DOI: https://doi.org/10.38035/sijal.v3i2 https://creativecommons.org/licenses/by/4.0/

Sports Law and Air Sports Governance: Regulatory Challenges in International Aviation-Based Athletic Competitions

Gevan Naufal Wala¹, Lazarev Viktor Antonovich²

¹Universitas Jambi, Jambi, Indonesia, gevannaufall@gmail.com

²University of Civil Aviation, Sankt Petersburg, Rusia., vitya.lazarev03@mail.ru

Corresponding Author: gevannaufall@gmail.com1

Abstract: Air sports governance presents unique regulatory challenges at the intersection of aviation law and sports law. This study analyzes the international legal framework governing aviation-based athletic competitions, examining how multiple regulatory authorities create jurisdictional complexities. Using normative legal research methodology, this study examines regulations from the Fédération Aéronautique Internationale (FAI), International Civil Aviation Organization (ICAO), and national aviation authorities across three jurisdictions. Results reveal significant regulatory fragmentation, with conflicts between safety standards and competitive requirements, jurisdictional overlaps in cross-border competitions, and inconsistent application of anti-doping regulations. The study identifies successful harmonization models and proposes a unified regulatory framework through memoranda of understanding between aviation authorities and sports federations. This research contributes to filling the regulatory gap in air sports governance and provides a roadmap for international regulatory reform.

Keyword: sports law, air sports governance, aviation regulations, international competitions, regulatory framework

INTRODUCTION

The rapid evolution of air sports has created unprecedented challenges for international regulatory frameworks (Smith, 2022). Air sports encompass diverse aviation-based athletic activities including paragliding, skydiving, air racing, aerobatics, hang gliding, and hot air ballooning, each requiring specialized skills and equipment while involving inherent aviation risks. Over the past two decades, international air sports competitions have grown exponentially, with participation rates increasing by over 300 percent between 2005 and 2023, transforming what were once niche activities into mainstream global sporting events (Zhang & Nakamura, 2023). This growth has been accompanied by technological advancements in aircraft design, safety equipment, and performance monitoring systems that enable athletes to achieve previously unattainable feats.

However, this expansion has revealed critical gaps in regulatory governance (Harrison, 2022). Unlike traditional sports that operate primarily under sports federations' authority, air

sports exist at the complex intersection of sports law and aviation law, creating jurisdictional ambiguities and regulatory conflicts. Aviation authorities prioritize safety and airspace management, while sports organizations focus on competitive fairness and athlete welfare, often resulting in contradictory requirements (Johnson & Lee, 2023). The dual nature of air sports participants as both athletes and pilots requires compliance with multiple certification standards, medical requirements, and operational procedures that may conflict with optimal athletic performance (Richards, 2022).

The International Olympic Committee (IOC) recognizes several air sports through the FAI, yet these activities remain subject to national and international aviation regulations that were not designed with competitive athletics in mind (Pearson & White, 2021). The Chicago Convention on International Civil Aviation establishes fundamental principles of airspace sovereignty and safety standards through ICAO (Miller, 2020), but these frameworks do not adequately address the unique requirements of international sporting competitions. When air sports events cross national borders, athletes and organizers must navigate multiple regulatory regimes simultaneously, creating compliance challenges that can impede fair competition (Taylor & Ahmed, 2023).

Research on air sports governance remains limited despite the growing importance of these activities (Smith, 2022). Existing sports law literature predominantly addresses ground-based sports, while aviation law scholarship focuses on commercial and general aviation rather than competitive athletics. This research gap leaves practitioners, athletes, and policymakers without adequate guidance for addressing the regulatory complexities inherent in air sports. Several critical issues remain underexplored, including how to balance aviation safety requirements with athletic performance optimization, how to resolve jurisdictional conflicts when competitions span multiple countries, and how to apply anti-doping regulations designed for traditional sports to aviation contexts where certain medications may be necessary for pilot medical certification (Garcia et al., 2021).

The theoretical foundation for understanding air sports governance draws from multiple legal disciplines. Sports law theory, particularly the concept of lex sportiva, recognizes the autonomous legal order created by international sports federations with their own rules, dispute resolution mechanisms, and governance structures (Foster, 2019). However, this autonomy is constrained in air sports by overriding aviation safety imperatives. Aviation law framework, grounded in the Chicago Convention and ICAO standards (International Civil Aviation Organization, 2020), establishes principles of airspace sovereignty, safety regulation, and international cooperation that supersede sports governance in certain contexts. Regulatory governance theory provides analytical tools for understanding how multiple regulatory authorities can coordinate effectively, identifying mechanisms for reducing regulatory fragmentation and achieving harmonization across jurisdictions (Blackshaw & Siekmann, 2020).

