



## UNVEILING A NEW CURTAIN: THE APPLICABILITY OF CISG ON SALES OF DRONES

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### ABSTRACT

Drones have become an integral part of the aviation industry, encompassing a wide range of sizes and functions. This paper examines the interpretation and application of the United Nations Convention on Contracts for the International Sale of Goods (CISG) to the sale of drones. While drones are not explicitly excluded from the CISG, their absence from its provisions can be attributed to the CISG's formation predating their widespread commercialization. The absence of specific provisions addressing drone sales within the CISG has led to diverse interpretations. However, considering the CISG's objective of establishing a uniform legal framework and promoting good faith in international trade, extending its application to the sale of drones is conceivable. As an internationally recognized legal instrument for the sale of goods, the CISG provides a convenient framework for parties involved in drone transactions. However, the CISG must also consider the intricacy and risks associated with certain goods, which may conflict with other legal regulations or introduce complexities in their legal treatment. Drones exhibit diverse types, functionalities, and operational contexts, and their regulation varies significantly across different countries due to airspace and national sovereignty considerations.

**Keywords:** sales of drones; cisd scope; international sales of goods.

### I. INTRODUCTION

The proliferation of drone technology has presented distinctive legal challenges, particularly regarding the sales of drones in international trade. A drone is an unmanned aircraft. Drones are more formally known as unmanned aerial vehicles (UAVs) or unmanned aircraft systems. Essentially, a drone is a flying robot that can be remotely controlled or fly autonomously using software-controlled flight plans in its embedded systems that work in conjunction with onboard sensors and a global positioning system (GPS).<sup>1</sup> Drones are commonly recognized for their utility in warfare or as mere toys for children. However, the scope of drone applications has expanded significantly, reaching the realm of aviation business<sup>2</sup>. Drones now serve diverse purposes, including the delivery of packages to customers and supporting government surveillance operations. This evolution has brought about a greater freedom in the sale of drones. However, drone sales differ significantly from the sale of conventional products. The classification of drones becomes imperative, taking into account their specific attributes such as form, size, and type of engine utilized. This classification is necessary due to the fact that drones operate in the airspace, potentially causing disruptions to air traffic or encroaching upon the airspace of other regions. As a result, the sale and purchase of drones necessitate careful consideration of relevant regulations. When engaging in the sale of drones, it is crucial to understand and adhere to the applicable regulatory framework.

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<sup>1</sup> Drone, Ben lutkevich

<sup>2</sup> Trevir I Nath, "How Drones Are Changing the Business World"

Drones have rapidly evolved into sophisticated devices with multifaceted functionalities, including aerial photography, surveillance, and product delivery. Nevertheless, the legal landscape surrounding drone sales remains fragmented, with different countries adopting varied definitions and regulations. National aviation laws often classify drones as aircraft, subjecting their sales to an array of requirements and restrictions. This legal inconsistency creates a challenging environment for businesses engaged in cross-border trade, hindering the development and growth of the drone industry. Furthermore, the sale of drones raises important concerns regarding airspace management and national security. Drones have the potential to access sensitive areas or interfere with the movement of manned aircraft. Therefore, regulations governing drone sales often incorporate provisions aimed at safeguarding airspace integrity and national defense interests. By implementing strict guidelines and permitting procedures, authorities can mitigate risks associated with unauthorized drone operations and protect the privacy and security of individuals and organizations. Another use for drones isn't in the sky at all. Some organizations are using ground-based and indoor drones to map their facilities. Drones take pictures or lidar images throughout the facilities, and then GIS technology creates maps and floor plans that give employees a common view of the workplace or industrial environment. By combining those maps with data from IoT devices like smartphones or sensors, companies can do advanced routing and analytics on the indoor environment, including patterns of movement, assets, and infrastructure. It's a whole new frontier for companies in many industries.<sup>3</sup>

In the realm of international commercial transactions, the CISG presents a promising solution for harmonizing the sales of goods, including drones. The CISG, ratified by a significant number of countries, provides a standardized legal framework that facilitates international trade. However, the applicability of the CISG to drone sales remains subject to interpretation, as drones possess unique characteristics that necessitate tailored legal considerations. From a legal standpoint, the inclusion of drones within the ambit of the CISG is crucial to establish clarity and consistency in international drone sales. This would enable businesses involved in the global drone trade to benefit from the uniform rules and regulations outlined in the convention. Moreover, by aligning the legal treatment of drone sales, international cooperation can be fostered, market accessibility enhanced, and innovation encouraged within the industry. Implementing the CISG as a governing instrument for drone sales would significantly reduce uncertainties and legal complexities associated with cross-border transactions.

One of the primary challenges in applying the CISG to drone sales lies in reconciling the convention's provisions with the unique aspects of drone technology. Drones are characterized by their remote operation, autonomous capabilities, and diverse applications. Therefore, adapting the existing rules of the CISG to accommodate the specific requirements and risks associated with drones becomes imperative. Issues such as liability for damages, warranties, and the seller's obligations may need to be tailored to suit the nature of drone transactions. Furthermore, the applicability of the CISG to drone sales raises questions regarding the interpretation and application of its provisions in the context of emerging technologies. As the drone industry continues to evolve at a rapid pace, legal practitioners and scholars must grapple with the complexities arising from the interplay between traditional legal principles and innovative drone applications. This necessitates a nuanced understanding of the CISG's provisions and their potential adaptation to address the unique challenges posed by drone sales.

