

EXPLANATORY MEMORANDUM TO
THE AVIATION GREENHOUSE GAS EMISSIONS TRADING SCHEME
REGULATIONS

2009 No. 2301

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

2. Purpose of the instrument

2.1 These Regulations transpose parts of the Directive 2008/101/EC of the European Parliament and of the Council ('the Aviation Directive') by making provisions to include aircraft operators in an emissions trading scheme.

2.2 The Regulations, which apply in England, Wales, Scotland and Northern Ireland, give effect to two main parts of the Aviation Directive. The Regulations establish a procedure to allow aircraft operators within their scope to apply for a free allocation of allowances for participation in the emissions trading scheme. The first stage of the application is to apply for a benchmarking plan by 31st December 2009. The Regulations also, as required by the Aviation Directive, impose obligations on operators to apply for an emissions plan and to monitor and report emissions. Operators must apply for an emissions plan within 8 weeks of the Regulations coming into force. New entrants must apply for an emissions plan within 8 weeks of coming within the scope of the Regulations.

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

3.1 The Regulations are made in exercise of the powers conferred by both section 2(2) of European Communities Act 1972 and section 2 of the Pollution Prevention and Control Act 1999. A combination of these powers is needed as section 2 of the Pollution Prevention and Control Act 1999 is the appropriate domestic power, but does not extend to Northern Ireland. In order to ensure aircraft operators caught by the scheme that are regulated by the United Kingdom, particularly aircraft operators based outside of the United Kingdom, are treated equally it was decided the best approach would be to have one set of Regulations in force for the United Kingdom. It is therefore necessary to exercise the powers in section 2(2) of the European Communities Act 1972 as well as in section 2 of the Pollution Prevention and Control Act.

4. Legislative Context

4.1 Directive 2003/87/EC of the European Parliament and of the Council (the European Union Emissions Trading Scheme (EU ETS) Directive) established a system for greenhouse gas emission allowance trading within the European Community.

4.2 In September 2005, the Commission adopted a Communication outlining plans to reduce the impact of aviation on climate change. The Communication

recommended that aviation emissions should be included in the EU ETS. This was part of a comprehensive approach which included research into cleaner air transport, better air traffic management and the removal of legal barriers to taxing aircraft fuel.

4.3 The Commission invited feedback from the other institutions and set up an Aviation working group to consider the detailed design of the scheme. The Environment Council released supportive conclusions in December 2005 which also contained some preliminary guiding principles to be taken into account in the development of a Commission legislative proposal. In the European Council conclusions of 15/16 December, European heads of state and government also welcomed the Communication, recognised that the inclusion of the aviation sector in the EU Emissions Trading Scheme seems to be the best way forward, and welcomed the intention of the Commission to bring forward a legislative proposal by the end of 2006.

4.4 A consultation was held between March and June 2007 on the European Commission's proposal and on the Government's initial analysis on the changes required to the proposal. This proposal was altered throughout the EU legislative process, and a final deal was agreed between the Environment Council, the Commission and the European Parliamentary Environment Committee on its second reading on 26 June. This was put before the European Parliament on 8 July and was supported by 640 votes to 30. The Aviation Directive was adopted by the Council of the European Union on 24 October 2008. The Aviation Directive, which amends the EU ETS Directive, was published in the Official Journal of the European Union on 13 January 2009 and it entered into force on 2 February 2009.

4.5 The Aviation Directive amended the EU ETS Directive to include aviation activities in the EU ETS. Article 2(1) of the Aviation Directive requires Member States to bring into force the laws, Regulations and administrative provisions necessary to comply with the Aviation Directive before 2 February 2010. .

4.6 A second set of Regulations will be consulted on later in 2009 that will transpose the Directive in full to put in place further requirements on operators and the remaining powers that the regulator will require to administer the scheme.

5. Territorial Extent and Application

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

6. European Convention on Human Rights

6.1 The Minister for Energy and Climate Change has made the following statement regarding Human Rights:

In my view the provisions of the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2009 are compatible with the Convention rights.

7. Policy background

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 a major milestone in the global efforts to tackle climate change. It 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, where Member States are required to set an emissions cap for all the sectors covered by the EU ETS.

7.2 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.

