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THE IMPLICATIONS OF THE BAWEAN INCIDENT ON THE URGENCY OF LAW NUMBER 21 OF 2025 ON AIRSPACE MANAGEMENT AND THE CHALLENGES OF COMPLETING ITS IMPLEMENTING REGULATIONS

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Abstrak — *The 2003 Bawean Incident, where two Indonesian Air Force (TNI AU) F-16 aircraft intercepted a US Navy F/A-18 Hornet jet on an air cover mission, demands an in-depth analysis of the alignment between Indonesia's national airspace regulations and international air security practices. The enactment of Law No. 21 of 2025 on Airspace Management (UU PRU) marks a historical milestone in addressing this legal uncertainty. This study aims to analyze the implications of the Bawean Incident on the passage of UU PRU and examine the juridical challenges in completing its implementing regulations (RPP, Permenhub, Perpang TNI, and Perkasau) postenactment. Using a qualitative descriptive approach through literature review, this research examines air navigation coordination weaknesses and legal fragmentation. The results indicate that UU PRU successfully integrates civil aviation safety and national defense under a single legal umbrella. However, its effectiveness heavily relies on the timely drafting of derivative regulations targeted for late 2027. The major conclusion asserts the urgency of establishing an inter-agency acceleration team to overcome coordination barriers and ensure operational legal certainty across the Indonesian archipelago.*

Keywords: *Bawean Incident, Law No. 21 of 2025 on Airspace Management, Implementing Regulations, National Air Mobility, Aviation Safety*

1. INTRODUCTION

The 2003 Bawean Incident serves as a crucial reminder of the importance of airspace sovereignty and the strategic management of national airspace. The event unfolded when the Indonesian Air Force (TNI AU) radar detected five United States Navy F/A-18 Hornet fighter jets flying over Bawean Island without prior coordination or flight authorization from Indonesian aviation authorities. In rapid response, the TNI AU scrambled two F-16 fighter aircraft to execute an interception, triggering a tense 18-minute electronic dogfight (radar lock-on) before radio communication was finally established. Although the situation was de-escalated following an exchange of identity signals, the incident exposed Indonesia's vulnera bility in monitoring and controlling its own airspace, particularly in regions far removed from centralized command infra structure. Examined from sovereignty and safety perspectives, such airspace violations not only pose direct risks to civil aviation safety but also undermine the authority of state sovereignty. This historical event underscores the urgent need for an integrated airspace management system capable of simultaneously guaranteeing

defense readiness and civil air traffic safety [32]. Furthermore, the incident highlighted a broad coordination gap between military and civil aviation institutions, which carries the potential to cause delays in tactical responses and diplomatic misunder standings at the international level. The structural issue of fragmented airspace governance in Indonesia identified since the incident finally encountered a turning point with the enactment of Law Number 21 of 2025 on Airspace Management (UU PRU). The passage of the UU PRU marks a significant milestone in national airspace governance reform, refining and replacing partial provisions previously scattered across Law Number 1 of 2009 on Aviation and other sectoral legislation. The arrival of this umbrella law successfully integrates aspects of national defense, civil aviation safety, and strategic national interests into a unified regulatory structure. The enact ment of the UU PRU introduces equally crucial new juridical consequences: the imperative to swiftly draft and complete all implementing regulations (delegated legislation) so that the norms within the law can be operationally implemented in the field. Based on the principle of legal certainty (rechtszekerheid) as mandated by Article 1 Paragraph (3) of the 1945 Constitution of the Republic of Indonesia, the existence of derivative regulations comprising Government Regu lations (RPP), Regulations of the Minister of Transportation (Permen hub), Regulations of the Commander of the TNI (Perpang TNI), and Regulations of the Chief of Staff of the Air Force (Perkasau) is an absolute prerequisite to prevent obstacles in enfor cing air sovereignty and navigation effecti veness. The main objective of this study is to analyze how the 2003 Bawean Incident established the necessity for legal unification through the enactment of Law No. 21 of 2025 on Airspace Management, as well as to comprehensively examine the mapping of needs, levels of difficulty, and challenges in completing its implementing regulations within the transition target limit of late 2027.

2. METHODOLOGY

2.1. Research Design

This study employs a qualitative-descriptive research design utilizing a literature review method. This approach was selected to thoroughly analyze the legal text of Law No. 21 of 2025 on Airspace Management (UU PRU), its derivative legal products, historical documents of the Bawean Incident, and the delegation norm schemes of its imple menting regulations. Through a descriptive-juridical method, collec ted secondary data are critically analyzed to map the correlation between the empirical case and the necessity of completing derivative regu lations.

2.2. Population and Sample/Locus/ Object of Research

The object of this research focuses on the legal framework of Law No. 21 of 2025 on Airspace Management and its delegated regulations. The analytical locus centers on the coordination dynamics between the Ministry of Transportation (AirNav Indone sia) as the civil navigation service provider and the Ministry of Defense/TNI AU as the enforcers of air sovereignty. The research sample includes the substantive content of Law No. 21 of 2025, Law No. 1 of 2009, Government Regulation No. 4 of 2018, as well as relevant drafts of the Legislative Drafting Programs for Government/ Minis terial/TNI Commander Regulations.

