



# Identification of Stakeholders on the Impact of Management of the Flight Information Region (FIR) Kepulauan Riau - Natuna

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**Abstract.** The Indonesian government is currently making diplomatic efforts between countries to maintain sovereignty in the border areas. This is evidenced by the effort to take over Kepulauan Riau and Natuna airspace. This study aims to identify stakeholders on the Impact of FIR Management in Kepulauan Riau-Natuna. The research method used was descriptive qualitative with a case study approach. Data collection techniques using secondary data that are to the case study. Data analysis uses triangulation techniques emphasizing methods, theory, and logic. The results show the identification of the Main Stakeholders, namely by the Implementing Technical of the Ministry of Transportation of the Republic of Indonesia and Singapore. Key Stakeholders in decision-making by the President of the Republic of Indonesia and the Prime Minister of Singapore. Ratification of the Treaty through Diplomacy takes over airspace for the next 25 years. It also supports stakeholders not related to the FIR Discussion on the occurrence of Contras from observers and academics who should only refer to International Law by the Government of Indonesia.

**Keywords:** Identification · Stakeholders · Impact · Management FIR

## 1 Introduction

A Flight Information Region (FIR) is airspace controlled or managed by a country to regulate air traffic and prevent flight accidents [1]. The control of the airspace over the Kepulauan Riau by the Singapore aviation authority shows that Singapore has an interest in territorial matters, considering that the total area of Singapore is only 791 km [2]. Singapore's Air Traffic Control action, which regulates all types of flights that pass through the area, has shown that Singapore's power extends beyond its sovereign territory [3], even though the area is included in the sovereignty of the Unitary State of the Republic of Indonesia considering that this has been going on since 1946.

Currently, through diplomacy between state leaders between Indonesia and Singapore, Indonesia has officially signed an agreement to take over the Flight Navigation Service Area (FIR) over Kepulauan Riau and Natuna [4], which Singapore has managed.

Furthermore, the President Republic of Indonesia claimed to have signed a Presidential Regulation (Perpres) on the Ratification of the FIR Agreement between Indonesia and Singapore. As a result, Indonesia’s internationally recognized FIR area increased by 249,575 km<sup>2</sup> [5]. The additional area will be part of the Jakarta FIR area (Fig. 1).

Previous studies on FIR have focused more on research on international law, while research in the field of public administration science in Indonesia has not touched FIR. For example, Garcia, Marcelo L.’s previous studies, *Corrective Diplomacy in the Skies in 2019* [6], talked about how the Chicago Convention forbids using air space and civil aviation for coercive diplomacy, conflicts caused by one side ignoring the agreement on the Chicago Convention, and the author’s research talked about the implementation of presidential regulations that refer to the Chicago Convention, namely the own accord.

Indonesia has been a party to the Chicago convention since 1950. This convention, in principle, highly upholds the state’s sovereignty over its airspace. However, realizing the significant risk of air transportation and for the common interest of the international community, in some cases, the convention limits the freedom of states in regulating air transportation traffic. Countries must comply with the flight routes regulated in charts of the International Civil Aviation Organization (ICAO) and who is given the authority to monitor and regulate flight traffic in an area through the determination of the Flight Information Region (FIR). Almost equivalent to the age of Indonesian independence, Singapore controls Indonesia’s air space in the Kepulauan Riau region. This is because we cannot manage our FIR for air space over the Riau Islands. This study aims to analyze the implications of international agreements regarding the delegation of FIR flights over the Riau Islands airspace to Singapore.



Fig. 1. The navigation service area that Indonesia has taken over.

Other findings use the concept of national interest, where the state can protect and defend its national interests by making various policies—concerning Aviation and Government Regulation Number 4 of 2018 concerning Security of the Airspace of the Unitary State of the Republic of Indonesia, Improvement of Human Resources and Technology. Furthermore, on an international scale, efforts continue to be made through the International Civil Aviation Organization (ICAO) so that Indonesia can manage the FIR managed by ATC Singapore. Thus, every diplomatic and foreign aircraft security permit is processed through the Indonesian government [7].

The Indonesian government signed the latest bilateral Agreement with Singapore on January 25, 2022. The contents related to the FIR are that at an altitude of 0–37,000 feet in Kepulauan Riau and Natuna airspace, it is delegated to the Singapore aviation authority, and above 37,000 feet, the Indonesian aviation authority, which is very important. Few aircraft fly at 37,000 feet [8]. Thus a treaty was signed 25 years.

However, the FIR has not been technically given to stakeholders in charge of airspace control at the border until 2022, so it is unclear who will play the role of the central government. This paper examines how the management of the flight information region in Kepulauan Riau and Natuna affects the people who have a stake in it. Stakeholder Identification Analysis can be used to identify all parties involved who are the research object, stakeholders who make or implement policies, and various intermediaries between the two parties.