This study addresses three fundamental research questions that have remained unanswered in existing scholarship. First, how does the current international legal framework govern air sports, and what are the roles and relationships between various regulatory authorities including the FAI, ICAO, national aviation authorities, and national sports governing bodies? Second, what are the primary regulatory challenges in air sports governance, specifically regarding safety standards, jurisdictional conflicts, certification requirements, liability frameworks, and anti-doping regulations? Third, how can regulatory harmonization be achieved to create a more coherent and effective governance system for international air sports competitions? By answering these questions, this research aims to provide both theoretical insights into multi-jurisdictional regulatory coordination and practical recommendations for improving air sports governance globally.

METHOD

This research employs a normative legal research methodology, analyzing legal frameworks, regulations, and governance structures governing international air sports competitions (Smith, 2022). The normative approach is appropriate for examining how multiple regulatory regimes interact and identifying gaps or conflicts in existing legal frameworks. This study also incorporates comparative legal analysis to evaluate regulatory approaches across different jurisdictions and identify best practices for harmonization (Davies, 2023).

Primary data sources include international regulations and standards from the FAI, which serves as the international governing body for air sports recognized by the IOC (Pearson & White, 2021), ICAO standards and recommended practices particularly Annex 2 on Rules of the Air and Annex 8 on Airworthiness of Aircraft (International Civil Aviation Organization, 2020), and national aviation regulations from selected jurisdictions including the United States Federal Aviation Administration (FAA), European Union Aviation Safety Agency (EASA) (Turner, 2021), and Civil Aviation Safety Authority (CASA) in the Asia-Pacific region (Kumar, 2021). Additionally, the World Anti-Doping Agency (WADA) Code and its application protocols for air sports provide essential primary sources (Wilson & Davis, 2020). Secondary data sources comprise peer-reviewed academic journals on sports law and aviation law, books and monographs on international regulatory governance, official reports from air sports federations and aviation authorities, and documented case studies of regulatory conflicts and resolutions in air sports competitions.

The research subjects encompass regulatory frameworks governing air sports at international and national levels, governance structures of air sports organizations including the FAI and national aero clubs, and practical implementation of regulations in major international air sports events. The temporal scope covers the period from 2010 to 2024, capturing recent developments in both aviation technology and sports governance. The geographic scope includes comparative analysis of regulatory approaches in three major jurisdictions representing different regulatory philosophies: the United States with its risk-based regulatory approach, the European Union with its harmonized regional framework, and Asia-Pacific countries with diverse regulatory maturity levels.

Data collection procedures involved comprehensive document analysis of legal texts, regulations, policy documents, and official reports from relevant organizations. Semi-structured interviews were conducted with key stakeholders including FAI officials, national aviation authority representatives, air sports athletes and coaches, and legal experts specializing in sports law or aviation law, providing practical insights into regulatory implementation challenges. The study also examined documented cases of regulatory conflicts in major air sports events such as the Red Bull Air Race series, FAI World Air Games, and Paragliding World Cup.

The analytical technique employed content analysis to systematically examine regulatory texts and identify patterns, gaps, and conflicts in governance frameworks. Comparative legal analysis evaluated regulatory approaches across the three selected jurisdictions, identifying convergences, divergences, and successful harmonization models. Framework analysis synthesized findings into a conceptual model illustrating relationships between different regulatory authorities and mechanisms for coordination. Throughout the analysis, attention was paid to both de jure regulatory frameworks and de facto implementation practices, recognizing that formal legal structures may operate differently in practice.

RESULT AND DISCUSSION

International Legal Framework for Air Sports

The governance of international air sports operates through a complex multilayered regulatory architecture involving multiple authorities with overlapping jurisdictions (Smith, 2022). At the apex of sports governance sits the FAI, founded in 1905 and recognized by the IOC as the international governing body for air sports and aeronautics (Pearson & White, 2021). The FAI establishes sporting regulations for air sports competitions, maintains world records and sporting achievements, organizes world championships and international events, and certifies officials and technical standards for competitions. The FAI operates through national aero clubs in member countries, creating a vertical governance structure similar to other international sports federations.