The adoption of a comprehensive legal instrument like the CISG for drone sales not only ensures consistency in cross-border transactions but also strengthens legal certainty. Parties engaged in international trade can rely on the established legal principles and rules of the CISG to resolve disputes

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<sup>3</sup> Chris Chiappinelli "Think Tank: Defining the Business Case for Drones"

arising from drone sales. The expansion of drone applications in the aviation business has led to a more liberal environment for drone sales. However, the sale of drones requires careful consideration of their specific characteristics and compliance with relevant regulations. Adhering to classification requirements, aviation regulations, and national security considerations is essential to ensure the responsible and legal sale of drones. Moreover, in the context of international trade, understanding the applicability of the CISG and relevant international agreements becomes crucial for promoting consistent and harmonized drone sales practices across borders. This would mitigate the risk of conflicting national laws and varying interpretations, providing a stable legal foundation for businesses operating in the drone industry. Moreover, an internationally recognized legal framework for drone sales can foster cooperation between countries in addressing emerging legal issues and concerns. By promoting a uniform approach to drone sales, the CISG encourages collaboration and knowledge-sharing among states, leading to the development of best practices and guidelines. This cooperative approach helps navigate the complex legal challenges arising from the ever.

## II. RESEARCH METHODS

This article was written and arranged using desktop study research methodology, normative juridical and quantitative where use the analysis methods to test relationship between variables. Study research methodology was used as the research of sales of drones in the perspective of CISG based on sources, such as; primary law materials which includes basic norm, national law, and international conventions or treaty, and jurisprudence; secondary law materials such as doctrine, books, publication by international organization, and journal articles from imminent researchers.

## III. DISCUSSION AND RESULT

### A. Aircraft and its Scope

Throughout history, unmanned aircraft have played a significant role in the development and progression of aviation. In fact, the history of unmanned aircraft is intricately intertwined with the broader history of all aircraft.<sup>4</sup> From ancient times, such as the era when Chinese kites adorned the skies<sup>5</sup>, to the advent of the first hot air balloon, unmanned flying craft emerged before the concept of manned flight even arose. An early example of unmanned aircraft usage can be traced back to the Chinese General Zhuge Liang (180–234 AD)<sup>6</sup>, who ingeniously employed paper balloons equipped with oil-burning lamps. By heating the air inside these balloons, he was able to fly them over enemy territories at night, creating an illusion of divine intervention. This early utilization of unmanned aircraft demonstrated their potential for strategic advantage and unconventional warfare tactics. Aircraft means a device that is used or intended to be used for flight in the air.<sup>7</sup>

According to the current Title 14 of the Code of Federal Regulations (14 CFR) part 1, Definitions and Abbreviations, an aircraft is defined as a device that is utilized or intended for flight. The different categories of aircraft for airmen certification include airplane, rotorcraft, glider, lighter-than-air, powered-lift, powered parachute, and weight-shift control aircraft. In 14 CFR part 1, an airplane is further defined as an engine-driven, fixed-wing aircraft that achieves flight through the

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<sup>4</sup> Muhammad Nadeem Mirza et al, 'Unmanned Aerial Vehicles: A Revolution in the Making' (2016) 31 Research Journal of South Asian Studies 625, 627.

<sup>5</sup> Gregory K. James, Unmanned Aerial Vehicles and Special Operations: Future Directions (Postgraduate Thesis, Monterey California Naval Postgraduate School, 2000) 5.

<sup>6</sup> Shappee Eric, "Unmanned Aircraft System", page 1

<sup>7</sup> Cornell Law, Legal Information Institute

dynamic reaction of air against its wings.<sup>8</sup> Additionally, the term "advanced avionics aircraft" is not yet formally included in 14 CFR part 1 but refers to an aircraft equipped with a global positioning system (GPS) navigation system featuring a moving map display, typically coupled with another system such as an autopilot. This chapter serves as a concise introduction to aircraft structure, primarily utilizing an airplane for illustrative purposes. It is important to note that Light Sport Aircraft (LSA), including weight-shift control aircraft, balloons, gliders, powered parachutes, and gyroplanes, possess their own handbooks that provide comprehensive information regarding aerodynamics and control.

In modern times, the definition of unmanned aircraft has evolved to refer to autonomous or remotely piloted air vehicles that replicate the maneuvers and operations of their manned counterparts. These unmanned aircraft, often referred to as drones, have become increasingly sophisticated and technologically advanced. They are capable of performing a wide range of tasks, from aerial surveillance and reconnaissance to package delivery and cinematography. Over the years, the terminology associated with unoccupied aircraft has undergone changes, reflecting the perspectives of aircraft manufacturers, civil aviation authorities, and the military. However, the essence remains the same – unmanned aircraft are vehicles that navigate the skies without a human pilot on board. The progression of unmanned aircraft technology has revolutionized various industries, including aviation, defense, photography, and even recreational activities. The versatility and adaptability of drones have opened up new possibilities and applications that were once unimaginable.

