

**EXPLANATORY MEMORANDUM TO**  
**THE AVIATION GREENHOUSE GAS EMISSIONS TRADING SCHEME**  
**(AMENDMENT) REGULATIONS 2011**

**2011 No. 765**

1. This explanatory memorandum has been prepared by the Department of Energy and Climate Change and is laid before Parliament by Command of Her Majesty.

This memorandum contains information for the Joint Committee on Statutory Instruments.

2. **Purpose of the instrument**

2.1 This instrument amends the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 (“the 2010 Regulations”), which implement Directive 2008/101/EC of the European Parliament and of the Council. That Directive extends the EU Emissions Trading Scheme (“EU ETS”) to aviation activities. The implementing Regulations apply to “UK operators”, defined as persons who are specified in a list drawn up by the European Commission as operators to be administered by the United Kingdom. The effect of the amendments made by this instrument is to require the Secretary of State to supplement that list, where necessary, by designating additional persons as UK operators.

3. **Matters of special interest to the Joint Committee on Statutory Instruments**

3.1 The 2010 Regulations were made under the combined powers given by section 2 of the Pollution Prevention and Control Act 1999 (“PPCA”) and section 2(2) of the European Communities Act 1972 (“ECA”). This instrument, however, is made under section 2(2) ECA alone. Although as a general rule the convention is that powers other than section 2(2) ECA should be used wherever possible (either in preference to, or in combination with, section 2(2) ECA itself), that convention can be departed from where there is an urgent need to implement EU obligations and the use of other powers would involve delay. In this case, the urgency arises because it has recently become apparent that the Commission’s list cannot wholly be relied upon as an exhaustive list of operators to be administered by the UK in accordance with the criteria laid down by Directive 2008/101/EC. While we had expected that errors in earlier versions of the Commission’s list would be corrected, and that this would lead to an accurate list being published, this has not proved to be the case. There is in particular an urgent need to remedy the position in time for the relevant operators to apply for a free allocation of emission allowances, which must be done by 31st March 2011. The effect of using section 2(2) ECA alone is that the prior consultation required by section 2(4) PPCA can be dispensed with, enabling these amending Regulations to be made within the required timescale. However, by virtue of the new section 2A(4) inserted in the 2010 Regulations, a consultation will be required before a designation is made in any particular case.

3.2 The same reasons of urgency necessitate a breach of the 21-day rule. The Department intends to lay the instrument on 15<sup>th</sup> March and for it to come into force on 25<sup>th</sup> March 2011. This will allow a narrow window of opportunity for any relevant operators first to be designated, and then to apply for allowances by submitting the required data to their EU ETS regulator. As already noted, it has only recently become apparent that a power to designate operators is required. This urgency of the position was confirmed when the Commission published the most recent version of its list of operators on 12 February 2011. Although it is still possible that the list will be further amended before 31<sup>st</sup> March, this is not sufficiently certain to avoid the need for the present legislation.

3.3 Section 2(2) does not in general permit the sub-delegation of legislative powers. However, it is considered that the conferral of the present power to designate does not amount to legislative sub-delegation. The sole function of the Secretary of State in exercising the power will be to make a factual assessment of whether the operator concerned fulfils the criteria laid down by the Directive; and once that assessment is made the Secretary of State will have no further discretion as to whether the operator is to be designated as a UK operator.

#### **4. Legislative Context**

4.1 Directive 2003/87/EC of the European Parliament and of the Council (“the EU ETS Directive”) established a system for greenhouse gas emission allowance trading within the European Community. This was amended by Directive 2008/101/EC of the European Parliament and of the Council (“the Aviation EU ETS Directive”) in order to include aviation activities in the EU ETS. Article 2(1) of the Aviation EU ETS Directive required Member States to bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 2<sup>nd</sup> February 2010. On 17<sup>th</sup> September 2009 the Aviation Greenhouse Gas Emissions Trading scheme Regulations 2009 (“the 2009 Regulations”), came into force, appointing regulators in England, Wales, Scotland and Northern Ireland and enabling aircraft operators to apply for a free allocation of allowances. The 2010 Regulations revoked the 2009 Regulations, which however continued to have effect for some purposes. In particular, the 2009 Regulations continue to have effect for the purposes of the free allocation of allowances for trading periods up to 2020. The 2010 Regulations apply in the case of an allocation for periods from 2021 onwards, and allocation from a special reserve for certain aircraft operators in 2015. As well as making provision for the free allocation of allowances, the 2010 Regulations provide for the monitoring and reporting of emissions and the surrender of allowances equal to emissions; for the appointment of regulators in England, Wales, Scotland and Northern Ireland; for powers and functions of the regulators (including powers to recover costs); and for an effective, dissuasive and proportionate system of enforcement.

4.1 A Transposition Note was prepared for the 2010 Regulations, and was attached as an Annex to the Explanatory Memorandum for those Regulations. A supplementary

Transposition Note is annexed to the present Memorandum. The European Commission's proposal to include aviation in the EU ETS was the subject of Explanatory Memorandum 5154/07, sent to the Parliamentary Scrutiny Committees on 26 January 2007. The House of Lords Select Committee on the European Union referred the EM to Sub-Committee B. A supplementary Explanatory Memorandum was provided on 30 March 2007. The Lords Sub-Committee considered this in April 2007, and this was followed by additional correspondence between Government and the Committee before the Committee cleared the document in January 2008. The House of Commons European Scrutiny Committee considered the EM on 7 February 2007 and recommended that the proposal should be debated in European Standing Committee. The debate took place on 27 March 2007

## **5. Territorial Extent and Application**

5.1 This instrument extends to England, Wales, Scotland and Northern Ireland.

## **6. European Convention on Human Rights**

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

## **7. Policy background**

- What is being done and why

7.1 The EU ETS Directive established a system for greenhouse gas emission allowance trading within the European Community. The establishment of the EU ETS in 2005 was one of the key policies introduced by the European Union to help meet the EU's greenhouse gas emissions reduction target of 8% below 1990 levels under the Kyoto Protocol. It works on a 'Cap and Trade' basis, with Member States required to set an emissions cap for sectors covered by the EU ETS. The rationale behind emissions trading is that it enables emission reductions to take place where the cost of the reduction is lowest, thus lowering the overall costs of combating climate change. More abatement will be undertaken by operators with lower abatement costs, therefore reducing the overall costs of meeting the emissions target (cap) set by any trading scheme.

7.2 The EU ETS commenced in 2005 covering CO<sub>2</sub> emissions from heavy industry and energy intensive activities only. In recognition of the growing contribution of air transport to climate change the UK pressed for the inclusion of aviation in the EU ETS. The Aviation EU ETS Directive was agreed in 2008 and came into force in 2009.

7.3 Starting from 2013, operators will be required to surrender one allowance for each tonne of CO<sub>2</sub> they emit during the reporting year (i.e. the preceding calendar year). If an operator does not have enough allowances to cover its annual CO<sub>2</sub> emissions it will need to purchase more. It can also sell any surplus if it has successfully applied for a free allocation of allowances. Failure to surrender enough allowances for each tonne of CO<sub>2</sub> emitted will result in a civil penalty for the operator and persistent offenders may be

subject to detention and sale of assets or ultimately an operating ban as prescribed in Article 16 of the Aviation ETS Directive.

7.4 The EU ETS Directive provides for the regulation of aircraft operators covered by the System by Member States. The Directive states that aircraft operators who hold a valid operating licence granted by a Member State shall be regulated by that Member State. All other aircraft operators (primarily, those based outside the EU) shall be regulated by the Member State with the greatest estimated attributed aviation emissions from flights performed by that aircraft operator in the base year (2006). The Directive also provides for the European Commission to produce a list allocating aircraft operators to Member States for regulation under the System, in line with the allocation principles described above.

7.5 The 2010 UK Regulations provide for the regulation of an aircraft operator by the UK in any given calendar year where that operator:

- (a) is allocated to the UK on the Commission's list of aircraft operators; and
- (b) has carried out an 'aviation activity' that is covered by the Directive in that calendar year.

7.6 The European Commission has so far published three formal editions of its list allocating aircraft operators to Member States. The first two versions, published in August 2009 and January 2010 respectively, contained a number of erroneous omissions which would have meant that the UK was unable to regulate certain UK operators which should have been subject to regulation. The UK subsequently sought to resolve these errors through consultation with the European Commission,

7.7 The European Commission published its third, updated version of the list on 12 February 2011. After analysing this latest version of the list, the Government has concluded that it is not free from erroneous emissions and therefore the 2010 Regulations should be amended to allow the Secretary of State to regulate aircraft operators who do not appear on the list where he is satisfied that they should be subject to UK regulation.