However, unlike purely ground-based sports, air sports remain fundamentally subject to aviation regulatory frameworks (Chen & Liu, 2022). ICAO, established by the Chicago Convention, sets international standards for aviation safety, airworthiness, pilot licensing, and airspace management that member states are obligated to implement (Miller, 2020). These standards were developed primarily for commercial and general aviation but apply equally to sporting aviation activities. National civil aviation authorities such as the FAA, EASA, and CASA implement ICAO standards through domestic regulations, issue pilot licenses and aircraft certificates, regulate airspace usage and establish safety requirements that may exceed international minimums based on local conditions (Turner, 2021).

This creates a fundamental tension in air sports governance (Harrison, 2022). The FAI claims authority over competitive aspects including rules of competition, athlete eligibility, anti-doping regulations, and sporting sanctions. Meanwhile, aviation authorities maintain jurisdiction over safety standards, pilot certification requirements, aircraft airworthiness standards, and airspace access and operations. When these jurisdictions overlap, which occurs frequently in air sports, conflicts can arise between sporting imperatives and safety regulations (Johnson & Lee, 2023).

The legal status of air sports competitions under aviation law varies significantly across jurisdictions (Kumar, 2021). Some countries classify competitive air sports activities as distinct from general aviation, applying modified regulatory requirements. Other jurisdictions make no distinction, subjecting air sports competitions to the full range of aviation regulations applicable to any flight operation. This inconsistency creates challenges for international competitions where athletes and aircraft move across borders, potentially facing different regulatory requirements in each country (Lewis & Brown, 2022).

Table 1. Comparative Air Sports Regulations Across Three Jurisdictions

Table 1. Comparative Air Sports Regulations Across Tiree Jurisdictions			
Jurisdiction	Primary Aviation	Sports Governance	Key Regulatory Challenges
	Authority	Body	
United States	Federal Aviation	United States	Complex waiver process for competitive
	Administration (FAA)	Parachute Association,	events, inconsistent interpretation of sport
		Experimental Aircraft	aviation exemptions, tension between FAA
		Association	safety mandates and competitive
			requirements
European	European Union	National Aero Clubs	Harmonization challenges across 27
Union	Aviation Safety Agency	coordinated through	member states, varying implementation of
	(EASA)	FAI Europe	EASA regulations, different liability
		-	frameworks affecting event insurance
Asia-Pacific	National authorities	National Aero Clubs	Significant regulatory diversity across
	(CASA Australia,	with varying autonomy	region, limited regional harmonization
	CAAC China, DGCA		mechanisms, capacity constraints in
	India)		smaller nations, emerging regulatory
			frameworks

Source: Compiled from FAI, EASA, FAA, and CASA regulatory documents

Regulatory Challenges in Air Sports Governance Safety Standards Versus Competition Requirements

The most fundamental challenge in air sports governance involves balancing aviation safety requirements with the demands of athletic competition (Anderson, 2021). Aviation regulations prioritize risk minimization, requiring conservative operational limits, prescribed safety equipment, and standardized procedures that may inhibit competitive performance. Sports competitions, conversely, reward athletes who push boundaries of performance, often operating at the limits of aircraft capabilities and human endurance. This creates inherent tension between regulatory philosophies (Johnson & Lee, 2023).

Pilot-athlete certification exemplifies this challenge (Richards, 2022). Aviation authorities require pilots to meet medical standards, flight hour minimums, and demonstrated competency in standard operations. Sports federations separately impose athlete eligibility requirements, competition qualifications, and performance standards. Air sports participants must satisfy both sets of requirements, but these may conflict. For example, certain medications permitted or even required for athletic performance enhancement or injury recovery may disqualify pilots from holding medical certificates necessary for legal flight operations.

Aircraft used in air sports competitions present similar challenges. Aviation authorities establish airworthiness standards ensuring structural integrity and safe operation under normal conditions (International Civil Aviation Organization, 2020). Competition aircraft, however, are often modified for performance optimization in ways that may technically violate airworthiness standards despite being appropriate for the specific competitive context. Some jurisdictions address this through experimental or special categories of aircraft certificates with modified requirements, but approaches vary significantly (Chen & Liu, 2022).

Liability frameworks further complicate the safety-competition balance (Harrison, 2022). When accidents occur during air sports competitions, questions arise regarding whether standard aviation liability principles apply or whether sports liability frameworks govern. This affects insurance requirements, damage claims, and potential regulatory sanctions. Unclear liability boundaries discourage some venues and organizations from hosting air sports events due to perceived legal risks.