Drones are classified as aircraft. This categorization stems from the fact that drones possess the ability to take flight, regardless of whether they are operated by a pilot or capable of autonomous flight. Drones have emerged as a significant technological advancement in the field of aviation, revolutionizing various industries and applications. The inclusion of drones within the broader classification of aircraft is supported by their fundamental characteristics and capabilities. Like traditional aircraft, drones are designed to achieve sustained flight through the manipulation of aerodynamic forces. They are equipped with wings, rotors, or other propulsion systems that enable them to generate lift and maneuver through the air. Furthermore, drones often adhere to the same principles of aerodynamics and flight mechanics as conventional aircraft, emphasizing their status as aircraft in their own right.<sup>9</sup>

Although it is true that many people perceive drones as unmanned aircraft systems (UAS), which is commonly referred to as UAS, it is important to recognize that UAS or unmanned aircraft systems are integral components of local or global air transportation and aviation. They operate within a framework of rules, regulations, and disciplines that govern their use and ensure the safety and efficiency of their operations.

UAS, as part of the broader aviation landscape, are subject to a comprehensive set of regulations and guidelines. These rules are designed to govern various aspects of UAS operations, including airspace restrictions, flight procedures, licensing requirements, and safety protocols. The objective of these regulations is to harmonize the operation of UAS with other airspace users and maintain the integrity of the aviation system as a whole. The establishment of rules and regulations specific to UAS reflects the recognition of their unique characteristics and operational considerations. As technological advancements continue to enhance the capabilities of UAS, it becomes imperative to address safety, privacy, and security concerns associated with their use. By implementing robust regulatory

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<sup>8</sup> Morelli, Eugene A., and Vladislav Klein. Aircraft system identification: theory and practice.

<sup>9</sup> Norton Rose Fulbright, "The Big Read Book: Drone", page 4

frameworks, authorities aim to strike a balance between promoting innovation and ensuring responsible and safe UAS operations.

Furthermore, the integration of UAS into the existing air transportation system necessitates adherence to established disciplines and best practices. Pilots and operators of UAS are required to undergo training and certification processes to ensure their competence in operating these systems safely and in compliance with applicable regulations. Additionally, UAS operators are encouraged to follow ethical guidelines and principles, such as respecting privacy rights, mitigating noise disturbances, and minimizing environmental impact. The recognition of UAS as a vital part of air transportation and aviation underscores the need for a structured approach to their regulation and management. This approach aims to facilitate the integration of UAS into airspace systems, promote interoperability with other aircraft, and ensure the overall safety and efficiency of aviation operations.<sup>10</sup> However, not all UAS can be classified as drones. For example, model airplanes are considered UAS but not typically referred to as drones. They fall under the category of "unmanned aircraft," defined as remotely controlled aircraft without an onboard pilot. Therefore, understanding drones is not a straightforward matter and cannot be determined solely based on various definitions of terminology. In the context of UAS, drones can be considered as such due to their enhanced maneuverability and sophistication. They are capable of carrying different payloads and cameras, making them more versatile in their applications. Drones have found widespread use across various industries.

The discussion here extends beyond whether drones fall within the scope of aircraft but also considers whether there are exceptions that categorize drones as aircraft. In today's rapidly evolving world, it becomes increasingly challenging to argue that drones are not considered aircraft. Their usage extends beyond mere hobbyist toys or military applications. Drones are now utilized in aerial activities that encompass the fundamental characteristics of aircraft. Therefore, it is becoming less plausible to assert that drones are not considered aircraft in our ever-changing world. The utilization of drones in aerial environments encompasses the defining features of aircraft.

## **B. Comparison Between Law Instrument**

The understanding that drones are encompassed within the aircraft category engenders a diverse array of regulations governing their utilization and commercial transactions, thereby posing challenges to achieving harmonization under the CISG. In the current landscape, the compulsory registration of drones has become an indispensable prerequisite. It is imperative for individuals to recognize that regional and local governing bodies hold the authority to establish distinct guidelines pertaining to the operation of unmanned aircraft systems (UAS). Thus, a conscientious awareness of the prevailing regulations within one's jurisdiction assumes paramount significance, as it serves to preempt any inadvertent violations involving encroachment, assault, or harm to individuals or property.

In order to delve deeper into the matter at hand, it is essential to explicate the legal instruments that unequivocally affirm the classification of drones as aircraft, thereby subjecting them to regulatory frameworks delineated within each instrument. Furthermore, the adherence to international laws governing the use of force constitutes the foundational cornerstone upon which the permissibility of deploying drones is predicated.

However, it is worth noting that the veracity and applicability of the aforementioned assertions are contingent upon the jurisdiction under consideration, as well as the dynamic nature of drone regulations. Therefore, to obtain a comprehensive and accurate understanding of the nuances

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<sup>10</sup> *Op. Cit*

surrounding the employment of drones within a specific locale, it is prudent and judicious to consult the pertinent local statutes and regulations, which are subject to periodic updates and revisions in order to keep pace with the evolving landscape of drone technology and its associated legal implications.

a. The Federal Aviation Administration (FAA)

The Federal Aviation Administration (FAA) of the United States the Department of Transportation has issued advisory circulars in relation to the operation of drones. The advisory circulars are not binding or enforceable. Drones for recreational use are not tested to any FAA standards. Therefore, it is the operator's responsibility to ensure the safety of the flight and to comply with Federal, State and local laws and the operator must not endanger the safety of the National Airspace Systems. Recreational drones must be operated within a visual line of sight and must not interfere with the operation of manned aircraft. In order to operate a drone for commercial use a remote pilot's certificate must be obtained and the drone must be registered with the FAA. Registration is valid for three years. The FAA has also published specific rules pertaining to the conditions of the operations. the FAA does not require small drones to comply with current agency airworthiness standards or obtain aircraft certification.

