

**Wildlife and Natural Environment (Scotland) Act 2011 Section 36**

**The Biodiversity and Resilience of Ecosystems Duty**

**Report 2020**

**UK Civil Aviation Authority**

The CAA is required to produce a report on its performance in relation to the public authority biodiversity duty under section 2A of the Nature Conservation (Scotland) Act 2004. The report focuses on the exercise of the CAA's statutory functions in relation to Scotland.

**Introduction and Context**

The Civil Aviation Authority is the UK's independent aviation regulator. We work to ensure that:

- the aviation industry meets the highest safety standards,
- consumers have choice, value for money, are protected and treated fairly when they fly,
- through efficient use of airspace, the environmental impact of aviation on local communities is effectively managed and CO<sub>2</sub> emissions are reduced,
- the aviation industry manages security risks effectively.

We are a public corporation, established by Parliament in 1972 as an independent specialist aviation regulator. The CAA can only act within the legal powers given to it by legislation. The UK Government requires that our costs are met from charges to those we provide a service to or regulate.

Most aviation regulation and policy is harmonised across the world to ensure consistent levels of safety and consumer protection. Worldwide safety regulations are set by the International Civil Aviation Organisation and within Europe by the European Aviation Safety Agency.

We run the ATOL holiday financial protection scheme.

We also economically regulate some airports and certain aspects of air traffic control.

- In developing this report, we acknowledge Scotland's Biodiversity Strategy '*It's in your hands*' (2004) and its supplement '*2020 Challenge for Scotland's Biodiversity*' (2013).

The CAA does not own any land in Scotland or carry out land management in Scotland.

- The CAA leases an office in Stirling, which is used as and when required, including when CAA staff are working with the Scottish Government. The office is also used by CAA staff carrying out regulatory work in Scotland
- The CAA Pension Scheme (CAAPS) is administered by the Pensions Administration Department who are based in Regus House, 10 Lochside Place, Edinburgh EH12 9RG. The team deals with all aspects of CAAPS member benefits.

In the CAA's own operations, we adopt a sustainability policy known as Greening the CAA. Our vision is to do business in a way that minimises our environmental footprint through the use of more efficient technologies, embedding of a strong culture of sustainability in our Values & Behaviours and empowering everyone to make innovative, positive changes and choices to help us reach our greening and sustainability goals.

This activity includes encouraging biodiversity on the land we control. To this end we have enclosed an area of managed grassland and allowed vegetation to grow without further management. Ultimately this habitat will revert to the location's natural climax community over the years to come. Additionally, within our estate have taken action to enhance the habitat to encourage growth of invertebrate species. The aim being to provide additional food to encourage growth of a diverse number of predator species, such as birds and small mammals, into the area.

### **CAA functions in relation to biodiversity**

Aviation activity has always had an impact on the environment: both internationally through contribution to climate change and locally through effects, for example, on noise and air quality. While the CAA does not act as an environmental regulator for aviation, as the industry's regulator, it views its role as being to encourage the industry to act on these challenges, but also has an important role to play in specific areas. The CAA's roles and duties on the environment are summarised below as they could be relevant to biodiversity and the biodiversity duty in Section 1 of the Nature (Scotland) Act 2004<sup>1</sup>:

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<sup>1</sup> 1) It is the duty of every public body and office-holder, in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions.

## **Noise**

The CAA has three key roles around aviation noise:

- Deciding whether or not the design of contracted airspace can be changed, in accordance with government, law and noise policy.
- Monitoring noise around UK airports and publishing information about noise levels and impacts. We do this for a range of customers including the UK Government, airport operators, airspace change proposers and local authorities.
- Collaborating on and reviewing research into the effects of noise and how they can be reduced and offering advice to the UK Government on these effects.

The CAA does not:

- Make decisions about the amount of noise that is considered damaging or annoying for people.
- Make decisions about particular plans for airports, such as expansions.

## **Climate change**

The CAA follows government policy and guidance on carbon emissions and air quality in making decisions about airspace change. It has a role in advising the government on the reduction of the industry's carbon emissions, the sharing of best practice, and the development of international initiatives such as emissions trading which is designed to address climate change.

Outside the aviation sector, the CAA also has a role in relation to the planning process around wind power in the UK, as it may impact on aviation.

