

Charges Associated with Unmanned Aircraft (Drone) Operations in Ireland



The purpose of this document is to outline the proposed charges for the new services related to the operation of unmanned aircraft systems. This document does not seek to explain the technical requirements of UAS operations, information in this regard is available at: https://www.easa.europa.eu/domains/civil-drones-rpas



STAKEHOLDER CONSULTATION

Executive Summary

This stakeholder consultation document sets out the fees proposed for the various tasks the IAA must deliver as the competent authority for unmanned aircraft systems (UAS), or more commonly drones, in Ireland.

The IAA receives no State funding and must recoup its costs through fees and charges applied to licence holders and the regulated aviation entities.

In 2015, the IAA introduce a regulatory framework for the operation of drones in the State, one of the first regulatory authorities globally to do so. Since then the IAA has registered over 14,500 drones in Ireland and has provided permissions for operations such as photography, inspections of key infrastructure and the aid of civil defence missions.

In 2018, competency for the regulation of unmanned aircraft operations passed to the European Union and in 2019, Regulation 2019/947¹ was published with a current applicability date of 31 December 2020. It creates a pan-European market for drone operations, where operators and other UAS providers can move freely throughout the EU. The regulation establishes, inter alia, various categories of operations (open, specific, certified), rules and procedures for the operation of UAS, competency of remote pilots, rules for conducting operational risk assessments, the authorising of specific operations, registration requirements and operational conditions for geographical zones. It also specifies the tasks of the IAA as the competent authority.

In line with the current programme for Government, UAS growth will provide opportunities for research, re-igniting and renewing the economy while reducing emissions from traditional transport channels; and building stronger and safer communities. It is therefore important that the application of any fees by the IAA do not represent a barrier to indigenous investment and growth of UAS SMEs in Ireland.

The obligations placed on the IAA, as competent authority, represents a major challenge. To provide a long-term sustainable solution the IAA must develop new automated systems for the management of operator registrations, submittal of declarations and applications, and management of geographical airspace. The IAA must also conduct licensing, certification, oversight and enforcement functions on an ongoing basis.

There is a clear dichotomy. The IAA must invest now to effectively meet it's regulatory obligations in the field of UAS but not seek to recoup the full cost from the users in the short term, as to do so may render any operation commercially unviable. As the number of operators grow, economies of scale may be achieved which will allow the IAA to recoup its full cost while maintaining charges at a competitive level compared to other European Member States.

The proposed fees outlined in this document seek to ensure:

- IAA delivers a safe UAS eco-system compliant with EU Regulation
- Fees are set at a scale that encourages registration and compliance
- The fees do not act as a barrier to entry for innovation and growth in UAS operations in Ireland
- Irish UAS operators and service providers can compete in Ireland and in Europe

¹ For a copy of the consolidated EU Regulation please visit: https://www.easa.europa.eu/document-library/easy-access-rules/easy-access-rules-unmanned-aircraft-systems-regulation-eu



STAKEHOLDER CONSULTATION

How the IAA is funded

The IAA receives no State funding and must generate adequate revenues through charges and fees raised from airline customers in respect of air navigation (air traffic control) and regulatory clients for all regulatory activities. In 2019, the IAA paid a dividend of €7.8 million to the State, bringing the total dividend paid to government in the last five years to €63.4million.

Further detail on IAA revenues and costs can be obtained from the IAA website at: https://www.iaa.ie/who-we-are/about-the-irish-aviation-authority/annual-report-accounts.

Responsibilities of the IAA as Competent Authority for Unmanned Aircraft Operations

As per Article 18 of Regulation (EU) 2019/947 the IAA, as the designated competent authority, shall be responsible for:

- a) enforcing this Regulation;
- b) issuing, suspending or revoking certificates of UAS operators and licenses of remote pilots operating within the 'certified' category of UAS operations;
- c) issuing remote pilots with a proof of completion of an online theoretical knowledge examination according to
 points UAS.OPEN.020 and UAS.OPEN.040 of the Annex and issuing, amending, suspending, limiting or revoking
 certificates of competency of remote pilots according to point UAS.OPEN.030 of the Annex;
- d) issuing, amending, suspending, limiting or revoking operational authorisations and LUCs and verifying completeness of declarations, which are required to carry out UAS operations in the 'specific' category of UAS operations;
- e) keeping documents, records and reports concerning UAS operational authorisations, declarations, certificates of competency of the remote pilots and LUCs;
- f) making available in a common unique digital format information on UAS geographical zones identified by the Member States and established within the national airspace of its State;
- g) issuing a confirmation of receipt and completeness in accordance with Article 12(5)(b) or a confirmation in accordance with paragraph 2 of Article 13;
- h) developing a risk-based oversight system for: i. UAS operators that have submitted a declaration or hold an operational authorisation or an LUC; ii. model clubs and associations that hold an authorisation referred to in Article 16;
- for operations other than those in the 'open' category, establishing audit planning based on the risk profile, compliance level and the safety performance of UAS operators who have submitted a declaration, or hold a certificate issued by the competent authority;
- j) for operations other than those in the 'open' category, carrying out inspections with regard to UAS operators who have submitted a declaration or hold a certificate issued by the competent authority inspecting UAS and ensuring that UAS operators and remote pilots comply with this Regulation;
- k) implementing a system to detect and examine incidents of non-compliance by UAS operators operating in the 'open' or 'specific' categories and reported in accordance with paragraph 2 of Article 19;
- I) providing UAS operators with information and guidance that promotes the safety of UAS operations;
- m) establishing and maintaining registration systems for UAS whose design is subject to certification and for UAS operators whose operation may present a risk to safety, security, privacy, and protection of personal data or the environment.