2.3. Research Instrument

The primary instrument in this study is the researcher (human instrument), supported by a statutory analysis matrix. This matrix is used to detect articles commanding the promulgation of Government Regulations, Regulations of the Minister of Transpor tation, Regulations of the Commander of the TNI, and Regulations of the Chief of Staff of the Air Force, as well as to measure their level of difficulty and estimated drafting timelines.

2.4. Data Analysis Technique

The data analysis technique utilized is qualitative content analysis employing systematic and teleological legal interpre tation approaches. The analytical process is

conducted through data reduction of the delegation articles in Law No. 21/2025, categorization of derivative regulation types based on authority levels, and drawing conclusions regarding the rationality of the target to complete all implementing regulations by late 2027.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Air Security Chronology and Regulatory

TransformationReconstruction of the 2003 Bawean Incident demonstrates that the unintegrated flight authorization and surveillance systems served as the primary trigger for the unauthorized entry of five US Navy F/A-18 Hornet aircraft without diplomatic and flight clearances. Delays in field data verification prompted combat scrambling by TNI AU F-16s]. Lessons learned from this case underscore the necessity for clear inter-agency authority, as now codified within Law No. 21 of 2025 on Airspace Management (UU PRU).

Table 1. *Comparison of Indonesian Airspace Authorities Under Law No. 21 of 2025*

Authority / Institution	***Primary Legal Basis***	***Main Function Under UU PRU***	***Focus of Implementing Regulations***
AirNav Indonesia / Ministry of Transportation	*Law No. 21/2025 & Law No. 1/2009 [11], [18]*	*Navigation Services & Civil Aviation Safety*	*Government Regulation Draft on Airspace Management & Ministerial Regulations on Navigation*
Indonesian Air Force (TNI AU) / Ministry of Defense	*Law No. 21/2025 & Law No. 34/2004 [32]*	*Sovereignty Enforcement & Airspace Security*	*Operational Regulations of the TNI Commander & Chief of Staff of the Air Force*
Airspace Management Council *(Planned)*	*Provisions of Law No. 21/2025*	*Cross-Sectoral Coordination & Policy Making*	*Presidential Regulation / Integrated Command Regulation*

3.1.2. Identification of Delegation Order Articles for Derivative Regulations of Law No. 21/2025

Based on a legal reading of the framework of Law No. 21 of 2025 on Airspace Management, several explicit mandates for drafting implementing regulations were identified as follows:

Table 2. *Mapping of Implementing Regulation Orders under Law No. 21 of 2025*

No	***Regulatory Subject Matter***	***Type of Derivative Regulation***	***Responsible Authority***
1	*National airspace management & Licensing*	*Government Regulation Draft (RPP)*	*Ministry of Defense, Ministry of Transportation, Coordinating Ministry for Political and Security Affairs*
2	*Air navigation, Air Traffic Rules, & FIR*	*Regulation of the Minister of Transportation*	*Ministry of Transportation*
3	*Airspace security for national defense*	*Regulation of the Commander of the TNI*	*TNI Headquarters / Ministry of Defense*
4	*Combat operation procedures & AirNav coordination*	*Regulation of the Chief of Staff of the Air Force*	*Indonesian Air Force Headquarters*
5	*Imposition of administrative and criminal sanctions*	*Government Regulation Draft (RPP)*	*Ministry of Law and Human Rights, Ministry of Defense, Ministry of Transportation*

3.2 Discussion

3.2.1. Juridical Consequences of Law No. 21/2025 and Rationality of the 2027 Target

The enactment of Law Number 21 of 2025 automatically establishes a juridical obligation for the government to complete all of its implementing regulations. Given that this law was promulgated at the end of 2025, the year 2026 serves as a crucial starting point for the technical drafting phase. Based on statutory drafting theory and Indonesian constitutional practice, the ideal transitional timeframe for completing delegated legislation instruments is two years. Establishing the target to finalize all derivative regulations by late 2027 is a realistic, measurable step supported by a strong legal rationale. The rationality behind setting this late 2027 deadline rests on three main considerations. First, from the perspective of the regulatory planning cycle, a 24-month timeframe provides sufficient space for relevant ministries and agencies to harmonize draft Government Regulations and Ministerial Regulations without causing operational disruptions to ongoing civil aviation services. Second, completing the implementing regulations by 2027 aligns closely with Indonesia's international strategic agenda, particularly regarding the full realignment of navigation services in the Flight Information Region (FIR) and compliance with safety standards

mandated by the International Civil Aviation Organization (ICAO). Third, meeting this target prevents an operational legal vacuum (vacuum in concrete), thereby enabling the normative provisions within the UU PRU to be immediately executed by law enforcement officials in the field.