the body that enacts federal aviation regulations, considers drones to be aircraft and refers to them as Unmanned Aircraft Systems (UAS). According to the FAA, an aircraft is "any contrivance invented, used, or designed to navigate or fly in the air. Drones are considered aircraft because of the FAA's definition of an aircraft. For a complete understanding of how drones are defined, you need to understand the following terms. Aircraft refers to any contrivance invented, used, or designed to navigate or fly in the air. Under the FAA if we're talking about the flying type of drones, there is no exception to drones being aircraft. If it was designed to fly and navigate in the air, that type of drone will always be considered an aircraft by the FAA. Under FAA Just as there are rules of the road when driving a car, there are rules of the sky when operating a drone, such as:

- Always avoid manned aircraft.
- Never operate in a careless or reckless manner.
- Keep drone within sight. If you use First Person View or similar technology, you must have a visual observer always keep your drone within unaided sight (for example, no binoculars).
- Owner cannot be a pilot or visual observer for more than one drone operation at a time.
- Do not fly a drone over people unless they are directly participating in the operation.
- Do not operate your drone from a moving aircraft.

b. Australia Government Civil Aviation Safety Authority

Australia was the first country in the world to regulate the use of drones in 2002. In Australia the operation of drones is regulated by the Australian Government Civil Aviation Safety Authority. A remote pilot licence and specialist training are required if an operator wishes to operate a drone larger than 2kg for commercial use, outside the standard drone operating conditions and for a remotely piloted aircraft operator's certificate holder. A remotely piloted aircraft operator's certificate is required for all operations for commercial use. In order to obtain the licence remote pilot training at a certified training provider is required.

The general operating requirements to legally operate a drone are similar to those in South Africa such as the height and location of operations and conditions which are not permissible. A remote pilot's licence is not required for recreational use, use over your own private land or for drones that weigh less than 2kg. However, if the drone weighs more than 250 grams for recreational use over your own land then accreditation is required. Accreditation entails a short safety video followed by an online quiz.

When operating a drone for recreational use it cannot be operated above 120 metres off the ground in all locations or in areas where public are at risk or where there is an emergency operation and further cannot be operated within 30 metres of other people unless other people are essential to controlling or navigating the drone. A team of inspectors and enforcement officials have been appointed by the Australian government to ensure compliance with the regulations and public reporting on non-compliance is encouraged. Fines up to \$1050 per offence can be issued and demerit points can be listed against an operator's licence or certificate. If a matter is escalated to court then an offender can be fined up to USD10,500, convicted of a crime or receive demerit points. If a drone is operated in a hazardous manner to other aircraft then the penalty can be up to two years imprisonment or a fine of USD25,200. The same penalty can be imposed if someone interferes with the operation of a drone or attempts to shoot it down.

The Civil Aviation Safety Authority (CASA) of Australia assumes a pivotal role in the oversight and regulation of remotely piloted aircraft systems (RPAS), commonly referred to as drones. With the proliferation of drones and the inherent risks they pose, CASA has crafted a comprehensive framework to govern their operation, placing paramount emphasis on safety and responsible conduct. Within the purview of CASA, an extensive array of regulations and guidelines encapsulates various facets of drone operations, encompassing registration, licensing, operational limitations, and safety protocols. These regulatory provisions extend to both recreational and commercial drone activities, striking a delicate equilibrium between fostering innovation and ensuring the integrity of airspace users and the general public.

Crucially, compliance with CASA's registration requirements is mandatory for all drone operators in Australia. This meticulous process ensures the identification of drone owners and cultivates accountability for their actions. Moreover, commercial operators are obliged to procure an operator's certificate, while drone pilots must hold either a remote pilot license (RePL) or a remote pilot operator certificate (ReOC), contingent upon the nature and scale of their operations. To fortify the safety of drone operations, CASA has implemented a series of operational limitations and constraints. These encompass adherence to stipulated altitude thresholds, the maintenance of visual line of sight during flights, avoidance of proximity to airports and other sensitive zones, and strict adherence to the regulations governing controlled airspace. Additionally, CASA provides comprehensive guidelines elucidating pre-flight checks, comprehension of meteorological conditions, and the responsible operation of drones.

CASA accords significant weightage to the education of drone operators, acquainting them with their responsibilities and the regulatory framework they must abide by. An assortment of resources, including online courses and informational materials, are made readily available to augment awareness and comprehension of drone-related regulations. Collaborative engagement with industry stakeholders and the aviation fraternity further engenders a culture of safety and compliance within the drone ecosystem. Given the dynamic nature of drone technology and evolving operational imperatives, CASA regularly reviews and revises its regulatory framework. Actively seeking feedback from the drone industry and the general populace, CASA strives to ensure the efficacy and relevance of the regulations.

Through robust regulation and the promotion of responsible drone operations, CASA endeavors to facilitate the seamless integration of drones into Australian airspace, concurrently mitigating risks and safeguarding the welfare of all stakeholders. These regulations not only safeguard the public but also foster continued growth and innovation within the burgeoning drone industry in Australia.

c. The European Aviation Safety Agency (EASA)

The EASA rules intend to replace national regulations by individual countries, however, member states can set their own no-fly zones. The regulations categorise drones as “open” which does not require prior authorisation, “specific” which requires authorisation according to the mitigation measures identified in an operational risk assessment and “certified” which requires certification of the drone, a licenced remote pilot’s licence and operator approval from the competent authority. The regulations provide a framework for the safe operation of drones while allowing for growth of the industry and further ensures the protection of privacy, security and data. The regulations define technical and operational requirements and combine both product and air legislation. Although the regulations do provide flexibility for member states, it aims to achieve a coherent and harmonised set of rules to encourage and regulate the circulation of drones across the European Union seamlessly.