- Consolidation

7.8 This is the first time that the 2010 Regulations are being amended. There are no current plans for consolidation, and current Regulations will be kept under review, regarding any possible further amendments. An informal version of the text will be available in due course, on both the DECC and DfT websites.

## **8. Consultation outcome**

8.1 Public consultations were launched for both the 2009 and 2010 Regulations. There has not, however, been a public consultation on these amending Regulations, for the reasons given in paragraph 3.1 above.

## **9. Guidance**

9.1 The Department of Energy and Climate Change and the Department for Transport will be placing notices on their websites informing stakeholders of the changes to the 2010 Regulations. They will also seek to have a similar notice published on the websites of aviation industry journals.

## **10. Impact**

10.1 The additional impact of these amending Regulations on business, charities and voluntary bodies is predominantly limited to any UK designated aircraft operators and other UK regulated aircraft operators. The costs and benefits are assessed in the accompanying Impact Assessment.

10.2 An Impact Assessment is attached to this Explanatory Memorandum and will be published alongside the Memorandum on [www.legislation.gov.uk](http://www.legislation.gov.uk).

## **11. Regulating small business**

11.1 The overarching legislation applies to small businesses and measures are in place to minimise the impact of the requirements on commercial aircraft operators with fewer than 243 flights per period for three consecutive four-month periods; or with total annual emissions lower than 10,000 tonnes CO<sub>2</sub> per year to be excluded from the scheme. Those operating aircraft with a certified maximum take-off weight of less than 5,700kg will also be exempt. Simplified monitoring and reporting procedures for small emitter operators are being implemented with the intention of reducing the administrative cost burden and ensuring proportionality.

## **12. Monitoring & review**

12.1 The Regulations will remain under review in response to amendments to the EU ETS resulting in particular from the procedure of review set out in Article 28(2) and Article 30(4) of the Aviation ETS Directive.

## **13. Contact**

13.1 Adam Kidson at the Department of Energy and Climate Change Tel: 0300 068 5269 or email: [adam.kidson@decc.gsi.gov.uk](mailto:adam.kidson@decc.gsi.gov.uk) can answer any queries regarding the instrument.

**DIRECTIVE 2008/101/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
AMENDING DIRECTIVE 2003/87/EC SO AS TO INCLUDE AVIATION ACTIVITIES IN THE  
SCHEME FOR GREENHOUSE GAS EMISSION ALLOWANCE TRADING WITHIN THE  
COMMUNITY<sup>1</sup>**

**TRANSPOSITION NOTE**

**FOR  
THE AVIATION GREENHOUSE GAS EMISSIONS TRADING SCHEME (AMENDMENT)  
REGULATIONS 2011**

*Statement on over-implementation:* These Regulations do no more than is necessary to implement the Directive.

<b>Article of 2003/87/EC as amended</b>	<b>Result to be achieved</b>	<b>Implementation by this instrument,<sup>2</sup> and by the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 (“the 2010 Regs”)</b>	<b>Comments</b>
<b>18a(1)</b>	The administering Member State in respect of an aircraft operator is the Member State which granted the operating licence, or (where the operating licence is not granted by a Member State) the Member State with the greatest estimated attributed aviation emissions.	Reg. 2 of the 2010 Regs, as amended by <i>reg. 2(2)(a) and (b)</i> .  Reg. 2A of the 2010 Regs, as inserted by <i>reg.2(3)</i> .	
<b>18a(3)</b>	The Commission must publish and update a list of aircraft operators, specifying the administering Member State for each operator.	Reg. 2A(1) and (7A)	Power to designate only applies to operators who are not identified in the Commission’s list.
<b>18a(1) with 3(o)</b>	“Aircraft operator” defined to be person who operates the aircraft or, where not identified, the owner.	Reg. 3 of the 2010 Regs, as amended by <i>reg. 2(4)</i> .	Amendment ensures that an owner who is an unlisted operator can be required to identify the operator and if necessary be designated as a UK operator.

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<sup>1</sup> OJ No L 8, 13.1.2009, p 3.

<sup>2</sup> Provisions of this instrument are given in *italics*.

<b>Title:</b> <b>Amendment to Second Stage Transposition of EU Legislation to include Aviation in the European Union Emissions Trading System (EU ETS)</b>  <b>Lead department or agency:</b> Department of Energy and Climate Change <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>
	<b>IA No:</b> DECC0050
	<b>Date:</b> 28/02/2011
	<b>Stage:</b> Final
	<b>Source of intervention:</b> EU
	<b>Type of measure:</b> Secondary legislation
<b>Contact for enquiries:</b> Annalisa Volpi. Tel: 0207 944 3256	

## Summary: Intervention and Options

### What is the problem under consideration? Why is government intervention necessary?

Government intervention is necessary to give full effect to the Aviation ETS Directive (2008/101/EC) and thereby to address a market failure in that the cost of aviation does not fully reflect the external costs of climate change. The specific issue to be addressed is that under the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 ("2010 Regulations"), UK regulators are currently unable to regulate at least one aircraft operator that the Government is satisfied should be subject to UK regulation. If any existing aircraft operators are unable to apply for an allocation of free emissions allowances by the 31 March 2011 deadline, this could result in competitive distortions between existing aircraft operators and could damage the credibility of the system.

### What are the policy objectives and the intended effects?

Including aviation in the EU ETS is intended to achieve emissions reductions in a cost-effective and efficient manner. The policy objectives of amending the 2010 Regulations are to a) give proper and full effect to the Aviation ETS Directive in the UK and b) to allow the UK Regulators to regulate all aircraft operators that the Government is satisfied should be subject to UK regulation. The intended effects are to a) comply with the UK's European obligations by ensuring that all eligible operators are covered by EU ETS and b) reduce the risk of competitive distortions between existing aircraft operators that could arise if any existing UK regulated aircraft operators are unable to apply for an allocation of free emissions allowances by the deadline of 31 March 2011.

### What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

One option has been considered – Amending the 2010 Regulations to allow the UK to regulate aircraft operators not on the European Commission (EC)'s list, where the Government is satisfied they should be subject to UK regulation. Under the 2010 Regulations, UK regulators can only regulate aircraft operators that have been assigned to the UK on a list produced by the EC. However, the Government is aware of at least one UK-based commercial aircraft operator that has been omitted from the current version of this list. This is the preferred option because a) to give proper and full effect to the Aviation ETS Directive, it is now clear that the Government may no longer safely rely upon the EC list; b) there is currently a risk that at least one aircraft operator wouldn't be able to apply for free allowances by the March 2011 deadline; c) there is a risk that this issue could lead to competitive distortions between existing aircraft operators in the future; and d) there is also a significant risk of legal action by any omitted aircraft operators.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** 1/2014

**What is the basis for this review?** PIR. **If applicable, set sunset clause date:** Month/Year

**Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?**

Yes

**Ministerial Sign-off** For final proposal stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.***

Signed by the responsible Minister:

Greg Barker

Date: 14<sup>th</sup> March 2011

# Summary: Analysis and Evidence

# Policy Option 1

## Description:

Amending the 2010 Regulations to allow the UK to regulate aircraft operators not on the European Commission (EC)'s list, where the Government is satisfied they should be subject to UK regulation.

Price Base Year 2009	PV Base Year 2009	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £0	High: £0.58	Best Estimate: £0.29

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£0	£0	£0
High	£0	0.03	£0.27
Best Estimate	£0	£0.02	£0.13

### Description and scale of key monetised costs by 'main affected groups'

If additional UK regulated operators apply for free allowances under the benchmarking process, this would reduce the number of free allowances allocated to other operators as the total number of free allowances is fixed at the EU level. It is assumed that only the costs to other UK regulated operators would be a cost to the UK. The costs to other UK regulated operators would be around 31% of the benefits to UK regulated operators that can only apply under the benchmarking process under Option 1.

### Other key non-monetised costs by 'main affected groups'

For the costs (and benefits below), the High estimates illustrate the potential impact if 1 additional operator can only apply for free allowances under the benchmarking process under Option 1, and the Low estimates reflect a scenario where they could apply under the Do Nothing scenario, with the Best Estimates the average of the two scenarios. The estimates would be higher if more than 1 additional operator can only apply for free allowances under the benchmarking process under Option 1. Any additional operators that apply for free allowances could incur a number of additional costs associated with these processes (e.g. verification costs).

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£0	£0	£0
High	£0	£0.11	£0.85
Best Estimate	£0	£0.05	£0.43

### Description and scale of key monetised benefits by 'main affected groups'

Compared to the Do Nothing scenario, some operators could receive more free allowances if they are able to apply for them under Option 1 but not under the Do Nothing scenario. See comments above for how the high, low and best estimates have been estimated. The estimates illustrate the potential impact on 1 operator currently omitted from the EC list.

