







# UK Emissions Trading Scheme: Impact of End of Aviation Free Allocation on Regional Connectivity Consultation

A joint consultation of the UK Government, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs for Northern Ireland

Closing date: 19 December 2025



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# **Executive Summary**

The UK Emissions Trading Scheme (ETS) is a 'cap and trade' scheme that sets out the total amount of greenhouse gases (GHGs) that can be emitted by the industrial, power and aviation sectors currently covered by the scheme. The UK ETS is developed and managed by the UK ETS Authority (hereafter "the Authority") — comprising the UK Government, Scottish Government, Welsh Government, and the Department for Agriculture, Environment and Rural Affairs in Northern Ireland.

In terms of the aviation sector, the UK ETS covers UK domestic flights, flights between the UK and Gibraltar and flights departing the UK to the European Economic Area (EEA) states and Switzerland. Aircraft operators (and energy intensive industries) currently receive a proportion of UK ETS allowances for free and must purchase allowances for their remaining emissions. Free allocation (FA) was adopted into the UK ETS (mirroring the EU ETS) to mitigate carbon leakage risks.

The 'Developing the UK Emissions Trading Scheme' consultation, published in March 2022<sup>1</sup>, set out proposals to end FA for the aviation sector. This was based on independent research<sup>2</sup> which found there was minimal risk of carbon leakage for aviation under the then scope of the UK ETS. After considering stakeholder feedback which largely supported the finding that removing aviation FA did not pose a significant risk to carbon leakage, the Authority committed to ending FA for aviation in 2026. In its response to the consultation the Authority recognised the importance of considering the impact this may have on regional connectivity across the UK, in particular "the importance of air connectivity to communities in isolated areas with few other viable means of transport, such as those in the Scottish Highlands and Islands<sup>3</sup>". Given the possible impact of the removal of FA for the domestic aviation sector, the Authority said it would take forward work to assess and review this issue. If required, the Authority will ensure that appropriate mitigations are put in place to prevent negative outcomes for these regions and communities.

The aim of a potential future policy in this area is to protect air connectivity to communities within the UK that rely on these connections, for example to access key services such as healthcare. Its purpose is not to shield the aviation sector from the financial implications of ending aviation FA, which is considered necessary to ensure the UK ETS effectively drives aviation decarbonisation in line with climate change commitments.

This consultation seeks stakeholder views on whether intervention is needed, and if so, what form this should take. It presents potential mitigation options that specifically target the potential risk to regional air connectivity to isolated communities. In the context of this document 'regional air connectivity' is used to describe domestic flights between and within nations and regions of the UK and not to locations outside of the UK.

<sup>&</sup>lt;sup>1</sup> https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets.

<sup>&</sup>lt;sup>2</sup> Economic research on the impacts of carbon pricing on the UK aviation sector.

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets.

The structure of this consultation is as follows:

Chapter 1: provides an overview of the domestic aviation sector and the UK ETS and refers to the decision to end aviation FA by 2026.

Chapter 2: sets out the importance of regional air connectivity in the UK and includes an overview of Public Service Obligation (PSO) routes and the Scottish National Islands Plan.

Chapter 3: sets out the potential policy mechanisms to mitigate the impact of ending aviation FA on regional connectivity, proposed qualifying criteria and potential options for consideration along with their rationale.

Annex A contains an analytical annex which provides further evidence on the policy issue and analysis of the policy options for consideration by stakeholders when providing feedback. Annex B provides a list of acronyms used in this consultation document for reference.

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# How to respond

Email to: <u>ukets.consultationresponses@energysecurity.gov.uk</u>

Write to:

Emissions Trading
Department for Energy Security and Net Zero
3rd Floor
3 Whitehall Place
London
SW1A 2EG

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

# Quality assurance

This consultation has been carried out in accordance with the government's <u>consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: bru@energysecurity.gov.uk.

# Section 1: Introduction

## Background

This chapter provides an overview of the domestic aviation sector and outlines the role of carbon markets in aviation decarbonisation, the UK Emissions Trading Scheme (ETS) and the UK ETS Authority (hereafter "the Authority" which comprises the UK Government, Scottish Government, Welsh Government, and the Department for Agriculture, Environment and Rural Affairs in Northern Ireland) which administers the scheme. It refers to the decision to end aviation free allocation (FA) in 2026 and the Authority's commitment to further assess and review the possible impacts of the removal of FA for the domestic aviation sector.

#### Domestic aviation sector<sup>4</sup>

Domestic aviation provides key connections and access to key services within the UK for business travel, leisure travel and the rapid transportation of cargo. It is especially vital for isolated communities, where flights often offer the fastest and most reliable access to essential services. For example, while the islands of Barra and Tiree in the Scottish Hebrides are served by ferries, limited medical facilities mean residents rely on regular flights to the Scottish mainland for timely access to healthcare.

In 2023, over 18 million passengers took UK domestic flights<sup>5</sup> and domestic air travel made up approximately 1% of all passenger kilometres travelled by all modes in the UK<sup>6</sup>. In the same year, domestic aviation greenhouse gas emissions were 1.2 MtCO2e, although this equates to less than 4% of total UK aviation emissions, the remainder of which were from UK departing international flights<sup>7</sup>.

The UK relies on a small number of aircraft operators to provide regional connectivity. The majority of UK domestic flights are currently operated by easyJet, Loganair and British Airways<sup>8</sup>. London Heathrow, Edinburgh Airport, Belfast International Airport, Belfast City Airport, Glasgow Airport and London Gatwick are leading UK airports for domestic flights. Smaller regional airports also provide domestic connections and are heavily reliant on individual airlines and the routes they operate to provide connectivity with the rest of the UK. If any of the aircraft operators providing domestic connections were to cease it could significantly impact regional airports and the communities that rely on them. This could also have wider impacts across the UK as many domestic routes are interlinked and airlines use the same aircraft to fly multiple routes.

<sup>&</sup>lt;sup>4</sup> It should be noted that this consultation focuses on the impact of the removal of aviation FA on domestic passenger air travel to communities and not cargo.

<sup>&</sup>lt;sup>5</sup> Civil Aviation Authority (CAA) UK airport data: Table 12.2 – Domestic Air Pax Traffic Route Analysis.

<sup>&</sup>lt;sup>6</sup> <u>Transport Statistics Great Britain: 2023 Domestic Travel</u>. Based on domestic passenger kilometres on scheduled and non-scheduled flights operated by UK-registered airlines. Figures for other modes cover Great Britain only, but this is not considered likely to have a substantive impact on the conclusions drawn.

<sup>&</sup>lt;sup>7</sup> DfT 2023 data. "Greenhouse gas emissions by transport mode: United Kingdom, 1990 to 2023".

<sup>&</sup>lt;sup>8</sup> In 2024, these three airlines were responsible for ~77% of total domestic scheduled flights operated by UK-registered airlines. easyJet UK Ltd operated 33%, and Loganair Ltd and British Airways (including BA CityFlyer) each operated 22%. Data source: <u>Civil Aviation Authority UK airline data</u> - "Domestic Scheduled Services 2024 – Table 1.7.4".

The UK domestic aviation market has an important role in the UK economy in terms of jobs, investment, connectivity, and trade. However, UK airlines operate with traditionally low profit margins in a very capital-intensive industry and routes are vulnerable to being lost in reaction to fluctuations in the market. There are also only a limited number of regional airlines with aircraft suitable to operate thin domestic routes that provide essential regional connectivity. It should be noted that the objective of a potential future policy would be to mitigate the potential loss of these essential routes to protect vital connectivity impacted as a direct result of the removal of aviation FA, not to otherwise shield aviation from ETS costs, under the 'polluter pays' principle.