The European Aviation Safety Agency (EASA) has taken a proactive approach to regulate the use of drones within the European Union (EU) member states. Recognizing the rapid growth and potential risks associated with unmanned aircraft systems (UAS), EASA has introduced comprehensive regulations to ensure the safe and harmonized operation of drones across Europe. The regulatory framework developed by EASA covers various aspects of drone operations, including technical requirements, operational limitations, and pilot qualifications. These regulations are applicable to both recreational and commercial drone use, aiming to establish a common set of rules that prioritize safety while enabling innovation and growth in the drone industry.

One of the key elements of EASA’s approach is the categorization of drones based on their characteristics and associated risks. Drones are classified into different categories, such as open, specific, and certified, depending on their weight, capabilities, and intended use. Each category has specific requirements and operational limitations that drone operators must comply with. EASA’s regulations address various operational aspects, including flight restrictions, operational limitations, and geofencing. They define no-fly zones, such as airports, densely populated areas, and sensitive locations, where drone operations are prohibited or restricted. The regulations also impose altitude limits and require operators to maintain visual line of sight with their drones, ensuring safe and controlled operations.

To ensure the competence of drone pilots, EASA has introduced a new set of requirements for remote pilot qualifications. This includes the need for remote pilots to obtain a certificate or license, demonstrating their knowledge and understanding of aviation regulations, airspace rules, and drone operation procedures. Additionally, specific training and competency assessments may be required for certain categories of drone operations. In terms of technical requirements, EASA’s regulations cover aspects such as drone identification, registration, and maintenance. They also address issues related to safety features, including emergency procedures, fail-safe mechanisms, and electronic conspicuity systems. Compliance with these technical requirements is essential for ensuring the reliability and safe operation of drones.

EASA’s regulations are continuously evolving to keep pace with technological advancements and emerging challenges in the drone industry. The agency works closely with national aviation authorities and stakeholders to promote a consistent and harmonized approach to drone regulations across the EU member states. By implementing robust regulations, EASA aims to foster the development of a thriving and safe drone ecosystem in Europe. These regulations not only ensure the protection of airspace users and the public but also support the integration of drones into existing aviation systems, enabling the realization of the potential benefits offered by unmanned aircraft technology.

d. Arab Saudi Civil Aviation

Aircraft is any machine that can derive support in the atmosphere from the reaction of the air, other than the reaction of the air against the earth's surface under this regulation kingdom Arab Saudi has complete and absolute sovereignty over the airspace within its territory which civil aircraft must be registered in the Arab Saudi Kingdom. Under article 3: scope of application of the regulation stipulates that "Any aircraft registered in a foreign country and operated or maintained by a Saudi national by virtue of a lease, exchange or any similar agreement, if an agreement between the Kingdom and the aircraft registration country states." The General Authority of Civil Aviation (GACA) in Saudi Arabia has established regulations and guidelines to govern the use of drones within the country. These regulations aim to ensure the safe and responsible operation of drones while addressing concerns related to security, privacy, and airspace management.

Under the Unmanned Aircraft Systems (UAS) Regulations implemented by GACA, drone owners are required to register their drones with the authority. The registration process involves providing information about the drone, such as its specifications and the operator's details. Certain categories of drones may also require operators to obtain certification from GACA, which verifies their competence and knowledge in operating drones safely. GACA may impose specific training requirements for drone pilots as well. To maintain aviation safety, the regulations specify restrictions on where drones can be flown. Areas such as airports, military installations, and sensitive locations are designated as no-fly zones for drones. Operators must adhere to these restrictions to prevent unauthorized access to restricted areas and ensure the safety of manned aircraft.

GACA plays a crucial role in managing the airspace to accommodate both manned and unmanned aircraft. The regulations include guidelines for coordinating drone operations with air traffic control and maintaining appropriate separation from other aircraft to avoid collisions. Privacy and security are key considerations in drone operations. Operators are required to respect individuals' privacy and comply with regulations regarding data collection, storage, and sharing. GACA may also impose specific security measures for certain types of drone operations to address concerns related to public safety. Drone operators in Saudi Arabia should familiarize themselves with GACA's regulations and ensure compliance with the requirements outlined. By doing so, they can contribute to the safe and lawful operation of drones within the country's airspace, avoiding potential legal consequences and promoting responsible drone use.

e. The International Civil Aviation Organization (ICAO)

The International Civil Aviation Organization (ICAO) assumes a crucial role in the governance and regulation of drones on a worldwide scale. As a specialized agency operating under the United Nations, ICAO serves as the authoritative body entrusted with establishing international standards and guidelines to ensure the safe and efficient operation of civil aviation, encompassing the domain of drones. ICAO's regulatory framework concerning drones is driven by its overarching objective to uphold the utmost levels of safety, security, and environmental sustainability within the realm of aviation. The organization acknowledges the rapid growth and evolving capabilities of drones, and endeavors to address the distinct challenges they pose while advocating for their secure integration into airspace systems.