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(2) In complying with the duty imposed by subsection (1) a body or office-holder must have regard to—  
(a) any strategy designated under section 2(1), and  
(b) the United Nations Environmental Programme Convention on Biological Diversity of 5 June 1992 as amended from time to time (or any United Nations Convention replacing that Convention).

## **Air quality**

The CAA's role on air quality is secondary to that of the government and local authorities, who are statutorily empowered to act on air quality issues.

Where appropriate, the CAA gives consideration to air quality when making other regulatory decisions - particularly when it produces best practice for aircraft operators, and when involved in influencing the development of new technology standards.

## **Relevant CAA Functions**

We have identified the following functions as potentially pertinent to our duty to maintain and enhance biodiversity and promote the resilience of ecosystems when they are exercised in relation to Scotland:

### **Airspace Change**

The CAA works within the legal and policy framework set by Parliament and the Secretary of State to consider requests by airports and air traffic control organizations to change the structure of UK airspace (known as 'airspace change proposals').

This work is carried out through an airspace change process, guidance to which is published in our regulatory document CAP1616 'Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements'.

Underpinning this process is the Department for Transport's 'Air Navigation Guidance 2017' (the ANG). This sets out government's environmental objectives when carrying out its functions in relation to airspace and air navigation. The guidance details environmental objectives in line with altitude-based priorities, and covers topics including: noise, CO2 emissions, Local Air Quality, impacts on tranquility, and biodiversity.

The ANG recommends that the CAA keep abreast of policy and guidance issued by the government, and while no direct reference is made to impacts on biodiversity, the CAA is required to be familiar with environmental legislation including the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations. It goes on to say that

in general, airspace change proposals are unlikely to have an impact upon biodiversity because they do not involve ground-based infrastructure. However, all airspace changes below 7,000 feet should take into account local circumstances in the development of airspace structures the change sponsor should include in its considerations and engagement potential biodiversity implications associated with design options under consideration and should be mindful of such impacts as are identified by stakeholders. Biodiversity factors will be considered as part of the CAA's environmental assessment/statement and will verify that any such factors have been considered appropriately.

The CAA made a decision not to approve Edinburgh's Airspace Change Proposal in late 2018. Impacts on biodiversity were taken into account as part of the proposal, but biodiversity impacts did not affect the CAA's decision to reject the proposal.<sup>2</sup>

Glasgow Prestwick ACP Airspace Change Proposal (CAP 1783) was approved in 2018. The consultation document (Glasgow Airport: Modernising our Flightpaths<sup>3</sup>) portrayed biodiversity against an Ordnance Survey background by plotting Sites of Special Scientific Interest (SSSI) and locations designated or prized for their diversity within the vicinity of Glasgow Airport. It concluded that there were no direct impacts anticipated on flora and fauna or biodiversity from the proposed changes. The analysis within the consultation document, that the airspace change would have no effect upon biodiversity, was accepted by the CAA.

All changes proposed to airspace are to be made in accordance with the government's altitude-based priorities for consideration of the environmental impacts arising from airspace change proposals which are set out in its Air Navigation Guidance. These are that

- In the airspace from the ground to below 4,000feet the Government's environmental priority is to limit and where possible reduce the total adverse effects on people;
- Where options for route design from the ground to below 4,000feet are similar in terms of the number of people affected by adverse noise effects, preference should be given to that option which is most consistent with existing published airspace arrangements;

<sup>2</sup> [https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Decisions/FASI\(N\)/#4294987385-accordioncollapse-2](https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Decisions/FASI(N)/#4294987385-accordioncollapse-2)

<sup>3</sup> [https://www.glasgowairport.com/media/1992/glasgowairport\\_airspaceconsultationdocument.pdf](https://www.glasgowairport.com/media/1992/glasgowairport_airspaceconsultationdocument.pdf)

- In the airspace at or above 4,000ft to below 7,000feet the environmental priority should continue to be minimising the impact of aviation noise in a manner consistent with the government's overall policy on aviation noise, unless the CAA is satisfied that the evidence presented by the sponsor demonstrates this would disproportionately increase CO2 emissions
- In the airspace at or above 7,000 feet the CAA should prioritise the reduction of aircraft CO<sub>2</sub> emissions and the minimising of noise is no longer a priority.
- Where practicable, it is desirable that airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty (AONB) and National Parks; and
- All changes below 7,000feet should take into account local circumstances in the development of the airspace design, including the actual height of the ground level being overflown, and should not be agreed to by the CAA before appropriate community engagement has been conducted by the sponsor.

