore*", *Journal of Development Law Paradigm*, Vol 7, No 2, August 2022, p.20.

"The Participating States shall determine, in accordance with the provisions of this Annex and for the territories over which they have jurisdiction, the portions of airspace and airports over which air traffic services shall be provided. The Brand shall further regulate that such services be provided and provided in accordance with the provisions of this Annex, except that, by mutual agreement, a State may delegate to another State the responsibility for establishing and providing air traffic services in the flight information area, controlling areas or zones of control extending to the former territories"

In this paragraph, the rules for delegating FIR management in Indonesian territory by ICAO to the United Kingdom are used. Then when Singapore became independent in 1965, the British delegated the service because Singapore was a British commonwealth country.<sup>8</sup> Until January 25, 2022, the FIR agreement between Indonesia and Singapore was signed, which was later ratified through Presidential Regulation Number 109 of 2022, hereinafter referred to as Presidential Regulation No . 109 of 2022 and revoked Presidential Decree No. 7 of 1996. So that the Riau Islands area which includes Tanjung Pinang and Natuna is managed by the Jakarta FIR, which automatically increases the area of the Jakarta FIR by 249,575 km<sup>2</sup>.<sup>9</sup>



Figure 2. FIR Before and After the Change

However, after the enactment of Presidential Regulation No. 109 of 2022, there are still things that are inappropriate and not guided by previous regulations which then raise issues regarding the sovereignty of the Indonesian state, such as the regulation on navigation services which in Article 458 of Law No. 1 of 2009 states that navigation services managed/delegated to other countries must be taken over by Indonesia completely no later than 15 years after the Aviation Law comes into effect. Meanwhile, in Article 7 of the agreement agreement between the Indonesian government and the Singapore government on adjustments between the Jakarta FIR and the Singapore FIR, the FIR agreement is valid for 25 years and can be extended again. So that issues related to the period must be an important consideration and review by the government.

Another issue is that in Article 2 of the agreement agreement between the Indonesian government and the Singapore government on the adjustment between the Jakarta FIR and the Singapore FIR, Indonesia is obliged to delegate to Singapore for flight navigation services and is managed by Singapore up to an altitude of 37,000 feet. While Indonesia manages fully at an altitude of more than 37,000 feet. This delegation agreement has caused criticism from

<sup>8</sup> FIR (*Flight Information Region*) In Indonesian Airspace, accessed on June 10 from <http://fhukum.unpatti.ac.id/artikel/hukum-internasional/358-fir-flight-information-region>

<sup>9</sup> Cabinet Secretariat of the Republic of Indonesia, "Five Important Elements of the Indonesia-Singapore FIR Adjustment Agreement," accessed June 10, 2026 from <https://setkab.go.id/lima-elemenpenting-kesepakatan-penyesuaian-fir-indonesia-singapura/>

various circles. Because of the rare civil aviation traffic that is above an altitude of 37,000 feet. Civil flights above 37,000 feet are done just to pass.<sup>10</sup> This will certainly cause losses for Indonesia because in reality Singapore still controls Indonesia's FIR airspace. The delegation of airspace to other countries is actually not prohibited under international air law. Indonesia is also currently still managing FIRs from other countries such as Australia's *Christmast Island* FIR facilitated by *Indonesia's Air Traffic Control (ATC)*. In contrast to previous research which generally examines FIR from the perspective of airspace sovereignty alone, this study places FIR appropriately within the framework of international air law as an instrument of air navigation safety based on Annex 11 of the 1944 Chicago Convention. The scientific contribution of this research lies in a normative analysis that examines the gap between the substance of the 2022 Indonesia-Singapore FIR Agreement and the mandate of Article 458 of Law Number 1 of 2009 concerning Aviation, as well as identifying its practical implications for national aviation sovereignty and safety. Thus, this research is expected to provide constructive legal recommendations for the evaluation and renewal of the Indonesia-Singapore FIR Agreement in the future.