### Other key non-monetised benefits by 'main affected groups'

Option 1 has the potential to result in a more level competitive playing field between existing aircraft operators.

### Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

1.) It is assumed the EC would eventually include all appropriate aircraft operators on their list and that these aircraft operators would therefore need to comply with the Aviation EU ETS in the Do Nothing scenario (see Page 9). 2.) The scale of the potential costs and benefits to UK regulated aircraft operators is very uncertain. 3.) The extent that these costs and benefits would represent costs and benefits to the UK is also uncertain (see Page 13). 4.) The estimates of the monetised costs and benefits are very sensitive to the assumptions that have been made and the evidence that has been used, and should be interpreted as illustrative estimates of the order of magnitude of the potential costs and benefits..

Direct impact on business (Equivalent Annual) £m):

In scope of OIOO? Measure qualifies as



Costs: £0.02	Benefits: £0.05	Net: -£0.04	No	NA
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## Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?		United Kingdom			
From what date will the policy be implemented?		28/03/2011			
Which organisation(s) will enforce the policy?		Environment Agency, Scottish Environment Protection Agency, Chief Inspector			
What is the annual change in enforcement cost (£m)?		£0			
Does enforcement comply with Hampton principles?		Yes			
Does implementation go beyond minimum EU requirements?		No			
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)		Traded: N/A	Non-traded: N/A		
Does the proposal have an impact on competition?		Yes			
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?		Costs: 0%	Benefits: 0%		
Distribution of annual cost (%) by organisation size (excl. Transition) (Constant Price)	Micro NQ	< 20 NQ	Small NQ	Medium NQ	Large NQ
Are any of these organisations exempt?	No	No	No	No	No

## Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on...?	Impact	Page ref within IA
<b>Statutory equality duties</b> <sup>1</sup> <a href="#">Statutory Equality Duties Impact Test guidance</a>	No	16
<b>Economic impacts</b>		
Competition <a href="#">Competition Assessment Impact Test guidance</a>	Yes	16
Small firms <a href="#">Small Firms Impact Test guidance</a>	Yes	17
<b>Environmental impacts</b>		
Greenhouse gas assessment <a href="#">Greenhouse Gas Assessment Impact Test guidance</a>	No	N/A
Wider environmental issues <a href="#">Wider Environmental Issues Impact Test guidance</a>	No	N/A
<b>Social impacts</b>		
Health and well-being <a href="#">Health and Well-being Impact Test guidance</a>	No	N/A
Human rights <a href="#">Human Rights Impact Test guidance</a>	Yes	16
Justice system <a href="#">Justice Impact Test guidance</a>	No	N/A
Rural proofing <a href="#">Rural Proofing Impact Test guidance</a>	No	N/A

<sup>1</sup> Public bodies including Whitehall departments are required to consider the impact of their policies and measures on race, disability and gender. It is intended to extend this consideration requirement under the Equality Act 2010 to cover age, sexual orientation, religion or belief and gender reassignment from April 2011 (to Great Britain only). The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

<b>Sustainable development</b> Sustainable Development Impact Test guidance	No	N/A
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## Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

### References

Include the links to relevant legislation and publications, such as public impact assessments of earlier stages (e.g. Consultation, Final, Enactment) and those of the matching IN or OUTs measures.

No.	Legislation or publication
1	The Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 (“2010 Regulations”) <a href="http://www.legislation.gov.uk/ukxi/2010/1996/contents/made">Thttp://www.legislation.gov.uk/ukxi/2010/1996/contents/made</a>
2	Impact Assessment of Second Stage Transposition of EU Legislation to include Aviation in the European Union Emissions Trading System (EU ETS) [Impact Assessment of 2010 Regulations] <a href="http://www.decc.gov.uk/assets/decc/consultations/euetsaviationsecondstage/909-ia-second-stage-transposition-euets.pdf">http://www.decc.gov.uk/assets/decc/consultations/euetsaviationsecondstage/909-ia-second-stage-transposition-euets.pdf</a>
3	The Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2009 (“2009 Regulations”) <a href="http://www.legislation.gov.uk/ukxi/2009/2301/contents/made">http://www.legislation.gov.uk/ukxi/2009/2301/contents/made</a>
4	Impact Assessment of First Stage Transposition of EU Legislation to Include Aviation in the European Union Emissions Trading System (EU ETS) [Impact Assessment of 2009 Regulations] <a href="http://www.decc.gov.uk/assets/decc/Consultations/Aviation%20in%20ETS/1_20090914150838_e_@_uksiem20092301en1.pdf">http://www.decc.gov.uk/assets/decc/Consultations/Aviation%20in%20ETS/1_20090914150838_e_@_uksiem20092301en1.pdf</a>

+ Add another row

### Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

#### Annual profile of monetised costs and benefits\* - (£m) constant prices

	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>7</sub>	Y <sub>8</sub>	Y <sub>9</sub>
<b>Transition costs</b>	0	0	0	0	0	0	0	0	0	0
<b>Annual recurring cost</b>	0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
<b>Total annual costs</b>	0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
<b>Transition benefits</b>	0	0	0	0	0	0	0	0	0	0
<b>Annual recurring benefits</b>	0	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
<b>Total annual benefits</b>	0	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

\* For non-monetised benefits please see summary pages and main evidence base section

# Evidence Base (for summary sheets)

## 1. Background

### 1.1. Context

The EU Emissions Trading System (EU ETS) was established under the European Directive 2003/87/EC which entered into force on 25 October 2003. The purpose of the EU ETS is to promote cost-effective reductions in greenhouse gas (GHG) emissions. It supports the EU's commitment to a global carbon market as a key instrument for tackling climate change, and will be central in enabling the EU to achieve its stated goal of reducing emissions by 20% in 2020 compared to 1990 levels and its commitment to increase the target to 30% as part of an international agreement.

The Stern Review (2006)<sup>1</sup> stated that carbon pricing was one of the three essential elements required to tackle climate change. The review highlighted the benefits of using emissions trading as the principal policy mechanism for mitigation, as it provides both certainty over emission reductions and economically efficient outcomes.

In September 2005, the European Commission adopted a Communication<sup>2</sup> which considered a variety of policies and instruments for aviation, and concluded that in view of the likely future growth in international air traffic, a new market-based instrument at Community level, such as emissions trading, was preferable to other financial measures. The European Commission published its legislative proposal in December 2006, and the UK subsequently consulted on this proposal in 2007.

The Directive to include aviation in the EU ETS (2008/101/EC)<sup>3</sup> ("the Aviation ETS Directive") was adopted by the Council of the European Union on 24 October 2008. The Directive amends the existing EU ETS Directive (2003/87/EC) and entered into force on 2 February 2009.

### 1.2. Background on UK transposition of the Aviation ETS Directive

EU Member States were required to transpose the Directive into national legislation by 2 February 2010. In the UK, transposition was completed in two stages. The UK's first stage transposing Regulations ("2009 Regulations") came into force on 17<sup>th</sup> September 2009. The 2009 Regulations:

- imposed obligations on operators to apply for an emissions plan and to monitor and report emissions each year from 2010;
- established a procedure for aircraft operators to apply for a free allocation of allowances; and
- appointed aviation EU ETS regulators in all parts of the UK and provided them with powers to require and approve monitoring plans and to enforce the system effectively, dissuasively and proportionately.

The second stage transposing Regulations, the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 ("the 2010 Regulations") empower UK regulators to regulate only those aircraft operators who appear on the European Commission's list and are carrying out an aviation activity as defined by the Aviation ETS Directive. The 2010 regulations replaced the 2009 regulations. In addition to the measures set out in the 2009 regulations, the 2010 regulations contained further detailed arrangements for the operation of the Aviation EU ETS, including:

- Additional detail on penalties and sanctions including the arrangements for the enforcement of an operating ban;
- Arrangements for a system of administrative charges payable by UK regulated aircraft operators; and

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<sup>1</sup> Stern Review on the Economics of Climate Change (October 2006), available at [http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/sternreview\\_index.htm](http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/sternreview_index.htm).

<sup>2</sup> Document number COM(2005) 459 (2005), Reducing the Climate Change Impact of Aviation, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005DC0459:EN:NOT>.

<sup>3</sup> Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0101:EN:NOT>.

- Further detail on the operation of the ‘Special Reserve’ of free allowances for new and fast growing aircraft operators.

Policy responsibility for Aviation Emissions Trading has been split between the Department for Transport (DfT) and the Department for Energy and Climate Change (DECC). The UK’s implementing Regulations were made by DECC Ministers, but DfT officials were fully involved in drafting them, and DfT Ministers agreed their contents.