# GHG emissions targets

The Climate Change Act 2008 (CCA) sets a legally binding requirement for the UK to reduce its carbon emissions by 100% in comparison to 1990 levels, or net zero, by 2050. The CCA introduced a system of carbon budgets, which provide legally binding limits on the amount of emissions that may be produced in successive five-year periods, beginning in 2008 and spanning out to 2050. We are currently in Carbon Budget 4 (2023 – 2027). Domestic aviation is fully in-scope of UK carbon budgets, whereas international aviation will not be included before Carbon Budget 6 period (2033-2037).

## Decarbonising the domestic aviation sector

The UK Government and Devolved Governments are committed to decarbonising the domestic aviation sector in accordance with our Carbon Budgets and the net zero 2050 target. The Scottish Government has a legal commitment, set out in the Climate Change (Scotland) Act 2009, to reach an earlier target of net zero emissions by 2045, which includes aviation. It also has a non-statutory commitment to work to decarbonise scheduled flights within Scotland by 2040.

In addition to carbon pricing via the UK ETS and CORSIA (outlined in the next section), the UK Government is committed to promoting sustainable aviation fuel (SAF) via the SAF Mandate, and supporting airspace modernisation. Through the Aerospace Technology Institute (ATI) Programme, UK Government co-invests, with industry, in the development of ultra-efficient and zero-carbon aircraft technology. Announced as part of the Industrial Strategy, UK Government has committed to extend the ATI Programme with up to £2.3bn to 2035. Scottish Government funds Highlands and Islands Airports Limited, which is leading a programme of activity to decarbonise its airport operations and infrastructure.

Domestic aircraft operators are making progress towards carbon neutrality in line with, or ahead of, government targets. Sustainable Aviation, an industry coalition representing the UK aviation sector, has developed a roadmap that demonstrates the UK aviation sector's commitment to net zero by 2050. The roadmap includes measures to achieve this transition, such as the renewal of the existing domestic fleet to less polluting aircraft, investment in SAF, testing of electric aircraft and investment in carbon removals.

<sup>&</sup>lt;sup>9</sup> The phrase 'thin domestic routes' in this context is to refer to routes with fewer than 50,000 passengers per year.

## **UK Emissions Trading Scheme**

The UK aviation sector is subject to the UK ETS which came into operation on 1st January 2021 following the UK's departure from the EU and the end of the UK's participation in the EU Emissions Trading System (EU ETS).

The UK ETS works on the 'cap and trade' principle. A cap is set on the total amount of greenhouse gases (GHGs) that can be emitted by the industrial, power and aviation sectors covered by the scheme.

The routes covered by the UK ETS include UK domestic flights, flights between the UK and Gibraltar and flights departing the UK to the European Economic Area (EEA) states and to Switzerland. International flights are also covered by Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). 129 States, including the UK, are participating in CORSIA in 2025. The Department for Transport, in partnership with the Authority, recently consulted on the implementation of CORSIA alongside the UK ETS and will respond in due course <sup>10</sup>.

The UK ETS is an important tool to help the aviation sector to decarbonise in line with the four UK nations' ambitious climate targets. Aviation is historically a difficult sector to decarbonise, and the UK ETS provides flexibility to decide how to decarbonise most effectively at least cost, incentivising decarbonisation and green innovation.

#### Aviation free allocation

FA of UK ETS allowances is the primary policy instrument through which carbon leakage risk is currently addressed in the UK. Carbon leakage refers to the movement of production and associated emissions from one country to another due to different levels of decarbonisation effort through carbon pricing and climate regulation. As a result of carbon leakage, the objective of decarbonisation efforts – to reduce global emissions – would be undermined.

Aircraft operators currently receive a proportion of UK ETS allowances for free, which they can use towards their scheme obligations. Since 2021 FA entitlement for aircraft operators has been reduced by approximately 2% annually. The total number of allowances for aviation between 2021 – 2025 is 21.2 million with an estimated value of £1.24bn<sup>11</sup>. In 2021, aviation FA represented 3% of the total UK ETS cap.

It should be noted that the future of FA for non-aviation sectors is currently under review by the Authority. The latest consultation is publicly available, and a response is forthcoming <sup>12</sup>.

#### End of aviation free allocation

The 'Developing the UK Emissions Trading Scheme' consultation published in March 2022 set out proposals to end aviation FA (which was originally intended to address carbon leakage

<sup>&</sup>lt;sup>10</sup> <a href="https://www.gov.uk/government/consultations/implementing-the-carbon-offsetting-and-reduction-scheme-for-international-aviation-corsia">https://www.gov.uk/government/consultations/implementing-the-carbon-offsetting-and-reduction-scheme-for-international-aviation-corsia</a>.

<sup>&</sup>lt;sup>11</sup> Constant (2024) prices. Allocations taken from <u>UK ETS Aviation Allocation Table - GOV.UK</u> and applied to average annual UK allowance prices from <a href="https://www.theice.com/marketdata/reports/148">https://www.theice.com/marketdata/reports/148</a>. 2025 carbon price taken from Market Traded Carbon Values at <a href="Traded carbon values used for modelling purposes">Traded carbon values used for modelling purposes</a>, 2024 - GOV.UK.

<sup>&</sup>lt;sup>12</sup> https://www.gov.uk/government/consultations/uk-emissions-trading-scheme-free-allocation-review.

<sup>&</sup>lt;sup>13</sup> https://www.gov.uk/government/consultations/developing-the-uk-emissions-trading-scheme-uk-ets.

risks) based on independent research which found there was minimal risk of carbon leakage for aviation under the current scope of the UK ETS. This is because the majority of passengers fly return journeys so demand and emissions would decrease in both directions as a result of any ticket price rises and/or schedule changes due to carbon pricing policy and/or the withdrawal of aviation FA. UK aircraft operators were also not found to be significantly disadvantaged compared to non-UK competitors by UK carbon pricing policy.

In the Authority response to this consultation, published in July 2023, the Authority set out its decision to phase out aviation FA by 2026. The Authority concluded that it would be disproportionate to maintain aviation FA policy to mitigate the risk of carbon leakage where that risk is found to be minimal. This decision is in line with the EU ETS, under which aviation FA is also planned to be phased out by 2026.

The Authority is mindful that with the phase out of aviation FA, it is appropriate to consider the possible impact on domestic airlines providing regional connectivity across the UK. Therefore, the Authority announced in its response to the 'Developing the UK Emissions Trading Scheme' consultation that it would take forward work to assess the potential impact on air connectivity to communities in isolated areas with few other viable means of transport. If required, the Authority will ensure that appropriate mitigations are put in place to prevent negative outcomes for these regions and communities. The consideration of potential impacts and mitigations will not affect the Authority's decision to withdraw aviation FA.

## Consultation purpose

This consultation delivers on the Authority's commitment in the Authority Response to the 'Developing the UK Emissions Trading Scheme' consultation to assess and review the impact of the phase-out of FA for the domestic aviation sector and explore any potential mitigation options (as set out in Chapter 4: Aviation, pages 67 and 68).

We are seeking views on:

the likely impact on domestic routes providing connectivity to communities with few other alternative means of transport;

whether there is a need for government intervention to mitigate any negative effects; and,

on what basis intervention could occur.

The Authority will publish a response to this consultation summarising feedback received and the Authority's decision on whether intervention is required, and if so, what these measures will be.