## 2 Literature Review

The term stakeholder was first coined by the Stanford Research Institute (SRI) in 1963. Freeman said the stakeholder theory is a theory that describes to which parties the company is responsible [9]. Stakeholder theory combines the interests of a wider variety of stakeholders in an entity [10]. Stakeholders are parties from inside and outside the organization/agencies who have an interest and influence on the performance of the organization/agencies to create good governance [11].

Stakeholders are internal and external parties interested in and influencing government public relations performance [12]. Each stakeholder has different needs, so an accurate stakeholder mapping is needed according to their needs. The results of stakeholder mapping are essential information in formulating policy relations with stakeholders [13]. The importance of identifying stakeholders and their importance is used by expert opinion, Focus Group Discussion (FGD), snowball sampling, and selection based on secondary data.

Stakeholders identified in the formulation of the policy for taking Indonesian Air Space Sovereignty Rights, which Singapore has controlled, will be analyzed and divided into three categories, namely:

- The main stakeholders are those directly affected by the policy's existence, either positively or negatively [14].
- Key stakeholders legally have the authority or, in other words, have substantial influence and interest in decision-making in the policy-making process [15].

- Supporting stakeholders are stakeholders as intermediaries in the policy implementation process or parties who do not have a direct relationship but have concerns for policy decisions.

After determining the identification of stakeholders, an Impact will occur. Impacts generally desire to persuade, convince, influence, or impress others, to get them to follow or support their wishes. At the same time, vivaciousness is definite, firm, and accurate from a thought, perfect things [16].

### 3 Research Method

Qualitative research is an investigative process to understand social problems by creating a holistic picture formed in words, reporting detailed views of informants, and arranging in a background [17]. The data used in the study is secondary data that is relevant from within without a specified time limit. Secondary data is meant in the form of reports, news, websites, journals, and other documents [18] related to FIR.

Data analysis is done by organizing the data, breaking it down into units, synthesizing it, arranging it into a pattern, choosing what is essential and what will be studied, and making conclusions that can be told to others [19]. Activities in qualitative data analysis are carried out interactively and occur continuously until complete so that the data is saturated. The flow in data analysis is data reduction, display, and conclusion drawing/verification data.

## 4 Result and Discussion

### 4.1 Impact of FIR Management in the Kepulauan Riau and Natuna

The impact that will occur is that Indonesia can show its sovereignty or air space as a sovereign country so that it can manage it over its aviation area, both nationally and internationally. In addition, it can improve the quality of Human Resources between Indonesia and Singapore, namely the Opening of RI-Singapore Staff Cooperation at Changi Airport on Air Traffic Controllers to strengthen diplomatic relations between Singapore and Indonesia [7]. However, Indonesia controls only 37,000 feet and above airspace in the Kepulauan Riau and Natuna [20]. In addition, Indonesia is known to still provide flight service delegations in certain areas in the Kepulauan Riau at an altitude of 0 to 37 thousand feet to the Singaporean authorities.

The Presidential Decree number 109 of 2022 concerning Ratification of Approval of the Republic of Indonesia and the Government of the Republic of Singapore regarding Boundary Adjustment between Flight Information Region Jakarta and Flight Information Region Singapore. There are two articles regulated in the Presidential Regulation, namely Article 1, which reads:

- Ratify the agreement between the Government of the Republic of Indonesia and the Government of the Republic of Singapore on Boundary Adjustment between the Flight Information Region Jakarta and Flight Information Region Singapore, which was signed by the Government of the Republic of Indonesia and the Government of the Republic of Singapore on January 25, 2022, in Bintan, Indonesia.

- A copy of the original agreement between the Government of the Republic of Indonesia and the Government of the Republic of Singapore regarding Boundary Adjustment between Flight Information Region Jakarta and Flight Information Region Singapore [21].

This agreement is a step forward for international recognition of Indonesia's air space, which simultaneously increases aviation safety and security assurance and can increase non-tax state revenues. This can be momentum for the modernization of aviation navigation equipment and the development of Indonesian human resources. In addition, Indonesia will indirectly get non-tax state income (PNBP). Previously, Singapore's Kepulauan Riau airspace only charged about 10–20% of the air space for navigation and service fees. With this FIR between Singapore and Indonesia, Indonesia takes over 100% of Kepulauan Riau Archipelago's airspace [22]. So, later, Singaporean flights will have to pay a navigation fee when passing through the entire region.