### **Aerodrome Licensing / Certification**

Two aspects of the safety oversight and management of aerodromes may impact on biodiversity, those relating to Adverse Weather and Wildlife Hazard Management.

UK aerodromes that hold a national aerodrome licence or an EASA Certificate are regulated in accordance with the relevant legislative provisions.

While reference to environmental considerations is limited in the legislation, EU Aerodrome Regulation requires the CAA to have coordination arrangements with other authorities, one of which includes environmental protection authorities, for the management of conflicts between safety and environmental requirements.

The majority of the environmental requirements are between the aerodrome operator and the appropriate authority. The EU Aerodrome regulation contains a number of specific environmental rules for the operator to implement:

1. The management system should clearly identify safety as the highest organisational priority over commercial, operational, environmental, or social pressures;
2. Wildlife control staff should be fully aware of the conditions and terms of the operations of the aerodrome environment and changes in the local environment;

The aerodrome operator should, as adequate, avoid harmful effects on environment, aircraft or pavements when using chemicals to remove snow, slush, ice, and other contaminants from operational surfaces.

Further detail of the relevant legislation in both areas can be found in Annex A.

### **Licensed & Certified Aerodromes in Scotland**

In Scotland, the following aerodromes are regulated by the CAA and subject to the provisions above<sup>4</sup>

Aberdeen	North Ronaldsay
Barra (HIAL)	Oban
Benbecula (HIAL)	Papa Westray
Campbeltown (HIAL)	Perth
Coll	Prestwick
Colonsay	Sanday
Cumbernauld	Scafsta
Dundee (HIAL)	Stornoway (HIAL)
Eday	Stronsay
Edinburgh	Sumburgh (HIAL)
Fair Isle	Tingwall
Glasgow	Tiree (HIAL)
Inverness (HIAL)	Westray
Islay (HIAL)	Wick (HIAL)
Kirkwall (HIAL)	

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<sup>4</sup> . 11 of these airports are run by the Highlands and Islands Airport Company Ltd (HIAL) which is a public corporation wholly owned by the Scottish Ministers. They are supported by subsidies from the Scottish Government in accordance with Section 34 of the Civil Aviation Act 1982.

## **Annex A – relevant legislative provisions for aerodromes**

### *Winter Contaminants:*

National licensing criteria is published in Civil Aviation Publication (CAP) 168, Licensing of Aerodromes. Chapter 3 contains requirements relating to Aerodrome surface conditions and procedures to be followed when the surface is affected by winter contaminants. Appendix 3G 'Care of pavements during winter conditions – improving surface friction by removal of contaminants' contains guidance only on the effectiveness of chemicals as anti-icers and de-icers.

Guidance on environmental impacts of these chemicals is not provided by the CAA but it would advise an aerodrome that it would need to comply with any relevant environmental requirements.

The requirements of EU 139/2014 are applicable to EASA certified aerodromes. The Acceptable Means of Compliance for Operations in winter conditions (AMC1 ADr.OPS.B.035) includes the following:

'The aerodrome operator should, as adequate, avoid harmful effects on environment, aircraft or pavements when using chemicals to remove snow, slush, ice, and other contaminants from operational surfaces'.

Oversight of an aerodrome by the CAA would seek evidence to show that it has considered this.

### *Wildlife Hazard Management*

All aerodromes are required to implement a wildlife hazard management plan. (Requirements are contained in CAP168 Chapter 5 and Commission Regulation No.139/2014 Article 10 and Implementing Rule ADR.OPS.B.020)

The CAA publication CAP772 'Wildlife Hazard Management at Aerodromes' provides guidance to aerodromes on assessing and managing risks, including habitat management, to maintain an environment which is unattractive to birds and other wildlife. It also gives advice on managing the off-airfield environment and monitoring the impacts of wildlife hazards in the vicinity of an aerodrome.



The document advises aerodromes operating adjacent to or in close proximity to designated nature conservation sites is to discuss their bird/wildlife control management plans with the relevant conservation agency (e.g. Scottish Natural Heritage) to ensure that any activities carried out meet the requirements of the relevant environmental legislation.