Jurisdictional Conflicts in International Competitions

Air sports competitions frequently cross national borders, creating complex jurisdictional scenarios (Taylor & Ahmed, 2023). Airspace sovereignty, a fundamental principle of international aviation law, gives states exclusive authority over airspace above their territory. When air sports competitions utilize airspace from multiple countries, participants must comply with each state's regulations simultaneously. This becomes particularly complex in regions with many small countries or disputed territories.

Cross-border competitions face multiple regulatory regimes regarding flight authorization procedures that vary by country, different safety standards and equipment requirements, inconsistent pilot licensing recognition, and varied radio communication and language requirements (Lewis & Brown, 2022). Athletes and organizers must navigate these differences, often requiring months of advance coordination with multiple national authorities. Even with extensive planning, last-minute regulatory changes can disrupt competitions.

The FAI attempts to facilitate international air sports through bilateral and multilateral agreements with aviation authorities, but coverage remains incomplete (Pearson & White, 2021). Many countries lack formal mechanisms for recognizing foreign pilot licenses or aircraft certificates for sporting purposes, requiring full compliance with domestic requirements even for temporary competition visits. This places significant burdens on

athletes, particularly those from developing nations with limited resources for navigating complex international regulatory processes (Zhang & Nakamura, 2023).

Dispute resolution mechanisms reveal another jurisdictional challenge. When conflicts arise during international air sports competitions, uncertainty exists regarding which authority has jurisdiction to resolve disputes (Foster, 2019). Is it the national aviation authority where the event occurs, the FAI as the international sporting body, or the Court of Arbitration for Sport that handles disputes in most Olympic sports? This ambiguity can leave athletes without clear recourse when facing regulatory sanctions or competitive grievances.

Anti-Doping Regulations in Aviation Contexts

The application of anti-doping regulations to air sports presents unique complications due to the intersection with aviation medical requirements (Garcia et al., 2021). The WADA Code, which the FAI has adopted as an IOC-recognized international federation, prohibits numerous substances and methods to ensure fair competition and protect athlete health. However, aviation medical standards, established by ICAO and implemented by national authorities, focus on ensuring pilots' fitness to safely operate aircraft (Richards, 2022).

These two regulatory frameworks can conflict in several ways (Wilson & Davis, 2020). Some medications prohibited under WADA Code may be prescribed for legitimate medical conditions that do not impair pilot performance or may even be necessary to maintain medical fitness for flight operations. Conversely, some substances permitted by aviation medical authorities might be prohibited in sports. Athletes requiring therapeutic use exemptions (TUEs) under WADA procedures must simultaneously maintain aviation medical certification, but these processes are not coordinated between sports and aviation authorities (Garcia et al., 2021).

The Red Bull Air Race, one of the most prominent international air sports competitions before its suspension, documented several cases where these conflicts arose. Pilots faced situations where treating injuries or medical conditions according to standard medical practice would either violate anti-doping rules or jeopardize aviation medical certificates. This forced impossible choices between competitive participation, legal flight status, and appropriate medical care.

Testing procedures also present practical challenges in air sports contexts. Standard anti-doping protocols require athlete whereabouts information for out-of-competition testing, but pilots may be engaged in flight operations or training in remote locations without reliable communication. Sample collection procedures may need modification when athletes are participating in multi-day competitions in austere environments. The small size of some air sports communities creates additional privacy concerns regarding testing logistics.

Case Studies of Regulatory Challenges

The Red Bull Air Race series, which operated from 2003 to 2019, provides instructive examples of air sports regulatory challenges (Johnson & Lee, 2023). This international competition involved highly modified racing aircraft navigating courses marked by inflatable pylons at low altitude and high speed. The series operated in multiple countries, requiring coordination with numerous aviation authorities. Organizers developed a comprehensive safety management system that went beyond standard aviation requirements, but implementation varied across host countries based on local regulatory interpretations. Some venues required additional safety measures that affected competitive fairness by changing course configurations or operational parameters. The series eventually ceased operations partly due to the regulatory complexity and costs associated with meeting varying requirements across jurisdictions.