# Policy principles

In order to develop a tailored and robust policy, the Authority considered guiding principles to assess the development of potential mitigation options. These principles will also inform policy development post consultation. The principles are presented below.

• Impact on connectivity and isolated communities: Level of risk of flight routes being withdrawn that provide regional connectivity to communities with no or limited travel

alternatives and where there are limited or no other airlines that could substitute lost services 14.

- **Maintaining ETS effectiveness:** Level of reduction in the effectiveness of the UK ETS to reduce CO2 emissions. Potential ramifications for the integrity of the UK ETS.
- Cost to taxpayer: Potential cost to taxpayer due to increased government expenditure or reduced revenue.
- Alignment with other decarbonisation policies (UK and international): Extent to
  which the mitigation option aligns with other relevant policies, such as the EU ETS and
  CORSIA, preventing unnecessary divergence that could create regulatory burdens or
  inefficiencies.
- **Operational and legal feasibility:** Extent of operational issues and level to which these can be overcome. Whether the potential mitigation option is legally permissible.

We encourage stakeholders to keep these guiding principles in mind when considering the potential mitigation options presented in Chapter 3.

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<sup>&</sup>lt;sup>14</sup> The term 'limited' is used here to refer to where there are no equivalent public transport options that take under three hours, or a flight to an alternative airport within one hour's travel.

# Section 2: Regional air connectivity

#### Introduction

This chapter sets out the importance of regional air connectivity in the UK and includes an overview of PSO routes and the Scottish National Islands Plan.

The Authority acknowledges that government intervention (i.e. implementing a mitigation policy) may be required to protect routes providing essential regional air connectivity to isolated communities within the UK as a result of the removal of aviation FA. The extent to which intervention may be required is difficult to predict and the purpose of the consultation is to seek views on the necessity for intervention and how to identify where any intervention is needed.

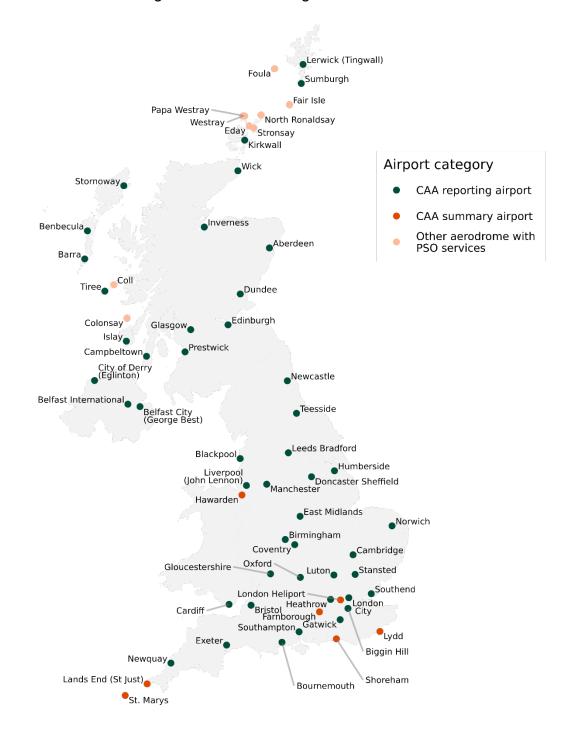
## Protecting regional air connectivity

Due to the UK's unique and varied geography, air connectivity is a vital part of the UK's domestic transport system and is sometimes the only viable option for communities to access jobs, medical services and education. This is particularly relevant for isolated communities, such as those in the Scottish Highlands and Islands, that rely on regular flight connections to access key services.

For reference, the plan below shows the airports that operate scheduled flights within the UK and shows the location of the surrounding island communities in relation to the mainland.

#### UK reporting and summary airports 15

+ additional aerodromes handling Public Service Obligation services



Department for Transport

<sup>&</sup>lt;sup>15</sup> Reporting airports submit an individual record of each Air Transport Movement to the Civil Aviation Authority (CAA). Summary airports only provide the CAA with high-level summary figures for air traffic handled. The map also shows airports where PSOs operate that are not covered by the CAA's statistics.

## **Public Service Obligation routes**

The Authority recognises the importance of domestic air connectivity and regional airports to local economies. Routes that are not commercially viable but are socially and economically vital for the regions they serve can be protected via financial support from government through imposing a PSO.

Each PSO application is considered on an individual basis, on the strength of its economic and strategic case. It must demonstrate the following key criteria to be eligible for consideration:

the service must be to a peripheral region (>3 hours from destination), an airport in a developing region, or on a thin route (<50K passengers per year);

the air route must be vital for the economic and social development of the region; and,

the PSO must only ensure the minimum provision of scheduled air services that carriers would not undertake if only considering their commercial interests.

There are currently 19 PSO routes in the UK administered and funded by UK Government, Devolved Governments and/or Local Authorities.

PSOs can only be considered on routes that have ceased to operate over the previous 24 months or on routes that are in danger of being lost.

#### Island communities

The Islands (Scotland) Act 2018<sup>16</sup> introduces measures to support and help meet the unique needs of Scotland's islands now and in the future. Part 1 of the Act defines an island community as 'a community which (a) consists of two or more individuals, all of whom permanently inhabit an island (whether or not the same island), and (b) is based on common interest, identity or geography (including in relation to any uninhabited island whose natural environment and terrestrial, marine and associated ecosystems contribute to the natural or cultural heritage or economy of an inhabited island)'.

The Scottish Government and other Relevant Authorities have obligations under the Act to have regard to island communities in carrying out their functions. An island communities impact assessment must be completed for any new or reviewed policy, strategy or service which is likely to have a significantly different effect for an island community compared to other communities (including other island communities). The Islands Act requires Scottish Ministers to develop a National Islands Plan<sup>17</sup>, which was published in December 2019. As required by the Act, the Plan is currently being reviewed. The purpose of the current Plan is to set out 'the main objectives and strategy of the Scottish Ministers in relation to improving outcomes for island communities that result from, or are contributed to by, the carrying out of functions of a public nature'. 18

The National Islands Plan provides a framework for action in order to meaningfully improve outcomes for Scottish island communities.

<sup>16</sup> https://www.legislation.gov.uk/asp/2018/12/enacted.

<sup>17</sup> Summary of Strategic Objectives - The National Plan for Scotland's Islands - gov.scot.

<sup>&</sup>lt;sup>18</sup> Islands (Scotland) Act 2018.

As outlined in the National Islands Plan<sup>19</sup>, 'fairness reflects our commitment to equality and human rights. The Plan recognises that every member of society has a right to live with dignity and to enjoy high quality public services wherever they live.' 'Compliance with Scotland's human rights obligations is a central component of that approach. The geographic, demographic, socio-economic, cultural and other particularities of the Scottish islands mean that many issues of significance to island communities are of such a fundamental nature that they are likely to interact with a range of human rights.'

The Plan sets out the main objectives and strategy of the Scottish Government in relation to improving outcomes for island communities. Part 2 of the Islands Act sets out some of the key areas to achieve this, with some examples being: increasing population levels, improving and promoting health and wellbeing, improving transport services, improving and promoting community empowerment, and improving and promoting sustainable economic development. The National Islands Plan includes proposals in relation to the <a href="Strategic Objectives">Strategic Objectives</a>. Those identified as most relevant to Regional Connectivity are summarised below:

# Summary of Strategic Objectives most relevant to regional connectivity<sup>20</sup>

Population Levels Strategic Objective 1 To address population decline and

ensure a healthy, balanced population profile

Sustainable Economic Strategic Objective 2 To improve and promote sustainable

**Development** economic development

Transport Strategic Objective 3 To improve transport services

Health, Social Care and Strategic Objective 7 To improve and promote health, social

Well-being care and wellbeing

Although the Islands Act is specific to Scotland, the UK Government has also taken steps to support island communities, including through establishing the UK wide Islands Forum to ensure island communities are reflected in central policy development.