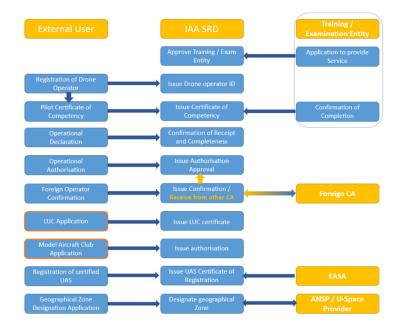
STAKEHOLDER CONSULTATION

Key Interface Processes

The key processes, from a UAS user perspective interacting with the IAA, are:

- Registration as a UAS operator
- Obtaining a Pilot certificate of competency
- Submitting an Operational Declaration
- Applying for an Operational Authorisation
- Submitting a foreign operator confirmation (to operate in Ireland)
- Applying for an LUC approval
- Applying for a Model Aircraft Club Approval
- Registration of certified UAS
- Applying for designation of a geographical zone
- Applying to be designated as a training or examination entity

Detailed information on the requirements for each individual process are published on the EASA website here.



The IAA is currently developing a digital platform that will allow stakeholders seamlessly engage with the IAA. It will facilitate the submittal of online applications, track their existing approvals and provide the status of any open applications. This digital platform signifies a major investment by the IAA in providing a seamless service to our stakeholders and ensuring we provide the regulatory services in the most efficient and effective manner. All processes outlined above will be transacted through this new platform.

Requirements for Pilot Training

The Regulation (EU) 2019/947 specifies various levels of pilot competency depending on the planned UAS operations. To demonstrate this competency UAS pilots will be required to complete varying levels of theoretical training, practical training and complete theoretical knowledge exams.

Since 2015, Ireland has developed a robust system for training and examination. Commercial entities, recognized and overseen by the IAA, have been successfully providing the necessary training and practical examination since 2015. The new regulation also recognizes this approach. The existing Irish training organisations will be able to transition to the specific requirements of the new regulation, opening up a broader European market for them to provide their services. For the UAS operator and pilot, this means they will be able to continue to choose where they source their training needs, in Ireland or indeed in another EU State. The IAA will continue to apply a fee to training organisations to cover the cost of initial recognition and continuing oversight of their operations.



STAKEHOLDER CONSULTATION

Understanding the Costs and Scale of the Market

The obligation placed on the IAA to provide the regulatory services represents a major challenge. Implementation of the new regulation requires initial capital investment in the digital platform and ongoing operational investment to provide for safety promotion, ongoing certification, oversight and enforcement tasks. This outlay is set against a user market that is difficult to quantify at this time. The most challenging aspect of setting a cost allocation charge is uncertainty about drone operator volumes. Today, there is no single reliable database concerning the volumes of drone ownership and use within the EU and Ireland, or how it may evolve in the coming years.

Currently the IAA has a register of drones with over 14,000 individual drones over 1kg registered since 2015. This register does not, however, allow us determine the number of actual active drone operators using drones over 250grms, which is the basic operator registration requirement in the new EU regulation.

At present, there are approximately 330 drone aerial work permission holders in Ireland. These entities, depending on the work they wish to conduct, will transition to the 'open' category, to 'declared' operations or 'authorised' operations in the 'specific' category or apply to obtain a light UAS operator certificate' ('LUC'). It is also quite likely that a UAS operator will regularly conduct operations in more than one category.

Since 2015, the IAA have issued approximately 750 pilot competency certificates. It is not envisaged that the new regulation will lead to a major increase in the number of pilots who will need to obtain an equivalent 'certificate of pilot competency'. It is expected that the vast majority of drone operators will operate in the AO, A1 and A3 OPEN categories and the IAA will provide the required training module and examination free of charge as part of the drone operator registration process. This is to encourage high levels of compliance and safety awareness.