## B. Research Methods

This research is a normative juridical research that focuses on the study of legal norms in laws and regulations and international agreements (*law in books*). The research is carried out through literature studies by identifying and analyzing legal principles, especially those related to international agreements in the field of air and airspace law. The approaches used include conceptual *approach*, statute *approach*, and historical *approach*. A conceptual approach is used to elaborate the relationship between the concept of *Flight Information Region (FIR)* and the principle of air sovereignty based on the doctrine of international air law, including distinguishing FIR as an instrument of aviation navigation safety from the concept of airspace sovereignty. The historical approach is used to trace the development of FIR regulations since the establishment of ICAO, while the legislative approach examines applicable regulations both nationally and internationally. In addition, the analysis of the substance of the Indonesia-Singapore FIR Agreement was carried out using the method of interpretation of international law based on *the Vienna Convention on the Law of Treaties 1969*, especially Articles 31-33 concerning the interpretation of international agreements in good faith in accordance with the general meaning of the provisions of the agreement in its context and purpose. The data source used is secondary data consisting of primary, secondary, and tertiary legal materials. Primary legal materials include national laws and regulations and international conventions, such as the 1945 Constitution of the Republic of Indonesia, Law No. 24 of 2000, Law No. 1 of 2009, the 1944 Chicago Convention, the 1969 Vienna Convention, and the 2022 Indonesia-Singapore FIR Agreement. Secondary legal materials are in the form of literature, journals, and expert opinions, while tertiary legal materials are in the form of dictionaries and encyclopedias.

---

<sup>10</sup> Elza Astari, "Part of the FIR is still quasi-Singapore, the honor of the Republic of Indonesia as a big country Highlighted", accessed Date June 10, 2026 from <https://nasional.kompas.com/read/2022/01/26/11264621/sebagian-fir-masih-dikuasai-Singaporehonor-to-be-large-country?page=all>

Data collection was carried out through document studies, while data analysis used qualitative juridical methods with a descriptive-analytical approach. Conclusions are drawn deductively, from general provisions to specific problems, resulting in a systematic and accountable analysis.

## C. Results and Discussion

### 1. Indonesia's Efforts to Resolve FIR Issues in the Riau Islands Region

The management of Riau's air to Singapore's FIR is a delegation of FIR arrangements decided at the Regional Aviation Navigation (RAN) *meeting* attended by ICAO participating countries. The RAN *Meeting* or regional air navigation meeting is a meeting held by ICAO on a large scale every 10 years to discuss the making, division and determination of a country in the management of FIR.<sup>11</sup>

In 1973 the first meeting was organized in Honolulu by the ICAO Asia Pacific region. At this meeting, Singapore submitted a proposal to manage the airspace in Natuna waters. With the reason that Singapore wants to protect its territory because the supervision of the Jakarta FIR cannot reach the waters of Natuna and Riau. So that Singapore feels threatened if there is a sudden attack by foreign aircraft just by passing through the Natuna waters.<sup>12</sup>

With the initiative to manage airspace in Natuna waters, Singapore hopes that the area will be clean of air violations and not become a threat to them. Therefore, ICAO in the Asia Pacific region approved the proposal from Singapore, as well as Indonesia. Indonesia agreed with the consideration that the waters of Natuna at that time were still international waters and would not interfere with Indonesia's sovereignty which at that time did not have UNCLOS 1982.<sup>13</sup> Singapore's FIR is fully managed in Natuna waters above 20,000 feet. At that time, Indonesia continued to make infrastructure improvements related to flight meetings such as building military radars that would later be able to monitor flights in all Natuna waters.

Then in 1983, through the second RAN *meeting* in Singapore, Indonesia proposed to manage the FIR in the Riau and Natuna archipelagos, but this was rejected because at that time Indonesia was considered still incapable in terms of human resources and complete infrastructure and technology. Indonesia's human resources and technology capabilities have not been able to reach the Natuna archipelago. So Singapore still manages the FIR in the Riau and Natuna islands.<sup>14</sup>

At the third meeting in 1993 held in Bangkok, Indonesia submitted (*Working Paper*) No. 55 namely: AIS/FAC/3-WP/55 19/2/93 Agenda Item 5 *Airspace Organization and ATS Units including en-route and terminal area Aids: "RE-ALIGNMENT OF INDONESIAN FIR"* on