The Authority recognises these considerations and wishes to better understand the possible impact of the end of aviation FA on regional air connectivity providing access to key services for communities within the UK. As part of this consultation, we encourage stakeholders to share their views and provide relevant evidence to help us build a clearer picture of any potential impacts of FA removal on regional air connectivity and communities served by these connections. We will assess this evidence in depth ahead of making a final decision on whether to intervene, giving due consideration to all relevant statutory requirements including those under the Islands (Scotland) Act 2018.

<sup>20</sup> Summary of Strategic Objectives - The National Plan for Scotland's Islands - gov.scot.

<sup>&</sup>lt;sup>19</sup> Summary of Strategic Objectives - The National Plan for Scotland's Islands - gov.scot.

# Section 3: Potential intervention

#### Introduction

In case, following analysis of responses to this consultation, the Authority concludes that intervention is necessary to mitigate the impact on regional connectivity as a result of the removal of aviation FA, the Authority has developed mitigation options for consideration. These could be implemented in a timeframe as close as possible to when the removal will occur in 2026.

The Authority is consulting on three leading options, but is also open to suggestions for feasible alternatives, informed by the guiding policy principles presented in Chapter 1.

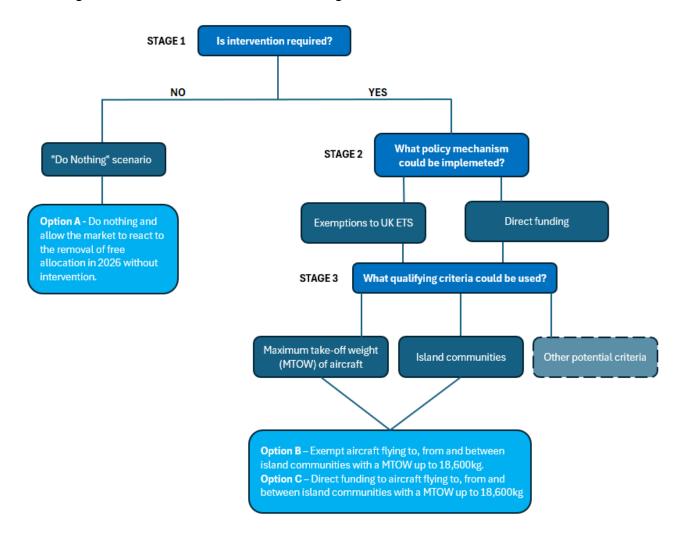
This chapter comprises two parts as set out below.

Part 1: outlines a "do nothing" scenario, proposed policy mechanisms (exemptions and direct funding) and potential qualifying criteria.

Part 2: sets out options (A to C) based on the proposals outlined in Part 1. An additional proposal to address impacts on PSOs and reduce inefficiencies as a result of the removal of aviation FA is included at the end of this section.

#### Part 1: Intervention considerations

The diagram below illustrates the considerations the Authority will make in determining whether and in what way to make an intervention to support regional air connectivity. There are three stages to consider that we are consulting on as outlined in this section.



# Stage 1: Is intervention required?

In the first instance, the Authority aims to establish whether or not intervention is required as a result of aviation free allocation removal to protect regional air connectivity for communities that rely on these connections for access to essential services. In this context, intervention is used to describe the Authority stepping in to implement a policy measure.

The Authority will analyse consultation responses and make an informed decision to either do nothing or implement a policy mitigation.

## "Do nothing" scenario

If, following this consultation, no mitigations are considered necessary when aviation FA ends in 2026 then no further action will be taken. This is referred to as the "do nothing scenario".

The Authority may decide not to implement an intervention if the evidence gathered as part of this consultation shows that removal of FA will have a nominal impact on regional connectivity to communities within the UK that rely on domestic flight connections to access key services.

Consideration of any expected impact needs to be set against the need to maintain an effective emissions trading scheme and for the UK to achieve its legislated decarbonisation objectives.

# Stage 2: What policy mechanism could be implemented?

If intervention is required, the second stage is to decide what policy mechanism would be appropriate to implement. In this context the term 'policy mechanism' is used to describe the type of intervention the Authority could implement to mitigate the impact of the removal of aviation FA. The Authority proposes **two potential policy mechanisms** for providing route support:

- (i) **Exempting** certain routes that meet specific qualifying criteria from being subject to the UK ETS.
- (ii) Providing **direct funding**<sup>21</sup> to aircraft operators to protect routes that meet specific qualifying criteria. The funding would be limited, targeted and proportionate to the policy issue.

#### (i) Exemptions to UK ETS

In order to protect routes providing essential regional connectivity, the Authority has been considering exempting routes that meet specific qualifying criteria from being counted towards the total UK ETS obligations for airlines operating these routes. The Authority is also considering a stand-alone or combined exemption for PSO routes which is outlined at the end of this section.

Exemptions would be in the control of the Authority. The benefit of exemptions is that they would not require additional public spending, and they are feasible to implement. Flights operated by aircraft with a maximum take-off weight (MTOW) of below 5,700 kg are already excluded from UK ETS obligations (see para 2(1)(m) in Schedule 1 to the UK ETS Order). This applies to flights operated by very small aircraft, such as the 9-seater BN Islander.

It would be possible to introduce exemptions and then slowly reintroduce UK ETS obligations on the exempted routes over a set period to allow more time for operators to decarbonise these routes. This could be periodically reviewed and amended according to the level of support needed.

<sup>&</sup>lt;sup>21</sup> Note that funding would need to be identified and sought outside of the UK ETS and not using UK ETS revenue.

However, exemptions could dilute the effectiveness of the UK ETS for aviation because fewer routes would be subject to UK ETS obligations, and this would reduce the decarbonisation potential of the scheme.

#### (ii) Direct funding

As an alternative mechanism to exemptions, the Authority has considered the option of some form of direct funding to aircraft operators to support routes that meet specific qualifying criteria. The funding could be provided for qualifying routes at a defined level and over a defined period of time. Part 2 of this chapter provides more information on the level of funding that could be provided. This could be tapered over time to increase exposure to the decarbonisation incentive of UK ETS allowance surrender obligations. This approach would avoid further proliferation of exemptions under the UK ETS and consideration of what support overall is required to support regional connectivity.

# Stage 3: What qualifying criteria should intervention be based on?

This stage considers how to allocate support. In this context, the term 'qualifying criteria' is used to describe the parameters for deciding how to allocate support. The Authority suggests **two potential qualifying criteria** for determining which routes would qualify for any intervention, with their rationale set out in this section. This consultation aims to gather views on whether, if intervention is required, these criteria are appropriate or if other potential criteria would be more suitable to address the problem under consideration.

#### (i) Maximum take-off weight (MTOW)

A possible qualifying criterion for support is to exempt or provide direct funding to aircraft operators to protect routes based on the MTOW of an aircraft.

The Department for Transport has data on the MTOW of aircrafts by route in the UK which would enable us to accurately identify qualifying routes. The weight of an aircraft is often reflective of the type of route flown and the airport facilities available, with smaller aircraft flown on shorter routes where passenger numbers are low, such as from the mainland to small islands.