Every approach to setting these fees, and the quantitative assumptions therein, represents a financial risk to the IAA. The IAA must establish adequate oversight capability and capacity without knowing the true extent of the future demand. The current pricing model is based on 7,000 drone operators in 2021, growing by approximately 20% in 2022 and 2023. This allows the IAA maintain its current allocated oversight capacity levels but does not provide for capacity increase. This must also be considered in the current context of COVID-19 and the impact it is having on the overall revenue of the IAA.

Should the market reach economies of scale quicker than anticipated and the IAA over-recover its costs, then the IAA will reduce charges over subsequent years. If we significantly under-recover and it is further forecast we will be unable to recoup the full cost, the necessary funding will be considered in the broader context of an appropriate funding model for the regulator and future amendments to the IAA Fees Order.

STAKEHOLDER CONSULTATION

Initial Fees and Charges

In accordance with the IAA Act 1993 Article 44 the IAA may charge such amounts as it considers appropriate in respect of any services provided by it.

The following tables outline the initial charges for the various services to be supplied by the IAA in relation to UAS in Ireland:

Process	Proposed Fee / Period
Registration of Drone Operator (valid max. 2yrs)	€18/year (or € 30/2yrs)
Pilot Certificate of Competency - Open Category A0, A1, A3 (valid 5 yrs)	€ 0, included as part of registration fee
Pilot Certificate of Competency - Open A2 & Specific (valid 5 yrs)	€ 150
Lodging of Operational Declaration	€ 150
Request for Operational Authorisation	€ 290
Request for Foreign Operator Confirmation	€ 700
LUC Application (initial)	€ 2,500
LUC Application (recurrent)	€ 435
LUC Variation	€145 per hour (max 4 hours)
Model Aircraft Club Application (initial)	€ 400
Model Aircraft Club Application (recurrent)	€ 250
Application for Geographical Zone Designation	€ 500
Application to be recognised as a Training /Examination Entity (initial) (DUTO)	€ 2,500
Application to be recognised as a Training /Examination Entity (Recurrent) (DUTO)	€ 435
DUTA variation charge	€145 per hour (max 4 hours)

Fees for the initial transition of existing National permission /approval related to UAS Operations

Process	Proposed Fee / Period
Transition of Existing National Permissions to Operational Authorisations	€ 100
Transition of recognised Training Organisations	€ 100
Transition of Model Aircraft Club	€ 100

Fees for additional services related to UAS operations, not covered above and to be charged on an hourly basis

- cos for didditional control of the operations, not control and the decision decision and the decision and	
Process	Proposed Fee / Period
Adhoc Fees and Charges	€ 145/hr



STAKEHOLDER CONSULTATION

Conclusion

The EU Commission strategy has recognised drones as a key enabler for innovation and technology advancement and is promoting drone usage growth through a pan-European regulatory framework. The Irish Government strategy is understood to include the promotion of drone adoption and integration as it is recognised that UAS have the potential to assist society for the good and represents an opportunity for Irish businesses and entrepreneurs to develop solutions which may apply globally.

The IAA is required to be self-funding - any certification, oversight and enforcement tasks it must undertake have to be funded from IAA resources. The pan-European market is in its infancy and it is currently impossible to estimate with any degree of certainty how quickly the market will grow. In introducing the new processes needed, the IAA has sought to automate all administrative procedures and ensure administrative costs are kept to a minimum.

Our experience to date with operators of registered drones has been very good with a high level of compliance. Likewise model aircraft clubs and recognised training organisations have demonstrated high levels of professionalism and safety maturity and have an important role to play in the future UAS market.

In setting the fees and charges, the IAA has sought to set fees on the basis of risk i.e. areas of greater safety risk requiring greater input from IAA attract higher fees. It has also sought to set fees at a level that encourage compliance, do not create a barrier to commercial market entry and allow Irish industry be competitive with industry from other European States.

In conclusion, the IAA is setting an annual charge for registering as a Drone Operator of just €18/year or €30/2years. This represent a fraction of the cost of the drone itself and compares favourably to equivalent national charges such as €20/year for a dog licence² or €100/year for a salmon fishing licence³.

Next Steps

The IAA welcomes the views of stakeholders on:

- a) What is your view on the IAA's proposed charges, in terms of the level and structure of the charge?
- b) Do you have alternative ideas about how the IAA could cover the costs of running the UAS operator registration scheme and its related certification, oversight and enforcement obligations?
- c) Are the IAA's estimated volumes appropriate for drone operators in Ireland, based on existing sources of data and your own observations?

Please follow the instructions on the IAA website's <u>stakeholder consultation</u> page to submit your views.

https://www.citizensinformation.ie/en/environment/animal_welfare_and_control/control_of_dogs.html#:~:text=There%20are%20three%20types%20of,is%20valid%20for%201%20year.

² For cost of a dog licence see:

³ For cost of a salmon fishing licence and the associated additional permit charges see: https://fishinginireland.info/salmon/salmon/salmon licence/