---

<sup>11</sup>Agus Pramono, "Flight Information Region (FIR) Services in the Airspace of Sovereign State Territories", accessed on March 15, 2026 from [http://eprints.undip.ac.id/46737/1/Seminar\\_nasional.pdf](http://eprints.undip.ac.id/46737/1/Seminar_nasional.pdf)

<sup>12</sup> Moh.Iksan Tatang, "Indonesian Practice in the Utilization of Airspace", *Journal of International Law*, Vol 3, No 6, Bandung 2006, p. 190

<sup>13</sup>Ramadhita Lestari, "Indonesian Diplomacy in Resolving the FIR (*Flight Information Region*) Dispute Over the Natuna Islands with Singapore", *Student Online Journal*, 2016, Vol 1, No 1, p. 6.

<sup>14</sup> Harry P Haryono, "Indonesian Airspace: Have We Utilized and Protected It?", *Journal Of International Law*, 2009, Vol 6, No 4, p. 533.

"Activities to be planned to be carried out over the Natuna Islands". The proposal aims to review the boundaries of Singapore's FIR, due to changes in Indonesia's territorial boundaries based on the 1982 UN Convention on the Law of the Sea (UNCLOS 1982) as well as proposing an intention to take over the FIR of Natuna's airspace.<sup>15</sup>

At this third meeting, *Working Paper No.55* was agreed but the material on the amendment of the FIR, ICAO suggested that it be discussed bilaterally between Indonesia and Singapore. Because in the juridical aspect, the two state delegations have different perspectives on the territory of Indonesia.<sup>16</sup> Indonesia and Singapore have a long history of bilateral cooperation. The government continues to seek to take over the management of FIR from Singapore by further improving the quality of human resources and infrastructure as a supporting part in the aviation world. In 1996, Indonesia and Singapore agreed on an agreement on the FIR in Riau airspace. However, in 1996, Indonesia did not manage Riau's airspace and only got RANS Charge on behalf of Indonesia. Indonesia and Singapore have again entered into a bundling bilateral agreement, namely the DCA Agreement, the Extradition Agreement, and the FIR Adjustment Agreement. In 2007 the DCA Agreement was agreed upon by Indonesia and Singapore, but the House of Representatives did not ratify it because it was considered detrimental to Indonesia.

Until finally after discussions and long meetings between Indonesia and Singapore, 3 agreements were agreed and one of them was an agreement on adjusting the FIR limit between Indonesia and Singapore which was ratified into Presidential Regulation No. 109 of 2022 and 2 other agreements were ratified into the Law.

## 2. Implementation of FIR Boundary Adjustment Agreement Between Indonesia and Singapore

There are two important points in the mandate of Article 458 of the Aviation Law, namely the first is the takeover of aviation navigation services and the second is the establishment of its organizing institutions. AirNav Indonesia is a milestone in the world of national aviation of the Indonesian nation, because AirNav Indonesia is the only flight navigation operator in Indonesia which was previously handled by PT Angkasa Pura I (Persero) and PT Angkasa Pura II (Persero) as well as the Ministry of Transportation which manages UPT airports throughout Indonesia. AirNav Indonesia was formed in accordance with the mandate of Law No. 1 of 2009 concerning Aviation and Government Regulation No. 77 of 2012 concerning Perum LPPNPI.

The formation of AirNav Indonesia is also supported by ICAO which advises Indonesia to form a special institution for flight navigation services, previously Indonesia's aviation navigation services were managed by PT Angkasa Pura I (Persero) and PT Angkasa Pura II (Persero) Airport Technical Implementation Unit of the Directorate General of Civil Aviation, Regional Government, Private, and Military. This results in the lack of uniformity regarding navigation service standards, especially in terms of management, technical, and operational.

---

<sup>15</sup> Moh.Iksan Tatang, *op.cit*, p. 190

<sup>16</sup> Anggi Kusumadewi, Abraham Utama, "Indonesia-Singapore Air War" accessed on March 10, 2026 from <https://www.cnnindonesia.com/nasional/20151004164716-20-82695/perang-udara-indonesia-singapura>

The management of navigation services by several operators causes differences in service standards and navigation policies because each operator has different SOPs (*Standard Operating Procedures*). Therefore, Law No. 1 of 2009 on Aviation confirms the need to establish a single manager of aviation navigation services and special rules related to navigation services and can assist in the takeover of Indonesia's FIR which is controlled by Singapore.