For these reasons, MTOW could be a good qualifying criterion to use to distinguish where support may be required as a result of the removal of aviation FA. However, one downside is there is the potential for routes to be captured by this qualifying criterion that may not be considered essential for regional connectivity. This would unnecessarily reduce the scope of routes covered by the UK ETS and as a result its effectiveness in encouraging decarbonisation of the domestic aviation sector.

#### (ii) Island communities

Another possible qualifying criterion that has been considered for the allocation of support is to exempt or provide direct funding based on whether routes are connecting to/from/between island communities.

Island communities rely heavily on domestic air connections, compared with other communities where a range of travel options are more likely to be available. Most island communities can

only access the mainland via air or ferry and sometimes air travel is the only viable option as sea travel is more susceptible to cancellations due to weather conditions. These flight routes are used by residents accessing essential services, as well as for leisure and could be more susceptible to even the slightest of cost increases. Only two islands in Scotland are accessible via bridge: Seil and Skye<sup>22</sup>.

This consultation seeks to gather evidence on the impact the removal of FA could have on such routes.

As a basis for this criterion, the Authority proposes using the four Strategic Objectives set out in Scotland's National Islands Plan (see Section 2 for more information). This is because the objectives address not only Scottish island issues but could also be applicable to those of other island communities in the UK that rely on air connectivity to access essential services.

#### Combining criteria

The Authority proposes to combine the MTOW and island communities criteria to provide support to mitigate the impact of the removal of aviation FA. This is because we think this would capture routes providing access to essential services for communities in the UK that are most likely to need protection. This option would be feasible to implement because the Authority holds data on the MTOW of domestic flights and it is possible to define what would constitute an island community, drawing on Scottish legislation as a basis. Therefore, the proposed mitigation options set out in the next section propose combining these two criteria.

#### Other potential qualifying criteria

The Authority has considered other qualifying criteria during policy development which we have set out below along with the reason for not proposing to take these forward.

- Annual passenger numbers to determine routes with low passenger demand: The
  Authority does not hold reliable data covering all annual passenger numbers in the UK
  because some small domestic airports do not record this data. This criterion is also not
  used to determine any existing exemptions in the UK ETS, unlike MTOW.
- Routes with limited alternative transport options: This would be resource intensive to monitor and would be subject to frequently change.
- Routes considered essential to access public services: There is significant
  challenge in defining what is considered to be "an essential service" in legal terms, and
  it would be difficult to effectively monitoring whether routes qualify.

Despite these concerns, the Authority is open to stakeholder views on how these or other potential qualifying criteria could be viably applied to allocate support. We welcome responses to Question 6 to inform this.

<sup>&</sup>lt;sup>22</sup> See "Scottish Islands Typology: overview 2024" Section 4.8 "Mainland-Connected Islands". Accessed via: <a href="https://www.gov.scot/publications/scottish-islands-typology-overview-2024/pages/6/">https://www.gov.scot/publications/scottish-islands-typology-overview-2024/pages/6/</a>.

# Part 2: Proposed options

Following consideration of policy mechanisms and qualifying criteria, the Authority is consulting on a "do nothing" option and two intervention options to address the potential impact of the removal of aviation FA on regional connectivity. These are as follows:

Option A – Do nothing and allow the market to react to the removal of free allocation in 2026 without intervention.

Option B – Exempt aircraft flying to, from and between island communities with a MTOW up to and including 18,600kg.

Option C – Direct funding to aircraft operators flying to, from and between island communities with a MTOW up to and including 18,600kg.

The rationale and impact of each policy option is set out below.

#### Option A – Do nothing

This is the no intervention option against which the intervention options can be compared. Although doing nothing would not reduce revenue for the UK ETS, costs would increase for the publicly funded PSOs that would be subject to the removal of FA because the relevant government authorities would need to fund more emissions allowances than they currently do. A proposal to address this issue is set out at the end of this section under "PSO exemption".

# Option B – Exempt aircraft flying to, from and between island communities with a MTOW up to and including 18,600kg

Exempting MTOW and island communities on a standalone basis could potentially capture routes that are not in need of support because they have enough passenger demand to operate even with the additional cost from the removal of FA support. Therefore, the Authority has explored combining the two criteria into one option for a more tailored and targeted policy that captures only essential routes that are likely at greatest risk of losing commercial viability following the removal of FA and potentially being withdrawn.

The Authority considered increasing the current MTOW threshold by different ranges but concluded 18,600kg is the optimum threshold for targeting support when combined with the island communities criteria. This is because the extent of routes covered captures small aircraft, such as the ATR-42 twin turboprop aircraft with 48 seats, which serves routes considered less commercially viable and therefore more at risk than aircraft with higher MTOWs and passenger capacity. Also, this suggested threshold would capture routes between the mainland and Scottish islands that provide connections for islanders to key services.

# Option C – Direct funding for aircraft operators flying routes to, from and between island communities with an aircraft MTOW up to and including 18,600kg

As an alternative to exemptions, we propose an option where the same combined qualifying criteria (i.e. MTOW and island communities) be applied to determine allocation of direct funding to aircraft operators, to protect relevant routes.

The table below provides further details on the scope of each option. This covers the routes that would be affected, their current annual emissions, and expected fiscal impacts.

	Option	Affected routes			2023 emissions,	2023 equivalent
ID		Aircraft operators	Air transport movements	Number of routes	tCO2e (% of UK ETS aviation) <sup>23</sup>	UK ETS revenue foregone <sup>24</sup>
Α	Do nothing	-	-	-	-	-
В	Exempt aircraft flying to, from and between island communities with a maximum takeoff weight up to and including 18,600kg	1	11,600 <sup>25</sup>	17	8,160 (0.09%)	£0.45m
С	Direct funding to aircraft operators flying to, from and between island communities with a maximum take- off weight up to and including 18,600kg	1	11,600	17	8,160 (0.09%)	-

The intention is to achieve a similar outcome from Options B and C, although the policy mechanisms to achieve this are different. For further information, see Annex A: Analytical Annex.

## **PSO** exemption

Another issue to consider from the removal of aviation FA is the impact on PSO routes that fall under UK ETS obligations. PSO funding bodies (i.e. Local Authorities, Transport Scotland and Department for Transport) would be subject to increased costs from UK ETS obligations that would need to be sought. If and when these costs are sought, they would then be passed on to the relevant government fund that collects UK ETS revenue. This creates the risk of losing

 $<sup>^{23}</sup>$  The bracketed value indicates the proportion of CO<sub>2</sub> emissions for each option out of the total aviation CO<sub>2</sub> emissions within scope of the UK ETS. Carbon emissions are calculated using information from the Department for Transport's Aviation Modelling Suite and may differ slightly from those reported by airlines.

<sup>&</sup>lt;sup>24</sup> Assuming an average 2023 UK ETS allowance price of £55.54, as per footnote 7.

<sup>&</sup>lt;sup>25</sup> A number of routes operate a mixture of aircraft types, with some above and some below the threshold MTOW. This table reports the total number of ATMs / emissions for eligible aircraft types only.

PSO routes as removing FA will increase financial pressure on government funding bodies. To reduce this risk and to reduce cost pass through between government bodies, the Authority is also considering exempting PSOs from UK ETS obligations.

Exempting PSO routes from the obligation to surrender UK ETS allowances would be similar to EU ETS policy which exempts PSO routes within outermost regions<sup>26</sup> or on routes where passenger capacity does not exceed 50,000 seats per year.

A PSO exemption would also allow for targeting of support, through an existing mechanism, only to routes deemed essential, and reduces the risk that existing PSOs cease to exist due to increasing funding costs.

