DRONE REGULATION SNAPSHOT: EUROPE

There currently aren't any regulations that cover drone use across the entire European Union (EU). Instead, a patchwork of national regulations govern the use of unmanned aircraft across all the member states, somewhat [resembling](#) the state-level regulations in the US. The majority of large countries in the region with digitally savvy populations have some legal framework controlling drones. Meanwhile, in other nations, where there are no formal drone laws yet, use of the aircraft is largely regulated through existing aviation laws.

Many European countries have a similar regulatory landscape to the US, but they are generally more lenient in practice. For instance, the US, UK, and Germany all have requirements that commercial drone operators keep their aircraft within the line of sight of the operator at all times, and each has designated airspace where commercial drones can operate. However, regulatory agencies in Europe are often laxer in enforcement and granting exemptions to these laws. Notably, the UK's Civil Aviation Authority (CAA) granted Amazon an exemption to its line-of-sight rule in late 2016, enabling the e-commerce titan to test its last-mile drone delivery project, Prime Air, in the country. The FAA previously refused to give Amazon a similar exemption to test in the US. Additionally, the German government has proved to be fairly lenient in granting exemptions to its drone laws. Since 2014, it has allowed logistics giant DHL to deliver parcels to customers in a remote, mountainous area of the country, in one of the earliest commercial drone delivery pilots in the world. In France, meanwhile, the postal service was granted permission by the country's aviation regulatory body, the General Directorate for Civil Aviation, to deliver mail to consumers in a remote, nine-mile area in the south.

However, Switzerland stands out for its lack of extensive drone laws, which has led several companies to test their aircraft in the mountainous country. Notably, Matternet, a California-based drone startup, began testing the delivery of blood and other medical samples to a remote area of Switzerland, in partnership with a local hospital, last fall. To do so, Matternet needed wide-ranging permission from the Swiss government to operate a "drone logistics network," which it was granted that March.

Commercial Drone Laws In Europe

Country	Pilot requirements	Aircraft requirements	Operating rules	Line of sight requirement?
France	-Pilots must have a level of knowledge and training that depends on the type of scenario for which the drone is to be used, with some situations requiring a full pilot's license.	-Can't weigh more than 150 kilograms.	-Must be granted permission for all flights by French DGAC. -Can't fly over people. -Must remain below 150 meters in the air. -Must "respect other people's privacy."	Yes
Germany	-Cannot wear glasses and must be granted license by Luftfahrt-Bundesamt.	-Must weigh less than 25 kilograms -Must be registered with Luftfahrt-Bundesamt.	-Cannot fly within 1.5 kilometers of an airport -Must fly with 100 meters from the ground. -Can't fly at night. -Cannot fly above highways, government property, power plants, residential properties.	Yes
UK	-Operators must be granted a license by the CAA saying operator is "sufficiently competent" to fly a drone.	-Must weigh less than 29 kilograms.	-Must remain below 400 feet in the air. -Must remain within 500 meters of the operator. -50 meters away from people or buildings.	Yes
Switzerland	-Pilot must be issued license by the Federal Office of Civil Aviation.	-Must weigh over 30 kilograms.	-Can't fly within 100 meters of a group of people. -Must follow all military and privacy laws.	Yes

Source: Directorate General for Civil Aviation, Federal Office of Civil Aviation, UK Civil Aviation Authority, Telegraph, Luftfahrt-Bundesamt Law Library of Congress

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Top Regulatory Issues

1. The lack of EU-wide drone regulations. Drone regulations in many countries across Europe — especially the ones outlined above — are quite similar. Other countries, including Greece and Hungary, have limitations on how high the aircraft can fly, while Norway and Sweden boast the very common line-of-sight rule. However, the lack of baseline, EU-wide regulations prevents drone companies from creating sales forces, marketing teams, and other arms dedicated to serving the entire EU as a bloc, meaning these units have to navigate different regulatory environments throughout Europe, which can be time-consuming and confusing. Additionally, these issues plague businesses that want to use drones in multiple European countries, as they need to spend time and energy sorting through the different regulatory landscapes. A unified set of EU-wide regulations will be critical to the development of the drone industry in Europe.

2. Unfavorable regulatory environments in many underdeveloped regions. Many former Soviet-bloc countries in Eastern Europe either have incredibly strict drone regulations or ban the aircraft outright. This includes Slovakia, which effectively bans the commercial or civilian use of drones and doesn't issue many exemptions, as well as Lithuania, which has no drone regulations whatsoever. This has effectively limited the whole European market to reaching only a fraction of its current potential, as construction companies, agricultural conglomerates, and other businesses can't integrate the aircraft into their operations in these geographies.

A Look At What Comes Next

The European Commission, the chief executive body of the EU, hopes to have formal drone laws that apply across all member states in place by 2019. And, while it's still unknown exactly what these laws will look like, early proposals are encouraging for drone operators and businesses. An initial proposal from this past November included a measure to create a common airspace up to 150 meters in the air, dubbed the "U-space," for enterprise drones. The U-space would be controlled by an air traffic control system similar to existing ones for traditional aircraft, and likely include automated tools for things like geofencing, e-identification, and automatic registrations for aircraft and operators, helping streamline compliance for businesses.

The European Aviation Safety Administration (EASA) is currently working with the national governments of all member states to ensure these laws are as all-encompassing as possible, and allow a variety of different drone use cases. The European Commission also plans to finance the integration of drones into the existing aviation systems across the continent, helping companies and drone service providers make this transition. Additionally, the executive body wants to create a panel of industry experts that will consistently observe the space and propose potential future policy recommendations. When the EU eventually adopts drone regulations applicable throughout the union, it will not prevent individual countries from crafting their own drone laws, as long as they aren't in conflict with the broader regulations.

Meanwhile, look for countries that don't currently have any drone laws to craft them in the next few years, and for countries with strict drone laws to loosen them after the EU-wide regulations go into effect. About 85% of EU member states have at least some formal laws or regulations governing the use of unmanned aircraft, by BI Intelligence's estimates. Once the EU adopts regulations that are applicable to all member states, they will encourage more activity in the countries that have thus far prohibited much drone use. Moreover, even countries that don't initially revise their national regulations will likely change their stance to remain economically competitive as commercial drone activity increases in neighboring EU countries.

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