In this case, AirNav Indonesia has made efforts to take over Singapore's FIR, namely by preparing human resources to be assigned to navigation operations in the Riau Islands, improving aviation navigation facilities and technology in the field of telecommunications ADS-B (*Automatic Dependent Surveillance Broadcast*), modernizing CNS-A (*Communication, Navigation, Surveillance and Automation*) equipment.<sup>17</sup> Then in the formation of the FIR agreement, Indonesia does not seem to see this as a matter of sovereignty. This can be seen from the name of the FIR agreement, namely "boundary adjustment" which indicates that indeed this agreement is not a form of complete takeover of Indonesian airspace. Therefore, with the regulation of the takeover of Indonesian aviation navigation services as mandated by Article 458 of the Aviation Law. The Indonesian government should be able to take over the full management of the FIR from Singapore.

Regarding the implementation of the Indonesia-Singapore FIR agreement, technically Indonesia and Singapore have enforced an FIR agreement as of March 21, 2024. The two countries also enacted other agreements that were *bundling* with the *Re-Alignment Flight Information Region* (FIR) agreement, namely the *Defence Cooperation Agreement* (DCA) and the *Extradition Treaty*. The DCA agreement that has been agreed since 2007 failed to be ratified by the House of Representatives, which then made the takeover of the FIR and the extradition treaty agreement constrained. At that time, the House of Representatives did not agree to a defense cooperation agreement in Indonesia's airspace and sea for the exercise of Singapore's armed forces. Considering that in 2003 the MTA (*Military Training Area*) agreement was also canceled because Singapore committed violations and also involved other countries and entered Indonesian territory.<sup>18</sup>

According to the author, if you look at the three agreements that were packaged and implemented at the same time, there is an interest of Singapore in Indonesian territory, especially in the Riau Islands for military training of the Singapore army. So Singapore is trying to "barter" the DCA agreement with the extradition agreement and the FIR agreement. Then, if you look at the substance in the Articles of the *Realignment Flight Information Region Agreement* between Indonesia and Singapore, it still raises polemics regarding Indonesia's sovereignty. Therefore, this agreement must be re-evaluated by Indonesia because there are still many inconsistencies, especially clauses that are quite crucial such as the time of entry into force of the agreement which is not in accordance with the mandate of the Aviation Law

---

<sup>17</sup> Lenny Husna, Agus Riyanto, "The Role of the Government in the Attempt to Take Over the Flight Information Region (FIR) of Singapore over the Riau Islands Airspace" *Jurnal Cahaya Keadilan*, Volume 7 Number 2 October 2019, Batam, 2019, p. 407

<sup>18</sup> Ministry of Foreign Affairs, "Indonesia-Singapore Simultaneously Enforce Airspace, Defense and Extradition Services Agreement", accessed on June 10, 2026 from <https://damascus.kemlu.go.id/portal/id/read/5824/berita/indonesia-singapura-berlakukan-serentak-airspace-service-agreement-defense-and-extradition>

and there is still Singapore's interference in Indonesia's air management which then has an impact on the sovereignty of the Indonesian state.

Indonesia's sovereignty is questioned when it has to ask permission to fly and land in its own airspace from another country (Singapore) which is only given the delegation to manage its airspace. If Singapore controls control over Indonesia's territorial territory, especially in sectors A and B in Indonesian airspace over the Riau and Natuna Islands, of course, all flights of foreign aircraft that do not have a permit or are illegal that pass over Indonesia's territorial territory are unknown and this has an impact on Indonesia in maintaining the security of its country. Then this makes Indonesia not optimal in anticipating the risk of threats that can come at any time in its territory, especially for the Riau and Natuna Islands areas.