It should be noted that of the current 19 PSO routes, 15 are already excluded from UK ETS obligations as they use aircraft below an MTOW of 5,700kg and the UK ETS does not apply to flights performed by such aircraft. The four PSO routes that use larger aircraft and therefore fall within scope of the UK ETS are listed below. The first two are operated by Loganair and the latter two are operated by Eastern Airways.

City of Derry - London Heathrow

Dundee - London Heathrow

Aberdeen - Wick

London Gatwick - Newquay

PSO routes make up a very small proportion (~1.2%) of total CO2 emissions from domestic flights. A PSO routes exemption would impact 0.07% of aviation emissions covered by the UK ETS.

Total projected UK ETS allowances for routes with PSOs would equate to an estimated annual cost of £0.38m-0.54m between 2026 and 2030 if retained, which would be annual government revenue foregone. However, there would be an equivalent reduction in cost liabilities for PSO funding bodies (Local Authorities, Transport Scotland and Department for Transport), and this mitigation would therefore be cost neutral overall.

The Authority is considering the exemption of PSOs separately to Options A to C, because this addresses a slightly different issue caused by the removal of aviation FA, namely the impact on government funding of PSOs and consequential administrative inefficiencies. However, this proposal is not mutually exclusive, and the Authority could exempt PSOs from ETS obligations and also exempt other routes (such as Option B proposal) or provide funding to support other routes (such as Option C proposal). There is an opportunity to comment on the proposed exemption of PSOs in response to Question 7 and comment on combining with other options in response to Question 8.

<sup>&</sup>lt;sup>26</sup> The phrase "outermost regions" refers to the nine territories of EU member states that are geographically located far away from mainland Europe.

# Consultation questions

In your responses to the questions below please consider feasibility of implementation, level to which the proposals address the policy issue and consider the guiding policy principles set out in Chapter 1 when providing evidence.

- 1. Do you think there have been or will be any impacts on regional connectivity within the UK as a result of the removal of aviation free allocation? If so, what are they? Please expand on your response by providing relevant evidence.
- 2. As a result of the removal of aviation free allocation, do you think that government intervention is required to mitigate any potential impacts on regional air connectivity providing access to key services for communities within the UK? Please expand on your response by providing relevant evidence.
- 3. Which of the proposed policy mechanisms (i.e. exemptions or direct funding) would better mitigate any impact of the removal of aviation free allocation on regional connectivity? Please provide examples and/or evidence where possible.
- 4. Do you think that the qualifying criteria (i.e. maximum take-off weight and island communities) are suitable to identify how support is allocated? Please provide examples and/or evidence where possible.
- 5. Are there any other viable qualifying criteria that you think would be suitable to identify how support is allocated? Please explain your reasoning and provide examples and/or evidence where possible.
- 6. Which of the proposed policy options (A to C) do you prefer? Please explain your reasoning and provide examples and/or evidence where possible.
- 7. What is your view on exempting all PSO routes from UK ETS obligations? Please explain your reasoning.
- 8. What is your view on combining exempting all PSO routes with another mitigation option, such as Option B or C? Please explain your reasoning and provide examples and/or evidence where possible.
- 9. Do you think there are other viable options the Authority could consider that could effectively address mitigating any impact caused by the removal of aviation free allocation on regional connectivity? Please explain your reasoning and provide examples and/or evidence where possible.

## Welsh Language Questions

The Welsh language is a strategic priority for the Welsh Government. Its Welsh Language Strategy, Cymraeg 2050: A million Welsh speakers, has two overarching targets: to reach a million Welsh speakers and to double the percentage of us that use Welsh every day by 2050.

The strategy is delivered across Welsh Government, spanning various policy areas such as housing, the economy, agriculture and education. As such, it is important that we assess the potential effects of proposed policy solutions on the Welsh language and the delivery of our Welsh Language Strategy. We would like your views on how any proposed changes in relation to regional connectivity could support our efforts to increase the number of people who speak and use Welsh, avoid any negative impacts, and ensure that we support the delivery of the Welsh Language Strategy.

- 10. What, in your opinion, would be the likely effects of any policy solution aimed at solving the issue of regional connectivity on the Welsh language? We are particularly interested in any likely effects on opportunities to use the Welsh language and on not treating the Welsh language less favourably than English.
- Do you think that there are opportunities to promote any positive effects?
- Do you think that there are opportunities to mitigate any adverse effects?
- 11.In your opinion, could a policy solution aimed at solving the issue of regional connectivity be formulated or changed so as to:
- have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English; or
- mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?

# Annex A: Analytical Annex

## Background

Aviation free allocation is a policy instrument that was introduced in order to mitigate carbon leakage.<sup>27</sup> The UK Government's Department for Transport (DfT) and the Department for Business, Energy and Industrial Strategy previously commissioned external economic research into the extent of any such effects.<sup>28</sup> This research concluded that:

#### 1) The risk of carbon leakage is minimal

The study found minimal risk of carbon leakage under the existing scope of the UK ETS. Firstly, this is because CO2 emissions were projected overwhelmingly to decrease both inside and outside UK ETS scope when carbon pricing is applied to aviation. This is because the vast majority of passengers take round trips, and so a decrease in demand and emissions on flights in scope of the UK ETS is found to be matched by an equivalent decrease in demand and emissions outside its scope.

The study found minimal impact on the number of passengers transferring through UK hub airports because the vast majority of UK international-to-international transfer flows are long-haul and are minimally impacted by the UK ETS. The study also qualitatively assessed a number of carbon leakage channels that were found to have an insignificant impact on carbon leakage, this includes: reassignment of high emissions aircraft towards/away from UK ETS routes; changes in fuel tankering; changes in destination choice; and changes in spending on non-aviation activities.

# 2) The withdrawal of aviation free allocation does not influence marginal abatement decisions

The study explained that aviation free allocation has the effect of a lump-sum endowment to operators that does not vary with a change to capacity, effectively reducing fixed costs. The study found that a change in free allowances does not affect the direct margin of a given route and generally operators should continue to operate at the same capacity. Therefore, the level of free allocation does not generally influence operators' marginal abatement decisions. An exception to this finding occurs where a reduction in free allowances impacts upon profitability to the extent that an operator may choose to exit the market or scale back operations. Where routes continue to be commercially viable, other aircraft operators may be expected to increase supply, or 'backfill'.

However, a potential risk in some instances was identified, for example on some domestic routes where route profitability is marginal and routes are uncompetitive, that withdrawn capacity may not be replaced, leading to a sustained reduction in capacity or reduction in competition on a route.

Further analysis was conducted by DfT to understand the impact of withdrawal of aviation free allocation on aircraft operator finances and the risk of reduced overall profitability leading to a sustained reduction in capacity. For airlines serving primarily UK domestic and UK-European

<sup>&</sup>lt;sup>27</sup> Carbon leakage is the movement of economic activity and associated emissions from one country to another due to different levels of decarbonisation effort through carbon pricing and climate regulation.

<sup>&</sup>lt;sup>28</sup> Economic research on the impacts of carbon pricing on the UK aviation sector.

Economic Area routes, the value of aviation free allocation represents a material proportion of profitability, especially in a world following COVID restrictions where the majority of operators took on additional debt to cope with the loss of demand due to COVID.

Inherent uncertainty concerning aircraft operators' responses to withdrawal of aviation free allocation meant that it was not possible to quantitatively predict the risk of capacity reduction. However, the UK government's aviation commercial experts, based in DfT, advised that there was sufficient evidence to suggest that withdrawal of aviation free allocation may introduce a potentially significant downside pressure on the finances of the UK domestic aviation sector, in particular to the extent that there is a risk of market exit or scaling back of operations that is not subsequently backfilled, and hence leads to a sustained reduction in capacity and the corresponding loss of connectivity, loss of jobs etc.