### **1.3. Background on access to free EU aviation allowances**

EU aviation allowances (EUAAAs) equivalent to the aviation emissions cap will be created upon aviation's inclusion in the EU ETS and added to the EU ETS's volume of allowances. Initially, 15% of EUAAAs will be auctioned, 3% will be set aside for the Special Reserve (provided for new and fast-growing aircraft operators) and the remainder of EUAAAs will be allocated free of charge using a benchmarking methodology.

For the proportion of EUAAAs that will be allocated free of charge using a benchmarking methodology, the allocation process will distribute EUAAAs in line with the proportion of each aircraft operator’s share of the activity (total tonne-kilometres<sup>4</sup> during 2010) of all aircraft operators that submit an application for free EUAAAs. This calculation will determine an operator’s annual free allocation for 2012 and then for the period 2013 - 2020.

In order to become eligible for an allocation of free EUAAAs as part of this process, aircraft operators must submit an application for a benchmarking plan to their regulator, detailing how they intend to monitor their activity (total tonne-kilometres) during the benchmarking year (calendar year 2010). During 2010, operators had to monitor their total activity and have their activity data verified by a verifier who has been approved by the relevant regulator. By 31 March 2011, operators must submit their verified activity data to the relevant UK Regulator.

The Special Reserve, amounting to 3% of the aviation cap, will provide access to free EUAAAs for new entrant aircraft operators and to assist aircraft operators that sharply increase the number of tonne-kilometres they perform. However, it should be noted that successful applicants will only receive an annual free allocation from 2017-2020.

## **2. Problem under consideration**

The underlying issue the Aviation ETS Directive is tackling is the emission of greenhouse gases (GHGs) into the atmosphere, which leads to climate change. Carbon dioxide (CO<sub>2</sub>) is a key GHG, accounting for about 85% of the UK’s domestic GHG emissions. Emissions of CO<sub>2</sub> from aviation have increased significantly over recent decades and are forecast to continue growing. At the global level, international aviation (i.e. flights between countries) accounts for some 1.5% of total CO<sub>2</sub> emissions, and domestic aviation (i.e. flights within countries) a further 1.2%. At the UK level, the UK national atmospheric emissions inventory<sup>5</sup> shows that emissions from domestic and international aviation assigned to the UK (on the basis of bunker fuel sales) accounted for some 5.5% of UK CO<sub>2</sub> emissions in 2008.

An emissions trading system (ETS), such as the EU ETS, ensures a specified environmental outcome by setting a cap on total emissions from participants within the System. Participants are allocated allowances that, in addition to the sum of auction allowances, add up to the level of emissions permitted under the System, and any participants with emissions above their allocation must then purchase additional allowances. Participants who find it cheaper to reduce emissions rather than to purchase allowances can sell excess allowances to other participants in the System. In this way, emissions reductions to meet the cap are made wherever it is most cost-effective to do so. An ETS therefore introduces a direct cost, proportionate to the amount of CO<sub>2</sub> emitted. This encourages further efficiencies and incentivises participants to reduce emissions in the short and medium term. It also provides incentives to develop technologies to reduce emissions in the longer term.

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<sup>4</sup> Tonne Kilometres = weight of passengers (for which the default value is 100kg) or cargo carried multiplied by the distances over which it was carried – this metric is already used in aviation industry for other purposes.

<sup>5</sup> Available through [http://www.decc.gov.uk/en/content/cms/statistics/climate\\_change/data/data.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_change/data/data.aspx).

The specific issue to be addressed is how to ensure that UK Regulations give full and proper effect to the European Aviation ETS Directive and enable an aircraft operator who has been omitted from the European Commission's list to be regulated by UK Regulators, if it fulfils the necessary criteria that means that it is captured within the System. The issue is particularly urgent. If an omitted aircraft operator cannot be designated for UK regulation, before 31st March 2011, they may be unable to apply for an allocation of free EUAAs under the benchmarking process described in Section 1.3, which could have significant financial and competitive implications for their business.

We are aware of at least one UK-based aircraft operator who has been omitted from the current published version of the European Commission's list who wishes to apply for an allocation of free EUAAs under the benchmarking process. This operator will need guidance from both the Department and the Environment Agency, to ensure that they are on track with the submission of both CO<sub>2</sub> emissions data and tonne-kilometre data, which will also require verification. This needs to be completed in time for the 31<sup>st</sup> March 2011 deadline.

### **3. Rationale for intervention**

The Aviation ETS Directive states that the European Commission will produce and update annually, a list allocating aircraft operators to Member States for regulation. The 2010 Regulations empower UK regulators to regulate only those aircraft operators who appear on the European Commission's list and are carrying out an aviation activity as defined by the Aviation ETS Directive.

Since the 2010 Regulations were made, it has become increasingly clear that there have been a number of difficulties with the production of an accurate and timely list of operators and consequently we cannot be confident that the European Commission will publish accurate lists according to the timetable specified by the Directive. In particular, at least one UK-based aircraft operator is currently missing from the published version of the European Commission's list. The Government has clear evidence suggesting that this aircraft operator should be subject to the EU ETS and should be allocated to the UK for regulation. The most recent version of the European Commission's list, which was published in the OJEU on the 12<sup>th</sup> February 2011 did not include this particular operator, despite the fact that they appear to have operated above the commercial de-minimis thresholds. The fact that they have been omitted from this list, and as a result are unable to submit 2010 tonne-kilometre data to the Environment Agency (which they would need to do to secure a free allocation of CO<sub>2</sub> allowances), has been a contributory factor in the Government's decision to propose an urgent amendment to the 2010 Regulations. This proposed amendment would give proper and full effect to the Directive, and would furnish the Government with the power to designate aircraft operators for regulation, where it is satisfied that they are properly subject to UK regulation and not rely on the European Commission's list to be both timely and accurate.

There are therefore two issues – one is to overcome difficulties with the European Commission's list to ensure the UK regulations give proper effect to the European directive, the other is to ensure that this is done in time for any operators omitted from the European Commission's list to be able to apply for an allocation of free EUAAs under the benchmarking process. If the UK regulators cannot regulate omitted aircraft operators **before 31 March 2011**, then it is assumed that these aircraft operators would become subject to the System at some point in the future, but would be denied the opportunity to apply for their allocation of free EUAAs available between 2012 and 2020 under the benchmarking process. This could place them at a competitive disadvantage compared to their competitors who receive their allocation of free EUAAs under this process. If this is not remedied, this could result in competitive distortions between aircraft operators. Government intervention is required to address this risk and also avoid, where possible, the potential risk of a claim for damages from an aircraft operator who believes that they should be regulated by the UK but are not on the European Commission's list and therefore unable to apply for an allocation of free CO<sub>2</sub> allowances.

### **4. Policy objectives**

The inclusion of aviation in the EU ETS is intended to achieve emissions reductions in a cost-effective and efficient manner. The inclusion of aviation in the EU ETS needs to be considered in the context of the EU's 2020 greenhouse gas reduction target and the need for aviation to play its part in meeting this goal.

The policy objectives of amending the UK's Aviation EU ETS Regulations are to a) give proper and full

effect to the Aviation ETS Directive in the UK; and b) For any UK aircraft operators that have been omitted from the European Commission's list and are subject to regulation under the terms of the Directive, to be regulated by the UK, before the end of March 2011 in order that any such aircraft operators should have the option to apply for an allocation of free EUAAs under the benchmarking process discussed in Section 1.3.

The intended effects of this policy are to a) comply with the UK's European obligations and b) reduce the risk of competitive distortions between existing aircraft operators that could potentially arise if any existing aircraft operators, subject to the EU ETS, were unable to apply for an allocation of free EUAAs under the benchmarking process and were therefore at a cost disadvantage compared to other existing aircraft operators.

## **5. Description of options considered**

### **5.1 Do Nothing**

Under the 2010 Regulations, UK regulators are currently unable to regulate at least one UK-based aircraft operator that the Government is satisfied should be subject to UK regulation.

By doing nothing, the UK would be failing to respond to circumstances threatening its ability to comply with the obligation to regulate all qualifying UK aircraft operators, thereby giving full and proper effect to the Aviation ETS Directive.

Furthermore, doing nothing would mean that UK regulators would be able to regulate only those aircraft operators who appear on the European Commission's list and are carrying out an aviation activity as defined by the Directive. As discussed in Section 3, this would mean that at least one UK-based aircraft operator may not be able to apply for their allocation of free EUAAs under the benchmarking process discussed in Section 1.3. If any aircraft operators were denied this opportunity, there is a risk that this could put them at a potential competitive disadvantage compared to their competitors who receive their free allocation under this process. There is a risk that this issue could therefore result in competitive distortions between existing aircraft operators.