ICAO's approach to the governance of drones is rooted in a risk-based methodology, which entails assessing potential hazards and associated risks pertaining to drone operations, and formulating appropriate regulations and standards to mitigate these risks. This risk-based approach provides room for flexibility and adaptability in the regulation of drones, considering factors such as drone size, weight,

intended purpose, and the operational environment in which they are deployed. A significant initiative undertaken by ICAO with regard to drones is the development of the Unmanned Aircraft Systems (UAS) Traffic Management (UTM) concept. UTM aims to establish a comprehensive framework for effectively managing the escalating volume of drone traffic, ensuring the safe separation of drones from other aircraft and seamless integration into existing airspace systems. This concept encompasses provisions for remote identification of drones, implementation of geo-fencing to restrict drone operations in sensitive areas, and the introduction of automated traffic management systems.

ICAO also collaborates closely with its member states to harmonize regulations and foster international cooperation in the realm of drone operations. Through its technical committees and working groups, ICAO generates guidance materials, model regulations, and best practices that assist member states in developing their own national regulations pertaining to drones. This harmonization endeavor facilitates consistency and interoperability in drone operations, enabling smooth cross-border activities and bolstering the growth of the global drone industry. Moreover, ICAO actively engages with industry stakeholders, academia, and other pertinent organizations to cultivate innovation, exchange knowledge, and tackle emerging challenges in drone technology and operations. It encourages collaborative efforts and information sharing to remain abreast of the latest advancements and trends in the drone industry, ensuring that its regulatory framework remains contemporary and effective.

By furnishing a global framework for the regulation of drones, ICAO endeavors to ensure the secure and harmonious integration of drones into the global aviation system. Its endeavors contribute to the establishment of a sustainable and fortified environment for drone operations, thereby unlocking the full potential of this swiftly expanding technology while upholding the highest standards of safety and efficiency in civil aviation.

## **C. CISG And Drones**

### **a. CISG History**

The United Nations Convention on Contracts for the International Sale of Goods (CISG) was ratified by the United States Senate in 1986, and it became enforceable in the United States on January 1, 1988, thereby becoming part of U.S. federal law. As a federal treaty, the CISG takes precedence over Article 2 of the Uniform Commercial Code (UCC) in cases where it applies.<sup>11</sup> Consequently, it is crucial for lawyers involved in drafting or litigating international sales contracts to possess a comprehensive understanding of the CISG. This note aims to familiarize common law practitioners with the historical background and substantive provisions of the Convention. Part I of this note provides a brief overview of the history and scope of the CISG, while Part II explores the inherent challenges in interpreting an international treaty. Part III delves into the substantive provisions of the CISG. Finally, the conclusion presents a practical outline to assist U.S. lawyers in drafting contracts for the international sale of goods.

The primary objective of the CISG is to establish a uniform and equitable set of rules for contracts governing the international sale of goods. Its purpose is to eliminate the need for parties engaged in international transactions to navigate and analyze various national and international laws to determine the applicable legal framework. Widely regarded as one of the most successful international commercial law treaties, the CISG has been ratified by a large number of countries that play significant roles in international trade.<sup>12</sup> Furthermore, it has served as a model for the drafting of subsequent commercial law treaties. Currently, the CISG has been adopted by 83 countries. One of the key aims of the CISG is

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<sup>11</sup> Stonberg michael, "Drafting Contract Under the Convention on Contracts For The Internasional Sales Of Goods", page 1

<sup>12</sup> Gillette clayton P and walt steven D, "The CISG: history, methodology, and construction", summary

to promote certainty and predictability in international sales contracts, thereby reducing transaction costs. When a country adopts the CISG, it incorporates the terms of the Convention into its national law. In the case of the United States, the CISG has become part of federal law. Once the CISG applies to a transaction, it generally supersedes the uniform commercial code, which has been adopted by most U.S. states, and provides its own comprehensive regulations governing contract formation, party obligations, breach, remedies, and damages. It is important to note that the CISG applies exclusively to contracts for the sale of goods, specifically between parties whose places of business are located in different countries, provided that both countries are contracting states under the CISG. However, it does not cover consumer transactions or the sale of services.

Therefore, an American business owner who enters into an aircraft purchase agreement with a party whose "place of business" is located in a CISG signatory country at the time of signing will be bound by the provisions of the CISG, unless the agreement specifically excludes its application. Since the United States is a signatory to the CISG, it becomes essential to determine whether the CISG applies to a business aircraft transaction by examining the other party's "place of business" that has the closest connection to the aircraft purchase agreement, taking into account the circumstances known or contemplated by the parties at any given time, including the contract's conclusion. Article 10 of the CISG clarifies that the determination of the "place of business" involves an analysis of where the communications and representations relating to the contract and the product originated, as well as when those communications occurred. This evaluation encompasses the entire transaction, including the offer, acceptance, and performance of the contract. Importantly, the location's relevance is not based on where the business is incorporated or where its headquarters are located, which would typically be pertinent for jurisdictional purposes. Instead, under the CISG, the determination hinges solely on the location that has the closest relationship to the contract and its execution. The CISG's ratification by the United States Senate in 1986 made it an integral part of U.S. federal law. Its aim is to provide a uniform and fair framework for international sales contracts, eliminating the need for parties to navigate complex national and international laws. The CISG has been widely adopted by numerous countries, including the United States, and it governs contracts for the sale of goods between parties with places of business in different countries. By understanding the historical context and substantive provisions of the CISG, lawyers can effectively navigate the complexities of international sales contracts and ensure compliance with the applicable legal framework.