The FAI World Air Games, held periodically since 1997, attempts to showcase multiple air sports disciplines in a single event similar to the Olympic Games (Pearson & White,

2021). These events highlight coordination challenges when organizing multiple air sports simultaneously, including managing shared airspace among different disciplines, coordinating with local aviation authorities for temporary airspace restrictions, ensuring insurance coverage across diverse activities with varying risk profiles, and applying consistent competitive rules while satisfying local safety requirements. The 2015 World Air Games in Dubai demonstrated successful regulatory coordination through early engagement with aviation authorities, clear delineation of responsibilities between sports and aviation regulators, and comprehensive safety management systems accepted by both regulatory frameworks. However, replicating this success requires significant resources and expertise not always available to event organizers.

The Paragliding World Cup faces ongoing compliance challenges as a series of international competitions held in diverse countries throughout the year (Zhang & Nakamura, 2023). Paragliders often launch from mountains crossing multiple airspace classifications during competitions. Different countries have varying requirements for paraglider certification, pilot licensing, and airspace access. Some nations treat paragliding as aviation requiring full licensing, others as a minimally regulated recreational activity, and still others somewhere in between. This inconsistency creates competitive inequities where athletes from countries with stringent requirements may be more constrained than competitors from jurisdictions with minimal regulation. The International Paragliding Commission, working under the FAI, has attempted to standardize requirements through recommended practices, but implementation remains voluntary and uneven.

Best Practices and Harmonization Models

Despite challenges, several jurisdictions have developed successful approaches to air sports regulation that offer models for broader harmonization (Davies, 2023). The European Union's EASA has implemented a proportionate risk-based regulatory framework distinguishing between commercial aviation and recreational aviation including most air sports (Turner, 2021). This creates lighter regulatory requirements for lower-risk activities while maintaining safety oversight. Member states can implement additional national requirements but must recognize EASA certifications from other EU countries, facilitating cross-border competitions (Blackshaw & Siekmann, 2020).

New Zealand pioneered a delegated regulatory model where certain oversight functions for recreational aviation including air sports are delegated to approved organizations (O'Brien, 2023). Sport Aviation Corp in New Zealand acts as the delegated authority for recreational aviation, working under Civil Aviation Authority oversight but with operational flexibility to develop regulations appropriate to air sports contexts. This reduces regulatory burden on the national authority while maintaining safety standards through organizational accountability.

Australia's recreational aviation administration organizations operate similarly, with organizations like Recreational Aviation Australia administering aircraft certification and pilot licensing for light sport aircraft under Civil Aviation Safety Authority authorization (O'Brien, 2023). These models demonstrate how aviation authorities can maintain ultimate responsibility while delegating appropriate functions to specialized organizations with air sports expertise.

Regarding anti-doping, some national anti-doping organizations have developed specialized protocols for aviation sports recognizing unique challenges (Wilson & Davis, 2020). These include coordinated TUE review processes that consider both sporting fairness and aviation safety, modified whereabouts requirements accounting for operational flying demands, and education programs helping athletes navigate both sporting and aviation medical requirements. However, these remain isolated initiatives rather than systematic international practice.

CONCLUSION

This research reveals that international air sports governance suffers from significant regulatory fragmentation characterized by overlapping authorities, inconsistent standards across jurisdictions, and inadequate coordination mechanisms between sports and aviation regulatory bodies. The current legal framework represents a patchwork of regulations designed for different purposes rather than a coherent system addressing the unique requirements of competitive aviation athletics. The FAI provides sports governance structure and the ICAO establishes aviation safety principles, but insufficient integration between these frameworks creates persistent challenges for athletes, event organizers, and regulatory authorities

The primary regulatory challenges identified center on fundamental tensions between aviation safety imperatives and competitive sports requirements, jurisdictional complexities when competitions cross national borders, dual certification and medical requirements creating compliance burdens for pilot-athletes, unclear liability frameworks affecting insurance availability and event viability, and anti-doping regulations that may conflict with aviation medical standards. These challenges impede the growth and development of air sports while potentially compromising both safety and competitive fairness.

Achieving regulatory harmonization requires multifaceted approaches operating at international, regional, and national levels. International memoranda of understanding between ICAO and the FAI would establish principles for coordinating aviation safety requirements with sporting regulations, clarify jurisdictional boundaries and dispute resolution mechanisms, and create frameworks for mutual recognition of certifications across borders. Regional harmonization through bodies like EASA demonstrates viable models for reducing regulatory fragmentation while respecting national sovereignty over airspace and safety standards.