In addition, the Government would also be at a high risk of legal action from any aircraft operators that miss out on the opportunity to apply for their allocation of free EUAAs under the benchmarking process, including claims for damages to compensate them for the loss of free EUAAs.

### **5.2. Option 1: Introduce new Regulations to allow the UK Regulators to regulate aircraft operators that have been omitted from the European Commission's list where the Government is satisfied that they are properly subject to UK regulation**

Amending the Aviation EU ETS Regulations would allow the UK Regulators to regulate aircraft operators that have been omitted from European Commission's list allocating aircraft operators to Member States, and whom the Secretary of State is satisfied should be subject to UK regulation.

The amendment would therefore enable the Government to do the following:

- Consider **evidence** that is presented, which would allow the Secretary of State for the Department of Energy and Climate Change (SofS) to take a decision concerning individual cases of aircraft operators who may be eligible for regulation by the UK, and are currently not on the European Commission's published list. Once the amendments come into force, this will be an ongoing process, up to and beyond the 31<sup>st</sup> March 2011.
- Allow the UK Regulators to **regulate** any new operator, who fulfils the specified criteria (as set out in the 2010 Regulations), and is deemed to be an aircraft operator.

This process would follow the steps, as set out below:

- Evidence that an aircraft operator should be regulated by the UK is assessed and substantiated, prior to being presented to the SofS for consideration.

- If the SofS deems that an aircraft operator should be subject to UK regulation, then he will take a decision which will allow the appropriate UK Regulator to accept and process CO<sub>2</sub> emissions data.
- If the decision to regulate an aircraft operator is taken prior to the March 31<sup>st</sup> 2011 deadline, then an aircraft operator can also submit tonne-kilometre data and apply for an allocation of free EUAAs under the benchmarking process described in Section 1.3, based on the 2010 benchmarking year.
- Aircraft operators who are regulated by the UK, prior to the March 31<sup>st</sup> deadline, would be eligible to submit activity data in order to apply for an allocation of free EUAAs under the benchmarking process.

Amending the UK Aviation EU ETS Regulations (Option 1) to allow other aircraft operators to be regulated by the UK where the Government is satisfied that they are properly subject to UK regulation is the preferred option because (1) to give proper and full effect to the Aviation ETS Directive, the Government may no longer safely rely upon the European Commission's list; (2) there is currently a risk that at least one aircraft operator would not be able to apply for an allocation of free EUAAs under the benchmarking process by the deadline in 2011; (3) there is a risk that this issue could lead to competitive distortions between existing aircraft operators; and (4) there is also the risk of legal action by any omitted aircraft operators, including claims for damages, to compensate them for the loss of free EUAAs.

## **6. Costs and benefits of Option 1**

### **6.1. Impacts of Option 1**

For the purposes of this impact assessment, a key assumption is that all aircraft operators would eventually be added to the European Commission's list at some point in the future under the Do Nothing scenario. This assumption has been made because a) when UK regulators have identified aircraft operators that have been omitted from the European Commission's list in the past, these aircraft operators have eventually been added to the European Commission's list; and b) the European Commission is required to produce and update this list annually taking account of the best available information in the future. Should this assumption not hold for one or more aircraft operators, the Do Nothing scenario would result in additional CO<sub>2</sub> emissions. Therefore, Option 1 mitigates the risk that net CO<sub>2</sub> emissions from aviation would be higher than expected. Such a scenario would also result in additional costs, including the additional abatement costs of delivering the additional CO<sub>2</sub> emissions savings and additional subsistence charges.

#### **6.1.1. Impacts of Option 1 on aircraft operators that the SofS decides should be subject to UK regulation prior to 31 March 2011**

In the Do Nothing scenario, there is a risk that at least one aircraft operator that the Government believes should be subject to UK regulation would not be added to the European Commission's list prior to 31 March 2011. Given that the UK regulators would not be able to regulate such an aircraft operator under the existing 2010 Regulations until they are added to the European Commission's list, there is consequently a risk that at least one aircraft operator may not be able to submit their verified activity data before the deadline which is 31 March 2011, and that at least one aircraft operator may therefore not be able to apply for an allocation of free EUAAs under the benchmarking process described in Section 1.3 under the Do Nothing scenario.

As noted above, it is assumed that any aircraft operators who have been omitted from the current version of the European Commission's list would eventually be added to the European Commission's list at some point in the future under the Do Nothing scenario. Consequently, it is assumed that any omitted aircraft operators would be subject to UK regulation at some point under the Do Nothing scenario and would consequently incur the costs of complying with the Aviation EU ETS regardless of whether Option 1 is introduced. However, as noted above, the timing of when omitted aircraft operators would be added to the European Commission's list in the Do Nothing scenario is very uncertain.

Therefore, it is assumed that the main impact of Option 1 on any aircraft operators that the SofS decides should be subject to UK regulation prior to 31 March 2011 would be to ensure that the UK is able to regulate them prior to 31 March 2011, which would give them the option to apply for an allocation of free

EUAAs under the benchmarking process. Should they choose to do so, it is assumed that such an aircraft operator should have sufficient time to submit their verified activity data. The potential benefits and costs related to this impact are discussed in Section 6.3.1 and Section 6.4.1 below.

### **6.1.2. Impacts of Option 1 on aircraft operators that the SofS decides should be subject to UK regulation after 31 March 2011**

Beyond 31 March 2011, it is possible that some additional aircraft operators could be deemed to be subject to UK regulation. Any affected aircraft operators would become subject to UK regulation in advance of being added to the European Commission’s list. The potential costs related to this impact are discussed in Section 6.4.2.

### **6.1.3. Impacts on other aircraft operators**

The allocation of free EUAAs that would be received by each aircraft operator under the benchmarking process would depend on how many other aircraft operators apply. Therefore, aircraft operators that are currently subject to UK regulation could potentially be impacted by Option 1. The potential costs related to this impact are discussed in Section 6.4.3 below.

## **6.2. Monetisation of Benefits and Costs**

The following table illustrates which costs and benefits have been monetised for the purposes of this impact assessment. Where it has not been possible to monetise a cost or benefit, a full qualitative description has been provided.

<b><u>Benefits of Option 1</u></b>	<b><u>Costs of Option 1</u></b>
1.) Value of additional EUAAs that some UK regulated aircraft operators could receive under the benchmarking process (see Section 6.3.1) [Monetised]	1.) Potential additional costs of applying for an allocation of EUAAs under the benchmarking process (see Section 6.4.1) [Non-monetised]
2.) Potential for a more level competitive playing field between existing aircraft operators (see Section 6.3.2) [Non-monetised]	2.) Value of any reduction in the number of EUAAs that other UK regulated aircraft operators could receive under the benchmarking process (see Section 6.4.2) [Monetised]
	3.) Potential additional costs for some aircraft operators of being regulated by the UK before they are added to the European Commission’s list (see Section 6.4.3) [Non-monetised]
	4.) Enforcement costs (see Section 6.4.4) [Non-monetised]

## **6.3. Benefits of Option 1**

### **6.3.1. Potential benefits from applying for an allocation of free EUAAs under the benchmarking process**

Given the risk that at least one aircraft operator would not be able to apply for an allocation of free EUAAs under the benchmarking process under the Do Nothing scenario, there could potentially be financial benefits for at least one aircraft operator from being able to apply for an allocation of free EUAAs under the benchmarking process under Option 1. The scale of the potential financial benefits to UK regulated aircraft operators is very uncertain and would depend on a) whether the affected aircraft operators would be able to apply for an allocation of free EUAAs under the benchmarking process under the Do Nothing scenario; b) whether these aircraft operators would apply; and c) whether these aircraft operators could apply for an allocation of free EUAAs from the Special Reserve as a New Entrant under the Do Nothing scenario.

Should an aircraft operator only be able to apply for an allocation of free EUAAs under the benchmarking process under Option 1, the financial benefits to the aircraft operator from applying would depend on the additional number of free EUAAs they would receive compared to the Do Nothing scenario. The number of free EUAAs received by an aircraft operator under the benchmarking process would depend on the



aircraft operator's share of the total activity (total tonne-kilometres during the benchmarking year - calendar year 2010) of all aircraft operators that submit an application for free EUAAs, and the aviation cap in each year. To determine the additional number of free EUAAs they would receive, this would then need to be compared with the number of free EUAAs the aircraft operator would have received from the Special Reserve under the Do Nothing scenario, which is very uncertain at this stage.