However, Spokesperson for the Coordinating Minister for Maritime Affairs and Investment Jodi Mahardi said that the granting of navigation authority or the provision of aviation services agreed in the signing of the aviation information area boundary adjustment agreement or FIR between Indonesia and Singapore has nothing to do with Indonesia's sovereignty and unreadiness to fully manage the FIR, but this agreement looks at the lens of air traffic regulation and this delegation for the sake of flight safety and security.<sup>19</sup> However, according to the author, the FIR agreement agreement and the ratification of the FIR agreement into Presidential Regulation No. 109/2022 are rational actions taken by the Indonesian government considering Indonesia's long struggle in taking over Riau air management from Singapore. Therefore, the Government must be able to continue to strive to be able to take full control of Riau which is the absolute sovereignty of the Indonesian state which should not be interfered with by other countries. In this case, it is necessary to understand in depth that based on the doctrine of international air law, the Flight Information Region (FIR) is actually an instrument of air navigation safety service as stipulated in Annex 11 of the 1944 Chicago Convention, not a determination of the territorial sovereignty of a country. The view that places the FIR as a purely sovereign issue needs to be balanced with the understanding that the delegation of the management of the FIR to another country that is more technically competent is a recognized practice in international air law, solely for the sake of aviation safety. This is also the main argument of the Indonesian government and ICAO in supporting the temporary delegation scheme to Singapore. However, the fact that the delegation is intended to be temporary actually makes the 25-year clause in Article 7 of the FIR Agreement an urgent normative issue, considering that the provisions exceed the time limit mandated by Article 458 of Law Number 1 of 2009. Therefore, a substantive evaluation of this agreement is not only relevant from the perspective of sovereignty, but also from the perspective of fulfilling national legal obligations and Indonesia's commitment to the independent management of airspace. As a concrete step, the Indonesian government needs to strengthen AirNav Indonesia's technical capacity as a key prerequisite for the full takeover of FIR management, as well as establish a periodic evaluation mechanism for the implementation of the FIR Agreement which includes technical and legal reviews every five

---

<sup>19</sup> Elza Astari Retaduari, "Singapore's FIR Polemic, between Safety and Sovereignty Issues", accessed 10 June 2026 from <https://nasional.kompas.com/read/2022/02/18/07050091/polemik-fir-singapura-antara-isu-security-and-sovereignty?page=all>

years.

#### D. Conclusions and Recommendations

Indonesia has made efforts to be able to resolve the issue of the FIR of the Riau and Natuna Islands through multilateral and bilateral meeting efforts. Multilateral meeting efforts are carried out by holding 3 RAN Meetings attended by ICAO participating countries. In the RAN Meeting 1 and 2, Indonesia did not yield results. Until the RAN Meeting 3, ICAO advised Indonesia to discuss bilaterally the Riau Islands FIR which is controlled by Singapore. The Indonesian government has always been aggressive in improving infrastructure, establishing AirNav as an institution that provides Indonesian aviation navigation services and improving the quality of human resources and aviation technology. Until finally on January 25, 2022, the Governments of Indonesia and Singapore agreed on an agreement to approve the adjustment of the FIR limits of the Riau and Natuna Islands. However, Indonesia did not take full ownership of the management of the FIR in the Riau Islands airspace. Therefore, Indonesia must be able to strengthen bilateral relations with Singapore so that Indonesia can evaluate the content of the FIR agreement that does not conflict with Indonesian national regulations.

In implementing the FIR boundary adjustment agreement, both Indonesia and Singapore have implemented the *Realignment Flight Information Region Agreement* since this agreement was agreed and approved by ICAO on March 21, 2024. Indonesia and Singapore have also implemented 2 agreements that are packaged with other FIR limit adjustment agreements, namely the DCA and the extradition agreement, both of which have also been ratified into the Law. However, regarding the substance of the *Realignment Flight Information Region Agreement* between Indonesia and Singapore, it still raises issues regarding Indonesia's sovereignty. Therefore, this agreement must be re-evaluated by Indonesia because there are still many inconsistencies, especially clauses that are quite crucial such as the time of entry into force of the agreement which is not in accordance with the mandate of the Aviation Law and there is still Singapore's interference in Indonesia's air management which then has an impact on the independence of national airspace management. Based on these findings, this study recommends: first, the Indonesian government needs to renegotiate Article 7 of the FIR Agreement which regulates a period of 25 years to be aligned with the mandate of Article 458 of the Aviation Law; second, it is necessary to establish a periodic evaluation mechanism for the implementation of the FIR Agreement every five years which includes technical and legal aspects; third, strengthening AirNav Indonesia's technical capacity, especially in the ADS-B and CNS-A systems, needs to be made a national priority as a prerequisite for taking over full FIR management from Singapore.