As a result of these findings, the Authority decided on the phased withdrawal of aviation free allocation by 2026, estimated to result in unwarranted FA support to aircraft operators of between £1,610m and £4,130m over a 10-year appraisal period.<sup>29</sup>

#### Problem under consideration

As concluded by the above research, the withdrawal of UK ETS free allocation may have particular implications for airlines predominantly operating UK domestic routes. If routes are put at risk of becoming unviable, there may be implications for essential regional air connectivity and the communities they serve.

Regional air connectivity is currently protected through the use of Public Service Obligations (PSOs).<sup>30</sup> DfT's policy on PSOs seeks to establish a balance between protecting regional services and limiting, as far as possible, any distortionary intervention in the market or increased carbon emissions. It is therefore important to consider any interactions between policy proposals on aviation free allocation and existing policy on regional connectivity.

The Authority does not hold the information necessary to directly identify routes that may be at risk of closure when aviation free allocation is withdrawn. Individual airlines will take a range of factors into account when deciding whether to operate a specific route, using proprietary commercial data. Furthermore, decisions will be based not just on the economics of single routes, but on their network as a whole. Specific routes may for example act as feeder routes to more profitable longer haul flights or share aircraft with other routes. Nevertheless, while the specific routes potentially at risk cannot be identified, the impact of options designed to target essential connectivity can be estimated. The Authority would welcome responses, particularly from airlines and airport operators, to help further our understanding of which routes may be at most risk of experiencing a permanent reduction in capacity.

<sup>&</sup>lt;sup>29</sup> Developing the UK ETS: impact assessment.

<sup>&</sup>lt;sup>30</sup> Public Service Obligations: guidance on the protection of regional air connectivity.

## Potential options

Three potential options have been considered by the Authority:

- Option A Do nothing and allow the market to react to the removal of free allocation in 2026 without intervention.
- Option B Exempt aircraft flying to, from and between island communities with a Maximum Take-Off Weight (MTOW) up to and including 18,600kg.
- Option C Direct funding for aircraft operators flying routes to, from and between island communities with an aircraft MTOW up to and including 18,600kg.

In addition, the Authority is considering the potential to exempt PSOs from UK ETS obligations to reduce the risk of losing PSO routes as a result of increased financial pressure due to the removal of aviation free allocation and to reduce cost pass through between government funds. This could be either implemented by itself or in combination with another intervention identified above, or with any further options proposed through this consultation.

## Costs and benefits of options

The potential impacts of Options A - C have been considered against a snapshot of 2023 data. Impacts have also been considered over a 5-year forward looking appraisal period, from 2026 – 2030, to align with end of phase 1 of the UK ETS.

#### Summary and modelling approach

Flight data is taken from CAA Airport Statistics. The data used reflects the number of departing flights from each reporting airport, so as not to double count flights. This assessment reflects impacts on the basis of unchanged behaviour by airlines – in other words, removal of free allocation does not result in a change in aircraft use, or in additional PSO applications. The likelihood of these outcomes is considered qualitatively under each option. This assessment considers only passenger services and not dedicated cargo / mail flights.

The forward-looking assessment does not attempt to forecast future changes in Air Transport Movements (ATMs) on each of the routes affected, thus effectively keeping these constant at 2023 levels. The potential for Sustainable Aviation Fuels and other technologies to reduce emissions on these routes has also not been considered at this stage. As a result, route-level emissions are kept fixed at their 2023 levels throughout the appraisal period.

Carbon emissions have been estimated by combining estimates of aircraft specific emissions during landing and take-off, and at cruise altitude per kilometre of flight<sup>31</sup>, with the number of ATMs per route and airport pair distances. Aircraft emissions data are not held for each specific aircraft model, and as such some groupings have been applied.

A number of routes operate a mixture of aircraft types, and therefore may partially qualify under the proposed exemptions. When qualifying aircraft account for an extremely low (<1%) proportion of total ATMs on a route, these routes have been excluded from the below, as they account for largely single digit numbers of flights and do not reflect routine operations. Routes with fewer than 26 qualifying ATMs a year (i.e. less than one flight per fortnight) have additionally been excluded. Reported ATMs and CO2 emissions relate only to those aircraft

<sup>&</sup>lt;sup>31</sup> As per the Department for Transport's Aviation Modelling Suite.

that would have complied with the MTOW eligibility requirements, and so in some cases are lower than the total level of activity on a route.

Table A1 summarises the equivalent overall cost of the proposed options if applied to 2023, to directly align with the underlying aviation activity data examined.

Table A1 – Summary impacts of options, equivalent impacts in 2023, 2023 prices

		Exempted	routes	2023 emissions,	2023 equivalent	
ID	Option	Aircraft operators	Air transport movements in scope	Number of routes	tCO2e (% of UK ETS aviation) <sup>32</sup>	revenue forgone from UK ETS obligations
Α	Do nothing	-	-	-	-	-
В	Exempt aircraft flying to, from and between island communities with MTOW up to and including 18,600kg	1	11,600	17	8,160 (0.09%)	£0.45m
С	Direct funding for airlines flying routes to, from and between island communities with an aircraft MTOW up to and including 18,600kg	1	11,600	17	8,160 (0.09%)	-

<sup>33</sup> Assuming an average 2023 UK ETS allowance price of £55.54.

 $<sup>^{32}</sup>$  The bracketed value indicates the proportion of CO<sub>2</sub> emissions for each option out of the total aviation CO<sub>2</sub> emissions within scope of the UK ETS. Carbon emissions are calculated using information from the Department for Transport's Aviation Modelling Suite and may differ slightly from those reported by airlines.

Table A2 presents a summary of findings for a 5-year forward looking appraisal from 2026 – 2030. This incorporates forecast future changes in UK ETS values.

Table A2 – Summary impacts of options, 2026-2030 appraisal, 2025 prices, 2026 PV

ID	Option	CO2 emissions (tonnes)	Equivalent revenue forgone from UK ETS obligations <sup>34</sup> NPV
Α	Do nothing	-	-
В	Exempt aircraft flying to, from and between island communities with MTOW up to and including 18,600kg	40,800	£2.99m
С	Direct funding for aircraft operators flying routes to, from and between island communities with an aircraft MTOW up to and including 18,600kg	40,800	-

#### Option A – Do nothing

Under the do-nothing case, the market would be left to adjust to the removal of free allocation without further government intervention. As noted in the problem under consideration section, it is not possible to quantify the effect of the removal of free allocation on the provision of domestic aviation services, which will be determined by airlines. The loss of free allocation (equivalent to an increase in fixed costs) will not directly affect the marginal profitability of routes. However, as companies must recover fixed costs in the long run in order to remain profitable, if this increase in fixed costs is sufficiently large, then airlines' least profitable routes may become unviable. In these cases, airlines may respond by reducing the capacity provided on that route or potentially ceasing operations entirely. The potential for other airlines to backfill any such loss in capacity may be limited, as few airlines have aircraft suited to the low level of demand that such routes are likely to have. Any permanent loss of capacity would have a negative impact on the passengers who would otherwise use these routes. In such cases, it is

<sup>&</sup>lt;sup>34</sup> Using Market Traded Values from <u>Traded carbon values used for modelling purposes</u>, <u>2024 - GOV.UK</u> adjusted to 2025 prices.

possible that the creation of a PSO could be requested. As the process for establishing a PSO unavoidably takes time, there may be a period during which services do not run even if a PSO is ultimately awarded.