Consideration has been given to the extent it is possible to estimate the potential benefits for the known UK-based aircraft operator that is currently missing from the published version of the European Commission's list. The potential benefits have been estimated as follows.

1.) Two scenarios are presented: a *Low Scenario* and a *High Scenario*. The *Low Scenario* represents a scenario where the aircraft operator would be able to apply for an allocation of free EUAAs under the benchmarking process under the Do Nothing scenario, which would mean they would not benefit from Option 1. This scenario would also arise if the aircraft operator does not apply for an allocation of free EUAAs under the benchmarking process. The *High Scenario* represents a scenario where the aircraft operator would only be able to apply for an allocation of free EUAAs under the benchmarking process under Option 1, and where it would not receive any free EUAAs under the Do Nothing scenario. This scenario would only arise if this aircraft operator would not receive any free EUAAs from the Special Reserve under the Do Nothing scenario.

2.) An estimate of the share of total activity of all aircraft operators that submit an application for free EUAAs that would be accounted for by this aircraft operator is not available. Therefore, for the purposes of illustrating the order of magnitude of the potential benefits, it has been assumed that a suitable proxy for this is the proportion of CO<sub>2</sub> emissions covered by the Aviation EU ETS that would be accounted for by this aircraft operator in 2010.

3.) An estimate of the CO<sub>2</sub> emissions of this aircraft operator in 2010 is currently available from the Eurocontrol Support Facility. This estimate is the sum of the estimated CO<sub>2</sub> emissions from actual flights undertaken between for 1 January 2010 to 31 December 2010. It should be noted that the estimates from the Eurocontrol Support Facility are subject to a number of uncertainties, such as calculating CO<sub>2</sub> emissions with reference to the average CO<sub>2</sub> emissions expected from a given aircraft type.

4.) Based on Bloomberg analysis<sup>6</sup>, it is estimated that the total CO<sub>2</sub> emissions covered by the Aviation EU ETS will be of the order of magnitude of around 225 MtCO<sub>2</sub> in 2010. The Eurocontrol Support Facility estimates that the total CO<sub>2</sub> emissions of this aircraft operator could be of the order of magnitude of around 0.01 MtCO<sub>2</sub> in 2010<sup>7</sup>. This implies that the total CO<sub>2</sub> emissions of the aircraft operator could be of the order of magnitude of around 0.005% of the total CO<sub>2</sub> emissions covered by the Aviation EU ETS in 2010.

5.) Therefore, for the purposes of illustrating the order of magnitude of this potential benefit, it is assumed that the number of free EUAAs that could be received by the aircraft operator under the benchmarking process could be around 0.005% of the total number of EUAAs that would be allocated under the benchmarking process<sup>8</sup>. On the basis of this assumption, it is estimated that the number of additional free EUAAs that the aircraft operator could receive under Option 1 could be of the order of magnitude of 0 EUAAs (Low Scenario) to around 0.008 million EUAAs per year between 2012 and 2020 (High Scenario).

Year	Number of additional EUAAs (Low Scenario)	Number of additional EUAAs (High Scenario)
2012	0	0.008 million
2013	0	0.008 million
2014	0	0.008 million
2015	0	0.008 million

<sup>6</sup> Source: Bloomberg analysis based on Eurocontrol growth rates and CE Delft emission estimates.

<sup>7</sup> Estimate from 25 February 2011.

<sup>8</sup> Based on the impact assessment of the 2010 Regulation, the Aviation EU ETS cap is assumed to be around 210 MtCO<sub>2</sub> in 2012 and around 206 MtCO<sub>2</sub> per year between 2013 and 2020. 82% of the Aviation EU ETS cap is assumed to be allocated for free under the benchmarking process. Therefore, for the purposes of this impact assessment, the total number of EUAAs allocated under the benchmarking process is assumed to be around 172 million in 2012 and around 169 million per year between 2013 and 2020.

2016	0	0.008 million
2017	0	0.008 million
2018	0	0.008 million
2019	0	0.008 million
2020	0	0.008 million

6.) For the purposes of this impact assessment, it is assumed that the price of EUAAs will be equal to the price of EU allowances (EUAs) in the years between 2012 and 2020. DECC's latest central forecasts<sup>9</sup> of the price of EUAs in the years between 2012 and 2020 are as follows (e.g. £16.30 per EUA in 2020); these forecasts are presented in 2009 prices. However, it should be noted that the price of EUAs and EUAAs in the future is subject to a number of uncertainties.

Year	EUA Price (£'s in 2009 prices)
2012	£14.50
2013	£14.70
2014	£14.90
2015	£15.10
2016	£15.40
2017	£15.60
2018	£15.80
2019	£16.10
2020	£16.30

7.) For each additional EUAA that an affected aircraft operator would receive for free under Option 1 compared to the Do Nothing scenario, the financial costs to the aircraft operator of complying with the Aviation EU ETS would be reduced by the value of the EUAA, resulting in a financial benefit to the aircraft operator. On the basis of DECC's latest central forecasts, the financial benefit to this aircraft operator is estimated at of the order of magnitude of £0 (Low Scenario) to around £0.12 million per year between 2012 and 2020 on average (High Scenario).

Year	Undiscounted Benefits (Low Scenario)	Undiscounted Benefits (High Scenario)
2012	£0	£0.12 million
2013	£0	£0.11 million
2014	£0	£0.12 million
2015	£0	£0.12 million
2016	£0	£0.12 million
2017	£0	£0.12 million
2018	£0	£0.12 million
2019	£0	£0.13 million
2020	£0	£0.13 million
<b>Total</b>	<b>£0</b>	<b>£1.08 million</b>
<b>Average (2012-2020)</b>	<b>£0</b>	<b>£0.12 million</b>

8.) The 10 year appraisal period is from 2011 to 2020. On the basis of the above estimates, the Average Annual Benefits over the appraisal period is therefore estimated at the order of magnitude of £0 (Low Scenario) to around £0.11 million per year (High Scenario), and the Present Value<sup>10</sup> of the Total Benefit over the appraisal period is therefore estimated at the order of magnitude of £0 (Low Scenario) to around £0.85 million (High Scenario). For the purposes of this impact assessment, the midpoint of the range between the High and Low scenarios has been selected as the Best Estimate. This is because it is uncertain whether the aircraft operator that is currently omitted from the latest published version of the Commission's list, will be included in the next published version of the list prior to the 31<sup>st</sup> March 2011 deadline, when CO<sub>2</sub> emissions and Tonne-kilometre data have to be submitted to the UK regulators.

<sup>9</sup> Source: DECC (2010) Updated short term traded carbon values for UK public policy appraisal (June 2010).

<sup>10</sup> The Present Value Base Year is 2009.

Consequently, the Best estimate of the Average Annual Benefits over the appraisal period is of order of magnitude of around £0.05 million per year, and the Best estimate of the Present Value of the Total Benefit over the appraisal period is of order of magnitude of around £0.43 million.

For the purposes of illustrating the order of magnitude of this potential benefit in this impact assessment, these illustrative estimates are shown on the 'Summary: Analysis and Evidence' sheet. However, it should be noted that these illustrative estimates are very uncertain.

9.) The number of additional free EUAAs that omitted aircraft operators would receive under Option 1 (compared to the Do Nothing scenario) is very uncertain. It has only been possible to produce illustrative estimates for the one omitted aircraft operator that has been identified. However, it is possible that other UK-based aircraft operators are currently omitted from the European Commission's list. So, there is the potential that other omitted aircraft operators could receive additional free allowances under the benchmarking process if they are only able to apply for them under Option 1. If this is the case, this would increase the magnitude of this potential benefit.

10.) Furthermore, it should be noted that the extent that benefits to UK regulated aircraft operators would represent benefits to the UK is uncertain. Benefits to UK regulated aircraft operators would only represent benefits to the UK if these benefits fall on UK entities (e.g. UK businesses or UK consumers). However, it should be noted that, for example, UK regulated aircraft operators will carry non-UK passengers.

### **6.3.2. Potential for a more level competitive playing field between existing aircraft operators**

If any aircraft operators were denied the opportunity to apply for an allocation of free EUAAs under the benchmarking process, this could put them at a potential competitive disadvantage compared to their competitors who receive their free allocation under this process. Consequently, there is a risk that this issue could result in competitive distortions between existing aircraft operators. Option 1 should address this risk and therefore has the potential to result in a more level competitive playing field between existing aircraft operators.

## **6.4. Costs of Option 1**

Three potential additional costs to UK regulated aircraft operators have been identified. However, for the reasons outlined in Section 6.3.1, it should be noted that the extent that additional costs to UK regulated aircraft operators would represent a cost to the UK is also uncertain.

