



Overview of Professional Drones Activities in Ireland

By Julie Garland
Avtrain, Ireland

Our mission at Avtrain is to encourage prolific drone operations while keeping the skies safe through the highest standards of training and certification. We live by the 3Ds – if it is Dull, Dirty or Dangerous, then a drone should be doing it. We hold an approval as Recognised Entity issued by the Irish Aviation Authority for the grant of EASA Open A2 and all Specific Category Authorisations, Declarations & Light UAS operator Certificate (LUC) and independent verification of compliance with Operational Safety Objectives (OSOs) to a high level of robustness. We use a mix of innovative new online technologies to deliver our training courses and provide consultancy services.

Ireland and the Regulatory Environment

With the advent of the EASA regulations the drone industry in Ireland has been flourishing. Both 2019/945 and 2019/947 have been fully implemented with no National Standard Scenarios, unlike other member states. Brexit has contributed to this growth, as we are one of the last remaining native English speaking EASA member states, which can help in encouraging third country business, such as those inbound to Europe from the USA, to locate in Ireland. Coupled with our positive business environment, corporate tax regime, government supports, through the likes of Enterprise Ireland and the IDA, make Ireland an attractive location. And of course, there is the weather; if you can fly a drone in Ireland you can fly it anywhere!

Other than the Geographical Areas, there are no local differences to the EASA regulations, which gives a certainty to operators and makes cross border applications very simple. There is a section on the Irish Aviation Authority’s website dedicated to drones, and if any Aeronautical Notices are published, they will be available here: <https://www.iaa.ie/general-aviation/drones>

The following statistics are from the IAA in November 2022 and show the dramatic increase in the applications from 2021 through 2022 with the % increase year on year reflecting the industry growth:

| Item | Total | Increase 2021/22 |
|----------------------------|--------|--|
| Operator Registrations | 8,000 | + 54% |
| RP Certs Open A1/A3 | 12,615 | + 48% |
| RP Certs Open A2 | 1,337 | + 120% |
| RP Certs STS | 354 | N/A (only digitally available in 2022) |
| Operational Authorisations | 96 | + 146% |
| LUC | 2 | 0% |

As you can see, two LUCs were granted in 2021, and while there have been no additional LUCs granted yet in 2022, one additional application was submitted in November 2022 and 2 more are in progress for submission prior to yearend.

Training and Certification

The IAA were the first European Member State to have a “Drone Register” back in 2015, and with the implementation of the EASA regulations they developed MySRS – My Safety Regulation System. This allowed for the digitisation of all applications for drone pilots and operators from registrations to applications for Open A1/A3, A2 and STS Remote Pilot Certificate of Competence and Theoretical Knowledge Certificate for Specific Category and Operational Authorisations.

At Avtrain both the training and exams can be completed fully online through the Avtrain Learning Management System portal with on demand fully proctored exams available 24/7 for the clients convenience.

Appendix 4 declarations of compliance with Appendix 3 are not yet available for operators wishing to carry out the practical assessments of their own pilots, but this will be available in early 2023. In the meantime, a Recognised Entity such as Avtrain can carry out the practical skills training and assessment, and upload it to MySRS. Currently, LUC Applications continue to be processed manually.

A drone pilot from any jurisdiction can carry out their training at a Recognised Entity such as Avtrain, and following the successful completion of the theoretical knowledge portion, we endorse their application on MySRS and the IAA issue their EASA certificate. This is a seamless process, as it is totally digital and fully online.

For an operator to register itself, the individual or corporate entity, should register in the Member State where it is a resident (private individual), or where it has its principle place of business. The NAA in that EU Member State will then have ongoing oversight of their operations and authorisations, even if they choose to carry out their training in a different Member State. Third country operators should register in the Member State where their first planned operations will take place, and that country’s NAA will then have continuing oversight of their operations. It should be noted, that a LUC application can only be submitted by a legal entity and not an individual person.

Industry issues

The greatest bottleneck for the industry is the lack of acceptable published standards and standardisation between Member States. EASA standardisation audits of

Member State NAA will commence in early 2023, and these are welcomed, as there is significant divergence in both the implementation and application of the regulations. National Standard Scenarios have added to this confusion.

For the drone delivery sector there is significant confusion on operations and risk management regarding VLOS/ (EVLOS?)/BVLOS and the differing requirements in individual Member States. Is a method of impact reduction required and to what level? Is overflight of uninvolved people allowed, if mitigated? Can the delivery take place in a public area, or in a private garden? If a parachute is fitted to the drone, how do we mitigate operations below the parachute deployment height?

In the aerial survey sector, fitting a parachute to an aircraft may in fact cause an incident or accident, particularly with very few standards available for specific aircraft. Aircraft may be operating beyond the manufacturer's MTOM, the centre of gravity of the aircraft and its stability may be negatively affected causing additional wear and tear on motors. And when the parachute does deploy following the activation of a Flight Termination System where will the aircraft ultimately touch down – possibly outside of the planned operational area?

There is no definition of an “adjacent area”, and consequently, it is impossible for an operator to know, if it has made the correct assessment of the “adjacent area”. Geographical Areas differ significantly from country to country, and the instructions to get permission to fly in an area where flight is restricted, can often only be published in a local language, and a “geo-zone manager/

point of contact” may not be appointed.

As can be seen from the localised figures from Ireland above, the rate of growth of the industry is exponential, and the resources of NAAs across the EU Member States are already stretched. This will be a significant bottleneck for the industry, unless the NAAs are staffed with additional experienced personnel – a task that should not be underestimated.

In conclusion, the drone industry is thriving, but the bottlenecks for the industry need to be resolved. We are currently only carrying out operations in the Open and Specific Category, but Certified Category operations are approaching fast, and we need to look towards the future and build a solid foundation now. The possibilities are endless when it comes to drone usage - they are limited only by our own imaginations.



Julie Garland
CEO
Avtrain
Ireland
avtrain.aero