National regulatory reforms should consider proportionate risk-based frameworks distinguishing air sports from commercial aviation, delegated oversight models empowering specialized air sports organizations under aviation authority supervision, streamlined processes for international competition approvals and temporary airspace access, and coordinated medical certification procedures addressing both sporting and aviation requirements. These reforms must balance legitimate safety concerns with practical needs of competitive athletics.

This research contributes to sports law and aviation law scholarship by systematically analyzing the previously understudied intersection of these fields in the context of air sports governance. The findings fill a critical gap in understanding how multi-jurisdictional regulatory coordination can be achieved in activities that do not fit neatly within traditional legal categories. The proposed harmonization framework provides a roadmap for regulatory reform that can guide international organizations, national authorities, and sports federations in developing more coherent governance systems. Future research should examine implementation experiences as reform efforts progress, evaluate specific harmonization mechanisms for effectiveness, and extend analysis to emerging air sports disciplines including drone racing and electric aircraft competitions that present novel regulatory challenges.

REFERENCES

Anderson, J. (2021). Risk regulation in extreme sports: Balancing safety and athletic performance. *European Journal of Sport Science*, 21(8), 1134-1148.

Blackshaw, I., & Siekmann, R. (2020). Sports law and policy in the European Union. *International Sports Law Journal*, 20(1-2), 5-23.

Chen, M., & Liu, W. (2022). International aviation law and recreational flying: Regulatory gaps and challenges. *Air and Space Law*, 47(3), 289-312.

- Davies, M. (2023). Harmonizing aviation safety standards across jurisdictions: Lessons from EASA. *Journal of Air Law and Commerce*, 88(2), 201-234.
- Foster, K. (2019). Lex sportiva and lex ludica: The Court of Arbitration for Sport's jurisprudence. *Entertainment and Sports Law Journal*, 17(3), 1-18.
- Garcia, R., Thompson, L., & Martinez, S. (2021). Anti-doping regulations in aviation sports: Conflicts between WADA Code and pilot medical standards. *International Journal of Sport Policy and Politics*, 13(4), 567-589.
- Harrison, P. (2022). Liability frameworks in air sports competitions: Insurance, jurisdiction and dispute resolution. *Journal of Sports Law*, 29(1), 45-71.
- International Civil Aviation Organization. (2020). Annex 2 to the Convention on International Civil Aviation: Rules of the Air (11th ed.). ICAO.
- Johnson, M., & Lee, K. (2023). Safety regulations in extreme air sports: A comparative analysis. *Journal of Air Law and Commerce*, 88(1), 23-45.
- Kumar, A. (2021). Regulatory challenges in Asia-Pacific aviation: Harmonization efforts and persistent barriers. *Asian Journal of Law and Economics*, 12(2), 189-215.
- Lewis, D., & Brown, T. (2022). Cross-border sports competitions and jurisdictional conflicts. *International Sports Law Review*, 22(3), 341-368.
- Miller, S. (2020). The Chicago Convention at 75: Aviation governance in the twenty-first century. *Air and Space Law*, 45(6), 567-594.
- O'Brien, C. (2023). Delegated regulatory models for recreational aviation: New Zealand and Australian experiences. *Aviation Law Review*, 15(2), 123-147.
- Pearson, H., & White, J. (2021). Fédération Aéronautique Internationale: History, governance and regulatory authority. *International Journal of the History of Sport*, 38(5), 478-501.
- Richards, N. (2022). Medical certification for pilot-athletes: Navigating dual regulatory requirements. *Aviation Medicine Journal*, 34(4), 289-307.
- Smith, J. (2022). Aviation law meets sports governance: A regulatory conundrum. *International Sports Law Journal*, 22(3), 145-167.
- Taylor, R., & Ahmed, F. (2023). Airspace sovereignty and international sporting events: Legal frameworks and practical challenges. *Journal of International Sports Law*, 23(1), 78-104.
- Turner, B. (2021). Risk-based regulation in European aviation: The EASA approach. *European Transport Law*, 56(3), 412-441.
- Wilson, G., & Davis, L. (2020). Therapeutic use exemptions in sports: Policy conflicts across regulatory domains. *Journal of Sports Medicine and Physical Fitness*, 60(7), 998-1013.
- Zhang, Y., & Nakamura, K. (2023). Air sports development in Asia: Regulatory barriers and growth opportunities. *Asian Journal of Sport and Exercise Psychology*, 3(2), 156-178