### **6.4.1. Potential costs to aircraft operators of applying for an allocation of free EUAAs under the benchmarking process**

In order to apply for an allocation of free EUAAs under the benchmarking process, an aircraft operator needs to collate accurate and verifiable data of their activity and report it in the required format at the appropriate time. The costs this imposes on an aircraft operator will vary because much depends on the information already held and the extent to which these requirements would entail significantly new information to be produced. In addition, it should be noted that the regulators will charge those aircraft operators they regulate £830 for approving benchmarking plans; this cost will be a one-off charge and is to cover the additional costs to the regulators. Therefore, aircraft operators that choose to apply for an allocation of free EUAAs could incur additional costs if they have not already incurred these costs.

Given the uncertainties and limitations of the available evidence base, the potential costs to aircraft operators that apply for an allocation of free EUAAs have not been monetised. However, whilst the scale of the potential costs to aircraft operators compared to the financial benefits of applying for an allocation of free EUAAs under the benchmarking process described in Section 1.3 (i.e. the value of their allocation of free EUAAs) would vary between aircraft operators, it is assumed that aircraft operators would not apply for an allocation of free EUAAs unless they expected that the financial benefits would exceed the costs of applying for an allocation of free EUAAs.

### **6.4.2. Potential costs to other UK regulated aircraft operators that receive a smaller allocation of free EUAAs under the benchmarking process**

The total number of free EUAAs that will be allocated under the benchmarking process is fixed at the EU

level in a given year and depends on the aviation emissions cap in that year. The number of free EUAAs that will be allocated to each aircraft operator depends on their share of the total activity of all aircraft operators that submit an application for free EUAAs. Therefore, if an additional UK regulated aircraft operator applies for an allocation of free EUAAs under Option 1, this would reduce the number of free EUAAs that would be received by other aircraft operators that submit an application for free EUAAs and would result in additional financial costs for these aircraft operators. This would affect a) other UK regulated aircraft operators and b) aircraft operators regulated by other Member States. For the purposes of this impact assessment, it is assumed that only the costs to other UK regulated aircraft operators would be a cost to the UK.

The extent that other UK regulated aircraft operators would incur additional financial costs under Option 1 would depend on the activity of the additional UK regulated aircraft operator in question. These potential costs have been estimated as follows.

1.) An estimate of the share of free EUAAs that would be allocated to UK regulated aircraft operators under the benchmarking process under the Do Nothing scenario is not currently available. This would depend on the share of the total activity of all aircraft operators that submit an application for free EUAAs that would be accounted for by UK regulated aircraft operators. For the purposes of illustrating the order of magnitude of this potential cost, it has been assumed that a suitable proxy for this is the proportion of CO<sub>2</sub> emissions covered by the Aviation EU ETS that are accounted for by UK regulated aircraft operators in 2010.

2.) Based on Bloomberg analysis, it is estimated that the total CO<sub>2</sub> emissions covered by the Aviation EU ETS will be around 225 MtCO<sub>2</sub> in 2010. The Eurocontrol Support Facility estimates that the total CO<sub>2</sub> emissions of UK regulated aircraft operators will be around 70 MtCO<sub>2</sub> in 2010<sup>11</sup>. This implies the total CO<sub>2</sub> emissions of UK regulated aircraft operators will be around 31% of the total CO<sub>2</sub> emissions covered by the Aviation EU ETS in 2010.

3.) Therefore, for the purposes of illustrating the order of magnitude of this potential cost, it is assumed that the total reduction in the number of free EUAAs that would be received by other UK regulated aircraft operators under the benchmarking process would be of the order of magnitude of 31% of the total number of free EUAAs that would be received by UK regulated aircraft operators that can only apply for an allocation of free EUAAs under the benchmarking process if Option 1 is implemented. Under this assumption, for every additional 100 free EUAAs that these UK regulated aircraft operators would be allocated under the benchmarking process if Option 1 is implemented, around 31 fewer free EUAAs would be allocated to other UK regulated operators. This suggests that, as a result of Option 1, the number of free EUAAs allocated to UK regulated aircraft operators under the benchmarking process cannot fall.

4.) Based on the illustrative estimates of the order of magnitude of the additional number of free EUAAs that the aircraft operator that is currently omitted from the published version of the European Commission's list could potentially receive under the benchmarking process under Option 1 (see Section 6.3.1), it is estimated that the consequent reduction in the number of free EUAAs that would be allocated to other UK regulated aircraft operators could be of the order of magnitude of between 0 (Low estimate) and around 0.002 million per year between 2012 and 2020 (High estimate). Based on the same assumptions as in Section 6.3.1, it is estimated that the value of these EUAAs could be of the order of magnitude of between £0 (Low Scenario) and around £0.04 million per year between 2012 and 2020 (High Scenario).

<b>Year</b>	<b>Reduction in number of EUAAs (Low Scenario)</b>	<b>Reduction in number of EUAAs (High Scenario)</b>
2012	0	0.002 million
2013	0	0.002 million
2014	0	0.002 million
2015	0	0.002 million
2016	0	0.002 million
2017	0	0.002 million

<sup>11</sup> Estimate from 6 January 2011.

2018	0	0.002 million
2019	0	0.002 million
2020	0	0.002 million

Year	Undiscounted Costs (Low Scenario)	Undiscounted Costs (High Scenario)
2012	£0	£0.04 million
2013	£0	£0.04 million
2014	£0	£0.04 million
2015	£0	£0.04 million
2016	£0	£0.04 million
2017	£0	£0.04 million
2018	£0	£0.04 million
2019	£0	£0.04 million
2020	£0	£0.04 million
<b>Total</b>	<b>£0</b>	<b>£0.34 million</b>
<b>Average (2012-2020)</b>	<b>£0</b>	<b>£0.04 million</b>

5.) The 10 year appraisal period is from 2011 to 2020. On the basis of the above estimates, the Average Annual Costs over the appraisal period is therefore estimated at the order of magnitude of £0 (Low Scenario) to around £0.03 million per year (High Scenario), and the Present Value<sup>12</sup> of the Total Cost over the appraisal period is therefore estimated at the order of magnitude of £0 (Low Scenario) to around £0.27 million (High Scenario). The midpoint of the range between the High and Low scenarios has been selected as the Best estimate for the reasons explained in Section 6.3.1 of this impact assessment. Consequently, the Best estimate of the Average Annual Costs over the appraisal period is of order of magnitude of around £0.02 million per year, and the Best estimate of the Present Value of the Total Cost over the appraisal period is of order of magnitude of around £0.13 million. For the purposes of illustrating the order of magnitude of this potential cost in this impact assessment, these illustrative estimates are shown on the 'Summary: Analysis and Evidence' sheet. However, it should be noted that these illustrative estimates are very uncertain.

6.) As noted above, it has only been possible to produce illustrative estimates of the additional number of free EUAAs that the omitted aircraft operator that has been identified could be allocated under the benchmarking process under Option 1. However, other UK-based aircraft operators could also be currently omitted from the European Commission's list. So, there is the potential that additional omitted aircraft operators could receive additional free allowances under the benchmarking process if they are only able to apply for them under Option 1. If this is the case, this would increase the magnitude of this potential cost.

#### **6.4.3. Potential costs to aircraft operators that the SofS decides should be subject to UK regulation after 31 March 2011**

Beyond the 31 March 2011, it is possible some additional aircraft operators could be deemed to be subject to UK regulation. Any affected aircraft operators would be subject to UK regulation in advance of being added to the European Commission's list. This could potentially affect the timing of when these aircraft operators incur the costs of complying with the Aviation EU ETS (e.g. abatement costs and subsistence charges). However, whether this impact would result in any additional costs to these aircraft operators is very uncertain at this stage. Consequently, it has not been possible to monetise this potential cost in this impact assessment. However, more generally, the costs of complying with the Aviation EU ETS are discussed in the impact assessment of the 2009 Regulations and the impact assessment of the 2010 Regulations.

#### **6.4.4. Enforcement costs**

Given that a) it is assumed that all aircraft operators would be added to the European Commission's list at some point in the future under the Do Nothing scenario and b) applying for an allocation of free

<sup>12</sup> The Present Value Base Year is 2009.

EUAAs under the benchmarking process described in Section 1.3 is optional, it is assumed that there would be no additional enforcement costs under Option 1 compared to the Do Nothing scenario.

## **7. Wider impacts of Option 1**

### **7.1. Equality Duties**

I confirm that this proposal has been screened for its likely impact (positive or adverse) on the equality groups and, where required, an Equality Impact Assessment has been completed.