## References

### A. Laws and Regulations

- Indonesia. *Law on State Administrative Courts*. Law No. 5 of 1986.
- . Constitution of the Republic of Indonesia in 1945.
  - . Law Number 1 of 2009 concerning Aviation.
  - . Law Number 24 of 2000 concerning International Agreements.
- Government Regulation No. 3 of 2001.
- Regulation of the Minister of Transportation Number PM 55 of 2016.
- Presidential Regulation of the Republic of Indonesia Number 109 of 2022 concerning the Ratification of the Agreement between the Government of the Republic of Indonesia and the Government of the Republic of Singapore concerning the Adjustment of Flight Information Region Boundaries.

### B. International Treaties

- Convention on International Civil Aviation (Chicago Convention)*, 1944.
- Vienna Convention on the Law of Treaties*, 1969.
- Montevideo Convention on the Rights and Duties of States*, 1933.
- United Nations Convention on the Law of the Sea (UNCLOS)*, 1982.
- 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 Jakarta Flight Information Region and the Singapore Flight Information Region*.

### C. Journal

- Amrizal, Mansur. "Flight Information Region (FIR): Implications of Singapore's Control of Air Traffic Control in the Riau Islands." *Journal of the Indonesian Defense University*, 2011.
- Farida, Elfia. "The Obligations of the State of Indonesia to the Ratified International Treaties." *Administrative Law & Governance Journal*, 2020.
- Please, please, please. "Implications of International Law on Singapore's Flight Information Region (FIR) on Indonesian Airspace." *JOM Faculty of Law 2*, no. 1 (2015).
- Wiradipradja, E. Saefullah. "State Airspace Reviewed in Terms of International Law." *Indonesia Journal of International Law 6*, no. 4 (2009).
- Herlambang, Rahayu Saraswati. "Juridical Review of Indonesia-Singapore FIR Agreement." Thesis, Atma Jaya University Yogyakarta, 2016.
- Khoiriyah, M. "Indonesia's Attempt to Take Over FIR from Singapore." Thesis, University of Jember, 2016.

### D. Books

- Asshiddiqie., Jimly. *Introduction to Constitutional Law*. Jakarta: RajaGrafindo Persada, 2013.
- Adolf, Huala. *Aspects of States in International Law*. Jakarta: Raja Grafindo Persada, 2022.
- Amrizal, Mansur. *Flight Information Region (FIR): Implications of Singapore's Control of Air Traffic Control in the Riau Islands*. Jakarta: Unhan, 2010.
- Asikin, Zainal, and Amiruddin. *Introduction to Legal Research Methods*. Jakarta: PT Raja Grafindo Persada, 2016.
- Atmaka, Ekky Widha. *Get to know ICAO more closely*. New York: Eureka Media Press, 2023.
- Busroh, Abu Daud. *State Sciences*. Jakarta: Bumi Aksara, 2011.

- Kusumaatmadja, Mochtar, and Etty R. Agoes. *Introduction to International Law*. Bandung: Alumni, 2003.
- Hill, Boer. *International Law: Definition, Role and Function in the Era of Global Dynamics*. Bandung: Alumni, 2013.
- Martono, H.K., and Ahmad Sudiro. *Public National and International Air Law*. Jakarta: Rajawali Press, 2012.
- Marzuki, Peter Mahmud. *Legal Research*. Jakarta: Kencana, 2010.
- Nugroho, Yuwono Agung. *Sovereignty of Indonesian Airspace*. Jakarta: Bumi Intitama Sejahtera, 2011.
- Patton, Adri. *Indonesian Territorial Law*. New York: UB Press, 2011.
- Pramono, Agus. *Fundamentals of Air and Space Law*. Bogor: Ghalia Indonesia, 2011.
- Sefriani. *International Law: An Introduction*. Jakarta: RajaGrafindo Persada, 2011.
- Starke, J.G. *Introduction to International Law*. Jakarta: Sinar Grafika, 2010.
- Wiradipradja, E. Saefullah. *Introduction to Air and Space Law*. Bandung: Alumni, 2014.

