

# KUDUN & PARTNERS



Thought Leadership | Transport and Logistics

## Drone Logistics and the Future of Food Delivery

The dawn of drone logistics neatly echoes the development of commercial flight itself, which began in earnest a century ago. In both cases, similar legal questions regarding licenses, insurance, and airspace would require clear regulatory answers. But investors had confidence that adequate solutions would be found and made standard, as the technology was simply too good to go unused.

The main difference between then and now comes down to one thing: Scale. The small size of most commercial drones translates to small distances as well, potentially filling future warehouses and city skylines with the constant buzz of automated flying robots.

The benefits of this emerging technology are clear. Drones could deliver hot meals and other purchased goods right to the doorstep of consumers, even during periods of strict social distancing. They could safely transport medical equipment where it is needed during an emergency, or even fight fires in tall buildings. They could release water or chemicals over farmland, increasing crop yields with minimal effort. They could be programmed to take inventory for large businesses, saving thousands of man-hours per year. The variety of possible applications, across virtually every industry, is staggering to consider.

The predicted growth curve of the drone logistics sector reflects this nearly limitless potential. Its market value for 2022 is [estimated](#) at USD 11.2 billion – a figure which is projected to more than double over the following five years, reaching USD 29 billion by 2027. The companies which adapt quickly to changing regulations, and seize new opportunities as soon as they arise, will reap the biggest rewards as the commercial drone industry truly takes off.

July 2021

Get in touch

---

**Kom Vachiravarakarn**  
Partner  
[kom.v@kap.co.th](mailto:kom.v@kap.co.th)

**Peerasanti Somritutai**  
Senior Associate  
[peerasanti.s@kap.co.th](mailto:peerasanti.s@kap.co.th)



**Kudun and Partners**

---

23rd Floor, Unit C and F,  
Gaysorn Tower 127,  
Ratchadamri Road,  
Lumpini, Pathumwan  
Bangkok, 10330,  
Thailand  
[contact@kap.co.th](mailto:contact@kap.co.th)

## The current situation in Thailand

Thailand recognizes the importance of drone technology, and is in the process of updating the aviation industry regulations accordingly. The Civil Aviation Authority of Thailand recently joined the Geo-Informatics and Space Technology Development Agency (GISTDA) in [signing](#) a Memorandum of Understanding to facilitate progress in this area. The MoU confirms that loans will be offered to domestic manufacturers in an effort further to develop the Thai aerospace industry, including the drone sector.

There is already great enthusiasm for drone technology among Thai entrepreneurs as well as existing companies. However, due to a set of drone laws passed by the Ministry of Transport in 2015, commercial drones remain illegal without express authorization. Nevertheless, in cases where MoT permission is granted and other applicable regulatory requirements are met, drones can be a great tool for assisting with business operations.

According to the Civil Aviation Authority of Thailand, anyone flying a drone in Thailand must follow [current regulations](#). These include the following rules:

- All drones must be registered with the MoT if they have a camera or weigh more than two kilograms.
- All drones that weigh more than 25 kilograms must have received a permit from the MoT (as opposed to a mere registration with the MoT).
- Drone pilots need to maintain a line of sight with their drones.
- Drones cannot be flown close to manned aircraft.
- Drones cannot be flown close to a person, building, construction, or vehicle. A horizontal distance of at least 30 meters must be maintained – a greater horizontal distance may apply depending on the weight of each drone.
- Drones must not be flown in restricted areas without authorization.
- Drones cannot be flown within nine kilometers of an airport or any temporary airfield except with special permission.
- Drones cannot be flown higher than 90 meters from the ground.

## About Us

### Transport and Logistics Sector

Kudun & Partners is one of Thailand's foremost legal practices, with a team of transport & logistics law Thailand specialists prepared to assist in any transaction.

Our team includes some of Thailand's most highly-regarded and respected lawyers, who take an agile and creative approach to structuring and executing a deal.

Although these rules reflect reasonable safety concerns, they may be adjusted in the future to facilitate greater commercial use. Just as with air travel a century ago, it may take time to strike a lasting balance between technological progress and public safety. Naturally, public opinion will play an important role in determining the relevant policy outcome.

### **Public attitudes toward drones**

Current public opinion on drones is rather split. In many people's minds, the many potential advantages of drones are offset by the [invasion of privacy](#) they could also represent – looking into windows, or following people on the street – as well as the danger posed by foreign objects hovering above the ground.

Public acceptance of the drone industry depends on putting these fears to rest while also demonstrating the positive uses of the technology. These advantages include the fast delivery of parcels due to drones' ability to avoid road congestion, and indeed a reduction of traffic and air pollution as items can be delivered without the use of street vehicles.

The same technology also allows delivery costs to be cut, with savings passed on to the consumer, as drones require neither a driver nor petrol to function. Even though most of today's drones are flown manually, and their batteries are currently expensive, industry experts believe cheap and automated drones will become a standard option in years to come. Provided that commercial drone operators are able to manage the technology responsibly, the benefits of a drone-enhanced world may soon become too attractive to resist.

### **The future of drones in ASEAN**

Most observers have a positive outlook for the drone industry in Southeast Asia, given current growth priorities from governments as well as the private sector. Although some hesitancy continues to affect public opinion, proper licensing standards may help the industry earn people's trust. Although rules and regulations are often viewed by business as an inconvenience, the standards they impose lead to safer processes – which in turn lead to smoother operations and higher public confidence.

The level of technological advancement varies greatly from country to country within ASEAN. For example, while the rules remain quite

strict in Laos and Myanmar, Singapore is far more open to drone use, making it the most advanced among ASEAN countries in this sector.

## **Moving forward**

Right now in Thailand, the operation of drones for commercial purposes is illegal without express authorization from the Ministry of Transport. This restriction has created an unmet market demand for drones, particularly as people living amid the pandemic become acutely aware of the potential benefits of contactless delivery.

As drone technology is shown to be safe and well regulated, familiarity will likely lead to trust. From there, the promised growth in this sector will very likely become a reality.

At Kudun & Partners, we view every change in technology as an opportunity to rethink what is possible. With the right knowledge and insight, every change in the business landscape represents an opportunity to generate value.

Ultimately, the advantages of drone technology represent extraordinary potential for businesses in a variety of sectors. Our team of dedicated legal experts can help you make the right decisions at every step, complying with all regulations and keeping turbulence to a minimum as your investment takes flight. Contact Kudun & Partners today to find out more.

All information, content, and materials contained in or referred to in this article do not, and are not intended to constitute, legal advice and are purely provided for general informational purposes only. For more information, please contact the authors.