While it is expected that airlines set ticket prices based on marginal costs, it is possible that the increase in fixed costs, if sufficiently large, could be at least partially passed on to passengers. This may be more likely to occur where airlines operate from smaller airports without capacity constraints, as estimates of cost pass-through are typically higher for these types of route. <sup>35</sup> As we do not hold reliable information on the cost to airlines of operating services within scope of the UK ETS, nor is it possible to predict how or if airlines will choose to pass through increased costs, it is not possible to estimate any potential reduction in passenger numbers.

It is assumed that existing PSOs would be maintained, with a share of the increase in fixed costs added to the cost of the PSOs. This would increase the cost burden on government funding of PSOs, but result in a corresponding increase in government revenue from airlines' additional UK ETS obligations. There may be a marginal increase in overall public sector costs if this change were to increase administrative costs relating to PSOs, but this remains uncertain, so a cost neutral impact on public sector finances is assumed.

# Option B – Exempt aircraft flying to, from and between island communities with an MTOW up to and including 18,600kg

The assessment of UK domestic aviation activity in 2023 identified 18 regularly scheduled routes that could be wholly or partially exempted from the UK ETS under this option. Activity on these routes, as observed in 2023 CAA Airport Statistics data, is shown in Table A3. This reflects only activity for eligible aircraft – where routes also operated some flights using aircraft with an MTOW greater than 18,600kg, these operations are excluded.

All revenue forgone on non-PSO routes is considered a direct cost to the public sector.

<sup>35</sup> Economic research on the impacts of carbon pricing on the UK aviation sector, p.11.

Table A3 – Option B exempted routes, summary of 2023 activity, 2023 prices

Airline	Route	ATMs in scope of exemption <sup>36</sup>	CO2 emissions (tonnes)	Equivalent revenue forgone from UK ETS obligations, £m
Loganair	Aberdeen - Kirkwall	1,492	582	£0.03
Loganair	Aberdeen - Sumburgh	1,548	1,330	£0.07
Loganair	Benbecula - Glasgow	658	336	£0.02
Loganair37	Benbecula - Stornoway	371	127	£0.01
Loganair	Dundee - Kirkwall	117	99	£0.01
Loganair	Dundee - Sumburgh	154	166	£0.01
Loganair	Edinburgh - Kirkwall	1,290	1,205	£0.07
Loganair	Edinburgh - Stornoway	449	405	£0.02
Loganair	Edinburgh - Sumburgh	1,072	1,273	£0.07
Loganair	Glasgow - Islay	1,110	359	£0.02
Loganair	Glasgow - Kirkwall	664	477	£0.03
Loganair	Glasgow - Stornoway	245	143	£0.01
Loganair	Glasgow - Sumburgh	674	611	£0.03
Loganair	Inverness - Kirkwall	547	296	£0.02

<sup>&</sup>lt;sup>36</sup> Based on DfT analysis of CAA airport data. Number of ATMs is as reported by the airport of departure and reflects passenger services between that airport and the next airport on the aircraft's journey.

<sup>&</sup>lt;sup>37</sup> The Benbecula to Stornoway passenger service is no longer operated by Loganair and is now run by Hebridean Air Services using an aircraft that is already excluded from UK ETS obligations. This route is therefore excluded from the estimated total cost.

Loganair	Inverness - Stornoway	868	434	£0.02
Loganair	Kirkwall - Sumburgh	582	282	£0.02
Loganair	Manchester - Stornoway	76	110	£0.01
Loganair	Manchester - Sumburgh	33	57	£0.00
Total	,	11,579	8,164	£0.45

Exempting specific aircraft operations from the UK ETS would reduce the marginal cost of operating these routes, relative to Option A. Such a reduction in marginal costs may be accompanied by an increase in capacity and a reduction in prices. This would also influence the affected airline's marginal abatement decisions relating to the operation of eligible aircraft on island routes. However, the impact on any airline's overall marginal abatement decisions is likely to be minimal given the low level of emissions in scope.

In selecting a specific weight requirement for eligible routes, Option B increases the possibility of behavioural responses from airlines. This could include adjusting which aircraft airlines operate on specific routes in order to maximise the value of the exemption. However, given such a change would be expected to result in higher operating costs, any such behavioural response may be minimal.

Under this option Loganair's exemption would be equivalent to 77% of its 2023 free allocation.

# Option C – Direct funding for airlines flying routes to, from and between island communities with an aircraft MTOW up to and including 18,600kg

The impact of providing direct funding to qualifying aircraft operators is considered equivalent to that of Option B, with an equivalent level of cost reduction but using an alternative method of delivery.

#### **PSO** exemption

Four routes would be eligible for exemption from the UK ETS, with the majority of UK PSOs already exempt due to the use of aircraft with an MTOW of below 5,700kg. The Benbecula – Stornoway route is now operated by Hebridean Air Service and excluded from UK ETS obligations as it only uses small aircraft with a MTOW below 5,700kg. Activity on these routes, as observed in 2023 CAA Airport Statistics data, is shown in Table A4. CO2 emissions have again been calculated using information from DfT's Aviation Modelling Suite. This table also displays an estimate of the ETS revenue that would have been forgone had this exemption been in place in 2023.

Table A4 – PSO routes, summary of 2023 activity, 2023 prices

Airline	Route	ATMs <sup>38</sup>	CO2 emissions (tonnes)	Equivalent revenue forgone from UK ETS obligations
Eastern Airways	Aberdeen - Wick John O'Groats	1,072	233	£0.01m
Eastern Airways	Gatwick - Newquay	1,787	2,096	£0.12m
Loganair	Benbecula - Stornoway	393	137	£0.01m
Loganair	City of Derry - Heathrow	1,274	2,131	£0.12m
Loganair	Dundee – Heathrow / London City <sup>39</sup>	1,029	1,499	£0.08m
Total	-	5,162	5,960	

As stated under the assessment of Option A (do nothing), it is expected that the cost of UK ETS allowances would be added to PSO subsidy costs if PSOs were not made exempt. As a result, we would expect the revenue foregone from UK ETS obligations to accrue to the public sector bodies responsible for funding PSOs in the form of lower required subsidies.

The precise distribution of benefits will depend on how airlines account for ETS costs and free allocation across their routes and within their PSO applications.

Under this option, Eastern Airways' exemption would be equivalent to 11% of its free allocation in 2023, while Loganair's exemption would be equivalent to 34% of its free allocation.

If implemented alongside Option B, Eastern Airways' exemption would be unchanged, while Loganair's exemption would be equivalent to 112% of its free allocation.

<sup>&</sup>lt;sup>38</sup> Based on DfT analysis of CAA airport data. Number of ATMs is as reported by the airport of departure and reflects passenger services between that airport and the next airport on the aircraft's journey.

<sup>&</sup>lt;sup>39</sup> The Dundee to London PSO switched from London City to Heathrow during 2023. This table displays figures for the combined route.

# Annex B: Abbreviations list

ATM Air Transport Movements

CCA Climate Change Act

CO2 Carbon Dioxide

CORSIA Carbon Offsetting and Reduction Scheme for International Aviation

DfT Department for Transport

DPA Data Protection Act

EEA European Economic Area

EU ETS European Union Emissions Trading System

FA Free Allocation

FOIA Freedom of Information Act

GHG Greenhouse Gas

ICAO International Civil Aviation Organisation

MTOW Maximum Take-off Weight

PSO Public Service Obligation

SAF Sustainable Aviation Fuel

Uk ETS UK Emissions Trading Scheme