## E. Others

- AirNav Indonesia, History of the Establishment of Perum LPPNPI, accessed June 10, 2026 from <https://airnavindonesia.co.id/sejarah-lppnp>
- Anggi Kusumadewi, Abraham Utama, "Indonesia-Singapore Air War" accessed on March 10, 2026 from <https://www.cnnindonesia.com/nasional/20151004164716-20-82695/perang-udara-indonesia-singapura>
- Bureau of Communication and Public Information, "Diplomatic Reception in the context of Indonesia's Candidacy to Become a Member of the ICAO Board for the 2016-2019 Period," Ministry of Transportation (06 November 2015) accessed on 13 March 2026 from <http://dephub.go.id/post/read/diplomatic-reception-in-context-Indonesia-candidacy-become-member-of-the-ICAO-board-period-2016-2019>
- Elza Astari, "Part of the FIR is still quasi-Singapore, the Honor of Indonesia as a Great State is Highlighted", accessed on June 10, 2026 from <https://nasional.kompas.com/read/2022/01/26/11264621/sebagian-fir-still-mastered-SingaporeHonor-ri-as-country-besar?page=all>.
- Flowering food, "fur (*Flight Information Region*) In Indonesian Airspace", accessed on Date May 7, 2026 from <http://fhukum.unpatti.ac.id/artikel/hukum-internasional/358-fir-flight-information-region>.
- ICAO, "ICAO is an official institution under the auspices of the United Nations (UN) established in 1944 to manage the administration and governance of the International Civil Aviation Convention (*Chicago Convention*)", Retrieved 7 April 2026 from <http://www.icao.int/about-icao/Pages/default.aspx>.
- Ministry of Foreign Affairs, "Indonesia-Singapore Simultaneously Enact Airspace, Defence and Extradition Services Agreement", accessed on 1 June 2026 from <https://damascus.kemlu.go.id/portal/id/read/5824/berita/indonesia-singapore-enacted-simultaneously-airspace-service-defence-and-extradition-agreement>
- Ministry of Transportation of the Republic of Indonesia, "*Leaders Retreat* Indonesia – Singapore Minister of Transportation: Second Country Committed to Follow Up on FIR Agreement", accessed on April 7, 2026 from <https://dephub.go.id/post/read/leaders-retreat-indonesia-%E2%80%93-singapore-hub-both-countries-committed-follow-up-Agreements-Agreements-FIR>.

- Kompas TV, "President Jokowi's Full Statement Signs Presidential Decree on Riau Islands Airspace from Singapore" accessed May 10, 2026 from <https://www.kompas.tv/video/326517/pernyataan-lengkap-presiden-jokowi-teken-perpres-fir-kepri-airspace-from-singapore>
- Natuna News, Accelerated FIR Takeover from Singapore's Hand, accessed on Staircase 13 May 2026 from <https://natunakab.go.id/pengambilalihan-fir-dari-tangan-singapura-accelerated/>
- Ridwan Harry, "The History of the Birth of ICAO as an International Civil Aviation Organization", accessed Date May 10, 2026 from <https://airportman.id/lahirnya-icao-sebagai-organisasi-penerbangan-Civil-International/>
- Cabinet Secretariat of the Republic of Indonesia, "Five Important Elements of the Indonesia-Singapore FIR—Adjustment Agreement," accessed June 10, 2026 from <https://setkab.go.id/lima-elemenpenting-kesepakatan-adjustment-fir-indonesia-singapore/>.
- Syarif Iqbal, "International Airspace Politics-Law: Indonesian and Singapore FIRs" accessed on April 7, 2026 from <https://www.hukumonline.com/berita/baca/lt5db677c38d68a/politik-international-airspace-law--fir-indonesia-and-singapore-by--syarif-iqbal?page=3>