Environment (Wales) Act 2016 Part 1 - Section 6

The Biodiversity and Resilience of Ecosystems Duty

Report 2019

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 6 of the Environment (Wales) Act 2016. The report focuses on the exercise of the CAA's statutory functions in relation to Wales in the period from 2016-2019.

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 CO₂ 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.

The CAA does not own any land in Wales, and does not have any offices or carry out land management in Wales. However, in our 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 bio diversity 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 locations 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 Section 6 Biodiversity Duty:

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.

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 Wales:

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.

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;

- 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 CO₂ 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, the CAA would advise an aerodrome using chemicals for anti-icing or de-icing purposes that it would need to comply with any relevant environmental requirements. When considering its approach to wildlife hazard management, the CAA also 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. Natural England) to ensure that any activities carried out meet the requirements of the relevant environmental legislation.

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

Licensed & Certified Aerodromes in Wales

In Wales, the following aerodromes are regulated by the CAA and subject to the provisions above:

- Cardiff
- Haverfordwest
- St Athan
- Swansea
- Welshpool
- Caernarfon
- Hawarden
- Pembrey
- West Wales/Aberporth

Since 2016, the CAA has granted a national aerodrome licence to St Athan Airport.

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 deicers.

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. Natural England) to ensure that any activities carried out meet the requirements of the relevant environmental legislation.