

# Overview of the Drone industry in Latvia

## Use:

Drones are gradually becoming more and more popular in Latvia. Besides the typical use of drones one would immediately think about like taking pictures and videos during concerts, sport events, out in the wild and in cities, countless other applications are already in place.

Amongst those various other useful applications drones are equipped with 3D cameras in Latvian quarries to calculate the volume of minerals or sand extracted. Road construction companies use drones to measure distances and evaluate required materials. Telecommunication companies start to use drones to inspect antennas signal. All these new ways to use drones are still at experimental level, but the results obtained so far are very promising. Drones technologies are aiming to costs savings as they work faster and with more precision.

## Presence:

Latvian Companies:

- Drone Technology: Producer of multifunctional heavy-lifting drones. Belong to a holding of multiple companies with different services. They were initially representatives for 3D lasers brands (FARO and others) through their company SMART Engineering, and in 2011 they also decided to manufacture their own drones to reach end-users (customers active in many sectors). They also perform trainings, deliver certificates and provide custom made products on specific demands worldwide. They participate in international trade fairs (Aero-Expo, Exhibition Friedrichshafen, Le Bourget, Commercial UAV Show London...). Among other things, the holding is active in geo-scanning and also acquired the rights for distributing DJI drones in Latvia.
- UAV Factory: Manufacturer of fixed-wings gas drones. Producer of the Penguin B UAV, a drone optimized for endurance (record holder in its category).
- Flyvision: Aerial cinematography and photography with drones. Work with televisions, 5D cinemas, cover sport events, concerts, and advertising. Also work with Latvian architects and real estate companies on aerial surveys and aerial photogrammetry.

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- Anti-Drone: Subsidiary company of Drone Technology's holding. They provide integrated solution for drone detection and threat elimination. The company already provided anti-drone defence system for Riga airport.
- Skycam: Aerial photography and videography with the use of Drones.
- Airdog manufactured by "Helic Aerospace Industries". Airdog is a drone that automatically follows its target. It is designed for filmmakers and action sport enthusiasts who use GoPro cameras. Its Kickstarter campaign gathered 1375 backers who pledged \$1,368,177 to help bring this project to life.
- SPH Engineering: Mission planning and ground control software for drone manufacturers and professionals.
- ELKO: Elko is one of the largest IT product wholesalers in Eastern Europe. In summer 2015, they entered in an agreement with AEE Technology Co. Ltd (Chinese drone manufacturer) to distribute their products in the Baltics.
- Latvian shops and e-shops selling drones or spare parts directly to customer: ELKOR, Promarket.lv, RCveikals, motosports...

#### *Concurrence:*

Foreign manufacturers distributed in Latvia:

- AEE (China)
- DJI (China)
- Parrot (France)
- LaTrax (US)
- HUSBAN (China)
- KAMERA
- Lotus (China)
- Jamara (Germany)

#### Association:

The Latvian Remotely Piloted Aircraft Systems Association has been launched recently under the impulsion of the main manufacturers of drones in Latvia (Drone Technology, UAV Factory, Airdog ...) in order to help the public authorities to elaborate new rules that would enable the drone industry to develop in the best conditions.

An association of drone enthusiasts, the Riga Drone Meetup has also been created in December 2014 with the aim of promoting the responsible use of drones and making

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drone technology as widely accessible as possible. The association organizes meetings where amateurs and professionals meet in order to discuss the last tendencies, share their experiences and present their drones.

## Law:

A specific law concerning the use of unmanned aircrafts was written in 2006. This law define the maximum height, the distance of airports and the operating rules. Note that it was written with large fixed-wings gas RC aircrafts in mind and not today's sophisticated drones.

In March 2015, Riga hosted a Drone Conference where the main European stakeholders gathered together to debate on how best to open the aviation market to the Drones throughout Europe. They came up with a declaration made of guidelines that the European Aviation Safety Agency will take into account when submitting its opinion for a regulatory framework to the EU Commission by the end of 2015.

## Perspectives:

Latvian entrepreneurs are eager to further explore how drones could help their daily activities whether for aerial inspection of infrastructures, 3D scanning, energy exploration, cargo transport, traffic information, precision farming, law enforcement, or rescue operations, and more...

The European funds allocated to improve energy efficiency and financing energy projects represent a big opportunity for the drone industry in Latvia. Indeed, when mounted with infrared camera, drones can operate energy audits, they can fly over houses to analyze building insulation from the top, and they can also be used by municipal heat providers to operate pipes inspection.

Some projects already on track involve using drones in order to inspect sealed landfill used for gas production. The drone, mounted with a multispectral camera, will be able to detect any gas leak in the landfill.

In agriculture, drones mounted with multispectral cameras can detect minerals in soils, sickness in plants. It has been observed that the use of drones in agriculture helps reducing costs by 40% and grow production by 15%.

The future of drones will rely on technology miniaturization; with small transponders, the authorities will be able to locate drones anywhere and this will allow them to develop regulation more appropriated to the development of the industry.