#### **b. How CISG Govern Sales of Drones**

The CISG, with its scope of application defined in Articles 4 and 5, serves as an instrument for harmonizing international sales law. It is important to note that, like many other Conventions aiming to harmonize specific areas of law, the CISG does not seek to be an all-encompassing code regulating every aspect falling within its purview. The drafters of the Convention recognized that certain matters were too controversial to be included in the CISG due to significant differences in national laws and varying approaches across jurisdictions.

In order to ensure maximum support and wide acceptance of the Convention, the drafters made a deliberate decision to leave these contentious issues outside the scope of the CISG. They understood that including such matters would have led to a complete but controversial text, hindering the uniform application of the CISG. Instead, they chose to prioritize creating a widely acceptable Convention that could effectively govern a broad range of international sales contracts. Considering the broad description of the matters covered by the CISG and the non-exhaustive list of excluded issues, the interpretation of the notions and concepts used in Articles 4 and 5 plays a crucial role in determining

the extent of the CISG's unifying effect. A narrow interpretation of key concepts, such as the "formation of the contract" and the "rights and obligations of the seller and the buyer," could significantly restrict the CISG's scope of application.

However, adopting a broader and more inclusive interpretation of these concepts allows for a more comprehensive application of the CISG. Such an approach aligns with the Convention's objective of promoting uniformity in international trade. By considering the underlying principles and objectives of the CISG, as well as relevant international case law and legal scholarship, a more expansive interpretation can be applied to ensure that the CISG encompasses a wider range of transactions, including those involving drones. Furthermore, technological advancements, such as the widespread use of drones in commercial activities, necessitate a flexible and adaptable approach to the interpretation of the CISG. While drones may not have been specifically contemplated at the time of the CISG's drafting, their inclusion within the CISG's scope can promote consistency and certainty in international drone sales contracts.<sup>13</sup>

article 2 CISG stipulates that

#### Article 2

This Convention does not apply to sales:

- (a) Of goods bought for personal, family or household use, unless the seller, at any time before or at the conclusion of the contract, neither knew nor ought to have known that the goods were bought for any such use;
- (b) By auction;
- (c) On execution or otherwise by authority of law;
- (d) Of stocks, shares, investment securities, negotiable instruments or money;
- (e) Of ships, vessels, hovercraft or aircraft;
- (f) Of electricity

Aircraft, being considered as immovable goods and subject to special registration requirements, are typically excluded from most sales of goods conventions and legal systems. The treatment of aircraft within the realm of international sales law presents a complex issue. The drafters of the CISG grappled with the relationship between the Convention and mandatory rules of domestic law, as they were concerned that the uniformity achieved by the CISG would undermine the efficacy of such national rules.

Throughout the extensive drafting process, there were moments when the drafters appeared to agree that the CISG would automatically preserve the effect of mandatory rules of domestic law. This led to the belief that no specific provision was necessary to ensure this preservation. However, even this reassurance was later cast into doubt. The drafters never reached a definitive decision on whether all mandatory rules of national law would continue to apply to contracts governed by the CISG. Additionally, they struggled to establish a common understanding of the term "mandatory rules of national law."

In an attempt to avoid potential conflicts between domestic legal systems and the CISG, the drafters took a proactive step by explicitly excluding consumer sales and other special types of contracts under Article 2. This exclusion was intended to maintain the balance between the uniformity sought by the CISG and the preservation of specific legal regimes designed for consumer protection and unique contractual arrangements.

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<sup>13</sup>Kröll Stefan, "Selected Problems Concerning the Csig Scope of Application", page 39

In summary, the treatment of aircraft within the context of international sales law raises intricate questions, and the drafters of the CISG faced challenges in reconciling the Convention with mandatory rules of domestic law. While attempts were made to ensure the preservation of these rules, uncertainties remained, prompting the exclusion of certain types of contracts from the CISG's application to prevent potential conflicts and maintain the effectiveness of specific legal frameworks.<sup>14</sup>

Although the CISG does not apply to the sale of an aircraft, it may apply to parts<sup>15</sup>, components or other goods that are not installed on an aircraft but are otherwise being sold with the aircraft. When a dispute arises out of a contract for sale of goods between parties from contracting states the CISG will apply to the dispute unless the parties elected to exclude its application to their transaction. Many people would likely utilize the CISG in relation to drones using an interpretation approach to achieve the desired uniformity when settling any disputes involving drones and the CISG. While drones may not have been specifically addressed during the formation of the CISG due to their limited presence in the market at that time, it does not necessarily mean that drones are automatically excluded from the CISG's application. The CISG aims to provide a uniform framework for international sales contracts, encompassing the sale of goods across different countries. When it comes to drones, their classification and legal treatment may vary from one jurisdiction to another. However, the core principles of the CISG, such as contract formation, obligations of the parties, breach, remedies, and damages, can still be relevant and applicable to drone transactions. By applying the general principles and provisions of the CISG, parties involved in the sale of drones can establish a common ground for resolving any contractual disputes that may arise.

