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29th September 2025 - Irish Wildlife Trust Submission on “IAA - National Aviation Safeguarding Framework Consultation Document”.

The Irish Wildlife Trust welcomes the opportunity to respond to the “IAA - National Aviation Safeguarding Framework Consultation Document”.

The Irish Wildlife Trust is a membership based NGO formed in 1979 dedicated to conserving Ireland’s wildlife and habitats. The Irish Wildlife Trust’s mission is to protect and restore biodiversity in Ireland by motivating and supporting people to take action for nature. More information can be found at iwt.ie

The Irish Wildlife Trust's responses to the consultation document are as follows:

3. Safeguarding of Aerodromes and their Surroundings

We are obviously disappointed to read points 6 and 7 of section 3.1 “General Requirements” where habitat creation is prevented including; Sustainable Urban Drainage Systems (SuDS), afforestation and managing habitats to reduce wildlife within these areas. However we do appreciate the requirement to maintain a high level of safety around airports and aerodromes. However, perhaps there is an opportunity for the aircraft industry to support wildlife initiatives away from the areas aircraft operate.



The Irish Wildlife Trust also asks that points 6 and 7 mentioned above are not included for the development of drone operations.

3.2 Aerodrome Operator Assessment of a Proposed Development (Pre-planning / Outline planning / Planning Application)

Any future development of aerodromes during the pre-planning phase should take into account the existing habitats and potential impact on surrounding wildlife including disturbance from noise and shadow.

9. Unmanned Aircraft Systems (UAS)

The development of Unmanned Aircraft Systems (UAS)/drones for commercial use is a relatively new technology opening up previously unused airspaces, and brings with it new threats to wildlife within the areas that drones operate. Emerging research indicates that wildlife such as birds, bats and insects can be negatively impacted.

As a new technology there are several unknowns regarding the impact commercial drone activity will have on wildlife.

The Irish Wildlife Trust believes that there is cause to be concerned that the use of drones will have a negative impact on wildlife, and that there are insufficient measures in place to mitigate drone use and its impact on wildlife.

A review of existing research into the impact of drones on wildlife by Afridi, S, et al (2025) highlights that many species can be negatively impacted by drone operation. Disturbance can be caused by operational variables, sensory stimulation, species specific sensitivity as well as physiological and behavioral responses. Their findings also highlighted that drone altitude, speed, approach distance and noise levels influenced responses causing some species to exhibit increased vigilance, flight response or physiological stress. The environment and visual cues are also involved in



species response and disturbance. Their findings concluded that while the short-term response is well documented, the long-term impact of repeated exposure to disturbance from drones is poorly known.

Birds seem the most impacted species of wildlife disturbance from drones. Many factors can influence the response to drones as well as different responses from species to species.

The risk to birds (and other species) include:

Nest abandonment - Caused by noise and physical disturbance resulting in loss of eggs or chicks. Disturbance may also reduce nesting

Flight or fight response - due to bird of prey mimicry resulting in stress and/or change in behavior from loss of roosting or feeding time.

Physical injury - Collisions involving drones and birds have been documented.

Stress - The presence of drones causing physiological responses.

The Wildlife Acts 1976-2000 and the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011) sets out protection of nesting birds. Section 19 of the Wildlife Act (1976) specifically protects wild birds, their nests and eggs as well as unfledged young. Disturbance to birds, particularly during nesting season could be seen as breaching these regulations where a drone is operated in such a way to cause disturbance. Section 22 of the same act covers protected species of bird.

Mammals

Present research looking at the impact of noise on wildlife concentrated in Africa where a study on 7 herbivorous animals showed negative responses to approaching drones (Afridi.S 2024). There is a gap in the knowledge on the impact drones will have on smaller species particularly those found in Ireland.



Research on the impact of drones on bats by Kuhlmann, K. et al, showed bat activity sharply declined between pre-flight and take-off for two of the drones used in the study. Bat activity remained low during the drone flights, and bats did not completely return after disturbance from the drone. (Kuhlmann, K et al, 2022)

Overall their research found that the larger drones had the highest level of disturbance on bats, though sensitivity differed among bat species. In addition to noise the frequency may also have a negative impact on bats. Their research did show that smaller drone models had minimal impact.

All species of bats are protected under the Wildlife Act 1976.

Insects

Drones may cause a predator response in insects causing flying insects to drop to the ground or change behavior to avoid a would-be predator or disrupt feeding or pollination.

General

With regards to wildlife not enough focus has been given to the operation of drones and their impact on surrounding wildlife.

In quieter locations such as coastal or rural areas noise is likely to have a significant impact. While in urban areas a mitigating factor may be the background noise. But this does not account for the different frequencies species of wildlife hear, the different noise pitch drones make, as well as the predator response and physical impact of the drone itself. Drone flight can appear as a predator with sudden changes in height or hovering, mimicking the movement of a predator in flight. It should also be noted that gardens, parks and other green spaces in the urban landscape provide important habitats and wildlife corridors for species that may be impacted by the increased use of drones.



Within the urban environment areas have been created either incidentally or by design in the form of wildlife corridors or green nodes. Surrounding these areas boundaries formed by roads and other human dwellings/constructions have allowed species of wildlife to settle. Drone flights crossing these boundaries will likely upset this balance, potentially reducing the biodiversity found within these areas. (Wildlife corridors/green nodes can be defined as parkland, river valleys, established hedgerows and gardens).

The Irish Wildlife Trust would value the following:

- No fly zones around areas where birds nest, roost or feed
- Prohibited airspace for drones where drones cannot enter or land to take into account wildlife corridors/green nodes or at least an absolute minimum flight height (+100m?)
- Guidelines on drone operation to take into account the impact on wildlife, including; minimum flight height, flight patterns, best practice for landing and taking off etc
- Training of UAV operators to identify stress signs among wildlife
- One operator per drone. No AI driven drones
- Limited number of drones per hour
- While there is insufficient knowledge on the impact on wildlife a precautionary approach to drone authorisation and operation should be taken and an environmental impact assessment performed on the flightpath drones plan to operate in.



9.1 Use of Airspace – UAS Geographical Zones

The Irish Wildlife Trust notes that UAS Geographical Zones have not been provided to protect sensitive habitats such as seabird colonies, seal haul-out areas, river corridors, areas where birds may be nesting and bat roosts for example.

9.2 Use of Airspace – U Space

The diagram of the U Space concept on p16 of the National Policy Framework for Unmanned Aircraft Systems (Dept of Transport) underlines the point above that there is no consideration to provide geographical zones for protecting areas used by wildlife or providing a seasonal response to protect nesting birds.

The Irish Wildlife Trust would like to see:

- UAS Geographical zones provided to protect habitats from disturbance from drone operations
- Seasonal restrictions or seasonal UAS Geographical Zones to reduce the impact on nesting birds
- Limited times for drone operation to reduce the disturbance to bats.



References

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Department of Transport National Policy Framework for Unmanned Aircraft Systems