## 4.2 Identification of Stakeholders

The primary stakeholder is the Ministry of Transportation of the Republic of Indonesia. Currently, this FIR adjustment is an inseparable aspect between Indonesia and International. Comprehensive observation is the key, especially related to technical aspects, safety, international compliance, and international best practice. The Ministry of Transportation of the Republic of Indonesia will form a control team that will involve several parties from experts, academics, practitioners, and other related elements to conduct constructive discussions on FIR.

The goal is to get positive input to create a balance between the interests of Indonesia's sovereignty and the interests of aviation safety which have been regulated and agreed upon by international rules. Therefore, discussions on FIR, extradition, and defence cooperation between the two countries have been carried out since 2007 and have never been completed. The agreement's success is extraordinary for the Indonesian government because the issue is sensitive and not easy.

The agreement on Indonesia's delegation to Singapore was signed on January 25, 2022, and will last for 25 years, until January 25, 2047. This is a very long time for cooperation, and the agreement was not based on a decision made by all stakeholders in airspace management [23]. At the signing of this collaboration, three ministries were present: the Ministry of Transportation, which is an essential regulator of aviation in Indonesia; the Ministry of Foreign Affairs, which helped set up this bilateral cooperation until it was signed; and the Ministry of Defense, which has not fully coordinated with the National Air Operations Command or Koopsudnas, which is part of the TNI and falls under the Ministry of Defense; and Airnaf.

Furthermore, the Key Stakeholders are the Head of State of Indonesia and the Prime Minister of Singapore [24]. The agreement between the two countries, namely the ratification of this agreement, has been taking place since early 2022. Indonesian President Joko Widodo and Singaporean Prime Minister Lee Hsien Loong agreed on the takeover of the Kepulauan Riau-Natuna FIR [25]. This aims to improve security guarantees. Indonesia's takeover of the FIR is expected to increase non-tax state revenues and become a

momentum for modernizing aviation navigation equipment and developing Indonesian human resources. There are five diplomatic agreements regarding FIR, including;

- Adjust the boundaries of the Jakarta FIR, which covers the entire territory of Indonesia, so that the waters around Kepulauan Riau and Natuna, which were previously included in the Singapore FIR, become part of the Jakarta FIR.
- Indonesia has the right to and is responsible for the Provision of Aviation Services (PJP) in the flight information area, which is an Indonesian FIR that is in line with the boundaries of the territorial sea.
- Singapore also agreed to establish civil and military cooperation related to Aviation Traffic Management (Civil-Military Coordination in ATC/CMAC). The aim is to ensure no violation of Indonesia's sovereignty and sovereign rights.
- Singapore is also obliged to deposit a quote for flight service fees to aircraft flying from and to Singapore to Indonesia. The PJP delegation will also be closely monitored and evaluated by the Ministry of Transportation.
- Indonesia also has the right to conduct operational evaluations on the flight navigation services carried out by Singapore. This is done to ensure compliance with the provisions of the International Civil Aviation Organization (ICAO).

Supporting Stakeholders in adjusting the FIR in the Kepulauan Riau-Natuna region are against the decision. Many observers think that Indonesia is currently dependent on political decisions. Based on the 1946 Chicago Convention, 1982 UNCLOS, Law No.1 of 2009 concerning Aviation and Government Regulation No. 4 of 2018 concerning airspace security, all existing rules do not affect Singapore to hand over airspace to Indonesia as the owner. This is because the ICAO's assessment of Indonesia is still below the average. This causes the weaknesses of Indonesia and Singapore to be more self-defence for national security reasons.

However, from the cons side, Indonesia and Singapore already had a similar agreement in 1995. In that agreement, Indonesia delegated the authority to manage FIR in Kepulauan Riau-Natuna and surrounding areas to Singapore [26]. The government declared that the FIR had returned, but at the same time, its management was delegated to Singapore. Article 458 of the 2009 Aviation Law stipulates that the Indonesian airspace whose flight navigation services are delegated to other countries must return to Indonesia within 15 years. According to the law's mandate, Indonesia must fully manage FIR in the next two years. However, the new agreement last January will be in effect for at least the next 25 years.

## 5 Conclusions and Suggestions

The impact of takeover of the Kepulauan Riau - Natuna air space by the Indonesian government has had an extraordinary impact on state security and non-tax state revenue following the agreement between the two countries for 25 years. In addition, identification of key stakeholders in decision-making in their roles, namely the President of the Republic of Indonesia and the Prime Minister of Singapore. Meanwhile, the main stakeholders emphasized the technical implementation of inter-ministerial related institutions. Meanwhile, stakeholders include observers and academics who claim that sovereignty

or air space in Kepulauan Riau-Natuna can be permanent by not making long-term agreements according to international law.

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