### **7.2. Human Rights**

The objective of these amendments is to ensure that the obligations under the previous UK Regulations may be applied to those aircraft operators not identified on the Commission's list but which HMG are satisfied meet the necessary criteria to be considered as UK operators. It therefore follows that these newly designated 'UK' aircraft operators will be subject to the same human rights impacts as those specified in the impact assessment accompanying the 2010 Regulations.

Any new aircraft operators designated as "UK operators" will become subject to the existing UK Regulations which allow for the imposition of financial penalties for breach of the Regulations and from 2012 allow for the detention and sale of aircraft as part of the enforcement regime. Accordingly, these proposals appear to engage fundamental rights to property (Protocol 1, Article 1) and to a fair trial (Article 6). The same protection will be provided to any UK designated aircraft operators as to UK operators previously identified on the Commission's list as specified under the existing Regulations.

The imposition of civil penalties on regulated bodies for breach of regulatory requirements is permissible as long as the penalties are reasonable and proportionate. There will be a right of appeal against the imposition and/or amount of any penalty imposed by a regulator to the relevant authority. The appellate body will be empowered, inter alia, to quash the penalty imposed or substitute a lesser sum, and will itself be subject to judicial review. This will provide an appropriate right of access to an independent and impartial tribunal.

The detention of an aircraft under the Regulations would involve the control of the use of property, and the sale of an aircraft either the deprivation or the control of the use of property, within the meaning of Article 1 of Protocol 1. The right to property is not an unqualified right. Deprivation of property in the public interest and subject to the conditions provided for by law is allowable. Furthermore, Article 1 expressly permits the control of the use of property in accordance with the general interest, or to secure the payment of taxes, contributions or penalties. The Regulations contain conditions and safeguards that should be sufficient to ensure that the power to detain is exercised proportionately. Furthermore, the exercise of the power of detention is subject to judicial review, and no aircraft may be sold without the leave of the court.

### **7.3 Competition Assessment**

If any aircraft operators were denied the opportunity to apply for an allocation of free EUAAs under the benchmarking process described in Section 1.3, this could put them at a potential competitive disadvantage compared to their competitors who receive their allocation of free EUAAs under this process. Consequently, there is a risk that this issue could result in competitive distortions between existing aircraft operators. Option 1 should address this risk and therefore has the potential to result in a more level competitive playing field between existing aircraft operators.

However, given that the free EUAAs from the Special Reserve will only be distributed from 2017, new and fast-growing operators will still be at a potential competitive disadvantage (compared to aircraft operators that receive an allocation of free EUAAs from the benchmarking process) since they will have to cover a larger proportion of the cost of their CO<sub>2</sub> emissions. This impact is discussed further in the competition assessment in the impact assessment of the 2010 Regulations.

## **7.4. Small Firms Impact Test**

Commercial aircraft operators<sup>13</sup> operating either fewer than 243 flights per period for three consecutive four-month periods or flights with total annual emissions lower than 10,000 tonnes CO<sub>2</sub> per year are not performing an aviation activity as defined in Annex I of the Aviation ETS Directive and are therefore exempt from the 2010 Regulations.

The de-minimis threshold does not apply to non-commercial operators (however, all flights performed by aircraft with a certified maximum take-off mass of less than 5,700kg are exempt<sup>14</sup>). Therefore small operators (such as business jets, for example) which operate flights into or out of EU airports, and are to be regulated by the UK, would be required to comply with the 2010 Regulations if the SofS decides they should be subject to UK regulation.

The extent that Option 1 would impact on small firms is uncertain. In terms of any costs to small firms, additional costs would only arise if a) a small firm applies for an allocation of free EUAs; b) a small firm receives a smaller allocation of free EUAs as a result of another aircraft operator applying for an allocation of free EUAs; and c) a small firm is subjected to UK regulation earlier than it would otherwise have been.

## **8. Summary and preferred option with description of implementation plan**

Taking all this into account, Option 1 is the preferred option.

This would allow the UK Regulators to regulate UK aircraft operators, who are currently omitted from the European Commission's list. The SofS would have the power to assess each case individually, based on the evidence provided, and ensure that those aircraft operators who should be regulated by the UK, are correctly assigned to us.

The amendment would come into force before the 31<sup>st</sup> March deadline, to allow Regulators to accept and process an operator's submission of CO<sub>2</sub> emissions data (compulsory) and tonne-kilometre data (optional). The amendment to the current Regulations would then continue to have full effect, as part of the UK Aviation EU ETS Regulations.

The Environment Agency of England and Wales (EA) will be responsible for regulating the majority of the airlines to be regulated by the UK.

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<sup>13</sup> Directive 2008/101/EC defines "commercial air transport operator" as an operator that, for remuneration, provides scheduled or non-scheduled air transport services to the public for the carriage of passengers, freight or mail.

<sup>14</sup> A full list of exemptions can be found at Annex I (c) to the Aviation ETS Directive, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:008:0003:0021:EN:PDF>.

## Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

### Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

**Basis of the review:** [The basis of the review could be statutory (forming part of the legislation), i.e. a sunset clause or a duty to review, or there could be a political commitment to review (PIR)];

The European Commission must review Directive 2008/101/EC before 1 December 2014. With a view to informing the Commission's review process, which could lead to proposals to revise the Directive being brought before the European Council and Parliament, the Government will undertake its own review of the implementation of the Aviation EU ETS during the course of 2014. A review of the operation of the policy set out in this Impact Assessment will form part of that review.

**Review objective:** [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]

To identify any changes that could properly be made to the SI so as to enhance benefits or reduce costs.

**Review approach and rationale:** [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]

A full review will be undertaken. In order to feed into the European Commission's obligation to review Directive 2008/101/EC before 1 December 2014, the Government will need to take account of the following aspects of the its implementation of the Aviation EU ETS in the review, which are the same as those that the European Commission is required to consider:

- (a) the implications and impacts of Directive 2008/101/EC as regards the overall functioning of the Community scheme;
- (b) the functioning of the aviation allowance market, covering in particular any possible market disturbances;
- (c) the environmental effectiveness of the Community scheme and the extent by which the total quantity of allowances to be allocated to aircraft operators under Article 3c should be reduced in line with overall EU emissions reduction targets;
- (d) the impact of the Community scheme on the aviation sector, including issues of competitiveness, taking into account in particular the effect of climate change policies implemented for aviation outside the EU;
- (e) continuing with the special reserve for aircraft operators, taking into account the likely convergence of growth rates across the industry;
- (f) the impact of the Community scheme on the structural dependency on aviation transport of islands, landlocked regions, peripheral regions and the outermost regions of the Community;
- (g) whether a gateway system should be included to facilitate the trading of allowances between aircraft operators and operators of installations whilst ensuring that no transactions would result in a net transfer of allowances from aircraft operators to operators of installations;
- (h) the implications of the exclusion thresholds as specified in Annex I in terms of certified maximum take-off mass and number of flights per year performed by an aircraft operator;
- (i) the impact of the exemption from the Community scheme of certain flights performed in the framework of public service obligations imposed in accordance with Council Regulation (EEC) No 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes
- (j) developments, including the potential for future developments, in the efficiency of aviation and in particular the progress towards meeting the Advisory Council for Aeronautics Research in Europe (ACARE) goal to develop and demonstrate technologies able to reduce fuel consumption by 50 % by 2020 and whether further measures to increase efficiency are necessary; and



(k) developments in scientific understanding on the climate change impacts of contrails and cirrus clouds caused by aviation with a view to proposing effective mitigation measures.

**Baseline:** [The current (baseline) position against which the change introduced by the legislation can be measured]

The baseline scenario against which the changes introduced by the legislation will be measured is the scenario in which the UK Regulators are unable to regulate a number of aircraft operators that the Government believe should be subject to UK regulation.

**Success criteria:** [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]

The success criteria for the policy set out in this impact assessment are as follows:

1. The 2010 Regulations are amended so that the UK can regulate 'off-list'.
2. Identified aircraft operators, who are deemed by the SofS to be eligible for regulation by the UK, have both their CO<sub>2</sub> and Tonne-kilometre data emissions plans processed by the UK Regulators, in time to meet the March 31st deadline to apply for an allocation of free CO<sub>2</sub> allowances.

**Monitoring information arrangements:** [Provide further details of the planned/existing arrangements in place that will allow a systematic collection of monitoring information for future policy review]

Aircraft operators are required by the Aviation ETS Directive and the 2010 Regulations to monitor and report their emissions annually to the UK regulators.

Stakeholders and enforcers will be consulted as part of the review.

Further information monitoring will be undertaken as necessary and reviewed regularly.

**Reasons for not planning a review:** [If there is no plan to do a PIR please provide reasons here]

N/A