To ensure uniformity and observance of good faith in international trade, as outlined in Article 7 of the CISG, interpretation of the CISG's provisions should take into account the specific characteristics and functionalities of drones. It may require a careful analysis of the drafting history and intentions of the CISG, as well as an examination of relevant case law and legal scholarship in order to determine the applicability of the CISG to drone sales. Ultimately, the goal is to interpret the CISG in a manner that aligns with its underlying principles while considering the unique nature of drones. This interpretation should aim to provide a coherent and consistent approach to resolving legal disputes related to drone sales, thus fostering the uniformity and predictability that the CISG seeks to achieve in international trade.<sup>16</sup> Article 6 is perhaps the most important article of the Convention, permitting parties to opt out of the Convention, even if the sale otherwise falls within its jurisdiction. 2 If the parties opt out it doesn't provide a choice of law, the rules of private international law determine the applicable law. The parties may alternatively remain under the CISG but vary the effect of certain provisions.<sup>17</sup> In this case the conflict between the international and domestic legal orders is played out each time a judge or arbitrator has to decide whether an issue falls within the scope of the Convention. however The success of the uniform law for international sales will depend largely on how well it suits the needs of modern international commerce. These needs were of central concern to the drafters of the CISG and its predecessors.<sup>18</sup>

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<sup>14</sup> hartnell, page 44

<sup>15</sup> CLOUT case No. 53 [Legfelsőbb Bíróság, Hungary, 25 September 1992]

<sup>16</sup> Stonberg michael, "Drafting Contract Under the Convention on Contracts for The Internasional Sales Of Goods", page 5

<sup>17</sup> *ibid*

<sup>18</sup> *Op.cit* page 5

#### IV. CONCLUSIONS

Drones, which have become an indispensable part of aircraft, encompass a wide range of sizes and functions. When it comes to interpreting the application of the United Nations Convention on Contracts for the International Sale of Goods (CISG) to the sale of drones, it presents a challenging task, yet not an insurmountable one. While it is true that drones are not explicitly excluded from the scope of the CISG, this omission can be attributed to the fact that the formation of the CISG predates the widespread commercialization of drones. Consequently, drones were not specifically contemplated and regulated within the CISG.

The absence of explicit provisions pertaining to the sale of drones in the CISG has given rise to divergent interpretations regarding its application in contractual agreements involving drones. Nonetheless, considering the fundamental purpose of the CISG, which aims to establish a uniform legal framework for parties engaging in international trade across different jurisdictions and to foster consistency in the application of principles of good faith, as stipulated in Article 7 of the CISG, it is conceivable to extend its application to the sale of drones.

As an internationally recognized legal instrument governing the sale of goods, the CISG provides a convenient framework for the parties involved. However, it is important to recognize that the CISG, which prioritizes uniformity, must also take into account whether certain goods are too intricate or carry significant risks, leading to potential conflicts with other legal regulations or complexities in their legal treatment. This complexity emerges as a primary reason why the CISG does not explicitly regulate the sale of drones. Drones exhibit a remarkable degree of variability in terms of their types, functionalities, and operational contexts. Furthermore, drones are primarily deployed within airspace, which implicates a complex web of national regulations to safeguard national sovereignty. Consequently, the regulation of drones tends to vary significantly across different countries, hindering the possibility of achieving uniformity in their treatment under the CISG. Applying and interpreting a provision of the CISG to drones would undoubtedly run contrary to the very principles that the CISG seeks to uphold, as articulated in Article 7.

In light of the foregoing, while drones may not be explicitly excluded from the CISG, they fall within the broader category of aircraft, which is explicitly excluded from the CISG. Even if a party's domestic legislation does not expressly state that drones are classified as aircraft, it is crucial to consult the drafting history and the preparatory works of the CISG to elucidate the intention and understanding behind its provisions. To summarize, the absence of specific provisions addressing the sale of drones in the CISG does not preclude their potential applicability. However, due to the multifaceted nature of drones, their operational characteristics in airspace, and the divergence in national regulations governing them, achieving uniformity under the CISG proves challenging. Thus, while drones may not be directly regulated by the CISG, understanding their classification as aircraft, which falls outside the CISG's purview, becomes pivotal in comprehending the applicability of this international convention to drone-related transactions.

#### REFERENCE

##### Books

- Austin, Reg, *"Unmanned aircraft system"*, John Wiley & Sons Ltd, ISBN 978-0-470-05819-0, 2010
- Barnhart, Richard K., Hottman, Stephen B., Shapee Eric, Marshall, Douglass M., *"Introduction to Unmanned Aircraft Systems"*, CRC PRESS, ISBN 978-1-4398-3521-0, 2012
- Corbusier, Le, Renato Minetto, Anna Foppiano, and Sylvain Pelly. *Aircraft*. No. 1. Studio Limited, 1935.

Norton Rose Fulbright, “*The Big Read Book: Drone*”, Vol 6, 2020.

### **Journals**

Gregory J. Reigel, Application of the UN Convention on Contracts for the International Sale of Goods to Business Aircraft Transactions

Stefan Kröll, Selected Problems Concerning the CISG’S Scope of Application

Peter Winship, Aircraft and International Sales Convention, *Law journal of Air Law and Commerce*, vol 50, issue 4, 1985

Farnsworth, E. A. (1984). The Vienna Convention: History and Scope. *The International Lawyer*, 18(1), 17–20.

### **Laws and Regulations**

United Nations Convention on Contracts for the International Sale of Goods (CISG)

Civil Aviation Law, Kingdom of Saudi Arabia Bureau of Experts at The Council of Minister Official Translation Departement

International Civil Aviation Organization. "Annex 2 - Rules of the Air." ICAO Document 9377, 17th edition (2021).

Federal Aviation Administration. "Operation and Certification of Small Unmanned Aircraft Systems." Title 14 CFR, Part 107, Section 107.25 (2021).