3.2.2. Needs Analysis by Type of Derivative Regulation

Within the hierarchy of implementing regulations under the UU PRU, the Draft Government Regulation (RPP) serves as the primary foundation. The scope of the RPP encompasses the general framework of airspace management, cross-territorial licensing, and the imposition of adminis trative sanctions. Given that its drafting requires intensive cross-ministerial coordi nation, the RPP carries a high level of substantive complexity with a projected timeline of 6 to 12 months. Therefore, finalizing the RPP by late 2026 or early 2027 acts as a crucial prerequisite for the enactment of regulations at the ministerial and military commander levels. Next, the Regulation of the Minister of Transportation (Permenhub) focuses on providing tech nical standards for civil aviation safety, updating Air Traffic Rules, and integrating Communication, Navigation, and Survei llance (CNS) systems. Since this regulation largely refines previous rules such as PM 55/2016 and PM 10/2022, its difficulty level falls under the medium-to-high category. Its drafting process is expected to proceed incrementally throughout 2026 until mid-2027. On the defense side, the Regulation of the Commander of the TNI (Perpang TNI) is designed to govern technical mechanisms for airspace security, enforcement criteria against unauthorized flights (black flights), and data-sharing schemes between military and civil radars. This regulatory category carries a high level of difficulty because it must align military operational doctrines with international air law, requiring a completion timeline exten ding through mid-2027. Meanwhile, the Regulation of the Chief of Staff of the Air Force (Perkasau) focuses on internal institutional SOPs, including technical guidelines for tactical interceptions and joint exercise frameworks. Being internal in nature, Perkasau has a medium level of difficulty and is targeted for completion by late 2026 at the earliest.

3.3. Discussion Results

3.3.1. Mapping Challenges and Solutions

The process of completing all derivative instruments of Law Number 21 of 2025 by the late 2027 deadline faces several tangible operational hurdles. The primary obstacle stems from potential sectoral ego and complex coordination between the defense sector (Ministry of Defense/TNI), which is security-oriented, and the trans portation sector (Ministry of Transpor tation), which is focused on commercial safety. This factor poses a high risk of delaying regulatory enactment beyond the transitional window unless addressed through the establishment of a Special Acceleration Task Force coordinated by the Coordinating Ministry for Political and Security Affairs. Beyond coordination issues, the complexity of legal substance such as defining vertical airspace boundaries up to an altitude of 110 kilome ters and integrating modern navigation technology presents a distinct challenge requiring active involvement from acade mics and air law experts. This constraint is exacerbated by a limited number of legislative drafters (legal drafters) speciali zed in aerospace law. Concurrently, the government must account for the dynamics of international aviation agreements and FIR clause adjustments, which demand that draft regulations be prepared in parallel with regional diplomatic negotiations.

3.3.2. Principle of Civil-Military Cooperation (CMC)

The key lesson from the Bawean Incident highlights that a lack of real-time coordi nation between civil and military authorities can have fatal consequences for national safety and sovereignty. Therefore, imple menting the UU PRU through the drafting of Permenhub and Perpang TNI must imperatively mandate the adoption of radar data fusion technology. The integration of

civil air navigation radar data from AirNav Indonesia with TNI AU air defense radar data will eliminate blind spots in national air surveillance. This integration not only enhan ces situational awareness for rapidly identi fying foreign aircraft movements but also operationalizes the flexible use of airspace (FUA) concept, ensuring that national defense interests and commercial flight path efficiencies are balanced harmoniously.

4. CONCLUSION AND RECOMMENDATIONS

4.1. Conclusion

Based on the research findings, the following conclusions can be drawn:

- *The 2003 Bawean Incident served as the primary historical and philosophical catalyst underpinning the necessity of unifying Indonesian airspace law, which has now been successfully realized through the enactment of Law Number 21 of 2025 on Airspace Management (UU PRU).*

- *The enactment of Law No. 21 of 2025 entails legal consequences requiring the drafting of comprehensive imple menting regulations, including Govern ment Regulations (RPP), Regulations of the Minister of Transportation (Per menhub), Regulations of the Comman der of the TNI (Perpang TNI), and Regulations of the Chief of Staff of the Air Force (Perkasau). Setting the target to finalize all derivative regulations by late 2027 is a highly realistic, propor tionate step aligned with the principle of legal certainty.*

- *The successful implementation of the UU PRU heavily depends on the government's capacity to overcome cross-agency coordination challenges, address constraints in specialized legislative drafting personnel, and align national regulations with international aviation agreements.*

4.2. Recommendations

Based on the research results, the following strategic actions are recom mended:

- *The Coordinating Ministry for Political and Security Affairs, together with the Coordinating Ministry for Maritime Affairs and Investment, should imme diately establish an Inter-Departmental Task Force to oversee and prioritize the harmonization of the draft Government Regulation (RPP) and Ministerial Regulation (Permenhub) to ensure they do not exceed the 2027 transition deadline.*

- *The Ministry of Transportation and the Indonesian Air Force (TNI AU) must promptly draft joint operational regula tions (Permenhub and Perpang TNI) governing automated radar data fusion between AirNav Indonesia and TNI AU Radar Stations (Satrad).*

- *Relevant ministries and agencies should conduct capacity-building pro grams and consolidation initiatives specifically for legislative drafters specializing in aerospace law and airspace security.*

- *Regular monitoring of the progress of drafting implementing regulations should be conducted quarterly to ensure all derivative regulatory targets are finalized prior to the late 2027 deadline.*

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