7.3 The EU ETS commenced in 2005 covering CO₂ emissions from heavy industry and energy intensive activities only. In recognition of the growing contribution of air transport to climate change the Government has pressed for the inclusion of aviation in the EU ETS. The European Commission published a draft legislative proposal for including aviation in the EU ETS in December 2006. A consultation was held between March and June 2007 on the European Commission's proposal and on the Government's initial analysis on the changes required to the proposal.

7.4 The Regulations require aviation operators, subject to regulation under the scheme by the UK, to monitor and report their Carbon Dioxide (CO₂) emissions according to approved guidelines. Starting in 2012, operators will be required to surrender one allowance for each tonne of CO₂ they emit during the reporting year (i.e. the preceding calendar year). At the end of the year if an operator does not have enough allowances to cover their annual CO₂ emissions it will need to buy 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 CO₂ emitted will result in a civil penalty for the operator.

8. Consultation outcome

8.1 In conjunction with the Department for Transport, the Department of Energy and Climate Change consulted on the first stage transposition of the Aviation Directive from March 2009 to May 2009. Respondents included UK and internationally based Aircraft Operators, Trade Unions, parts manufacturers and Non-Governmental Environmental Organisations.

8.2 The UK Government has taken respondents' views into account when drafting these Regulations and published a summary report and Government response addressing points raised by respondents.

9. Guidance

9.1 The Department and regulators have so far as possible notified relevant stakeholders of the new procedures that will be introduced by these Regulations and will so far as possible further notify them again of further requirements at the second stage of transposition through formal consultation in August 2009.

10. Impact

10.1 A full Impact Assessment has been prepared and published alongside the Regulations. A summary of costs and benefits identifiable at this stage have been included as part of that assessment.

11. Regulating small business

11.1 The impact on small operators and small emitters has been considered as part of the full Impact Assessment accompanying the Regulations. The Regulations provide for 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 CO₂ 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. In addition, simplified monitoring and reporting procedures for small emitter operators will be implemented with the intention of reducing the administrative cost burden and ensure proportionality.

11.2 Further impacts of the Regulations on competitiveness to UK specified operators will be considered as part of the second stage transposition.

12. Monitoring & review

12.1 As noted above, a second set of Regulations will be consulted on later in 2009 that will transpose the Directive in full to put in place further requirements on operators and the remaining powers that the regulators will require to administer the scheme. At this time we intend that these first stage Regulations will be revoked and replaced with a complete Statutory Instrument transposing the whole of the Aviation Directive.

12.2 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).

13. Contact

13.1 Peter Barton-Wood at the Department of Energy and Climate Change Tel: 0300 068 5261 or email: peter.barton-wood@decc.gsi.gov.uk can answer any queries regarding the instrument.

Summary: Intervention & Options

Department /Agency: DfT/DECC	Title: Impact Assessment of First Stage Transposition of EU Legislation to Include Aviation in the European Union Emissions Trading System (EU ETS)	
Stage: Implementation	Version: Final	Date: 18 August 2009
Related Publications: Aviation Directive (2008/101/EC). Decision (2009/339/EC). The European Commission's IA for the EU ETS. Related publications referred to within text.		

Available to view or download at:

http://www.decc.gov.uk/en/content/cms/consultations/aviation_euets/aviation_euets.aspx

Contact for enquiries: EU ETS Aviation Consultation Team

Telephone: 0300 060 4000

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

In the Future of Air Transport White Paper (2003), the Government set out its sustainable long-term strategy for the development of air travel to 2030. The Government continues to support emissions trading as one of the key instruments for addressing the impact of aviation on climate change because it helps to minimise mitigation costs. Government intervention is necessary to ensure that aviation is included in the EU Emissions Trading System (EU ETS) at the earliest possible opportunity so that emissions reductions can be achieved in the most efficient and cost-effective way. In March 2007, DfT and DEFRA undertook a consultation on the European Commission's legislative proposal to include aviation in the EU ETS.

What are the policy objectives and the intended effects?

Including aviation in the EU ETS is intended to achieve emissions reductions in the most 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 targets, and the need for aviation to play its part in achieving this goal.

What policy options have been considered? Please justify any preferred option.

Government made clear in the Future of Air Transport White Paper (2003) its commitment to ensuring aviation joins the EU ETS at the earliest opportunity. A two-stage process is being progressed. This IA considers the first stage of the Regulations that will transpose the Aviation Directive (2008/101/EC) into UK legislation. It will establish a framework for operators to apply for a free allocation of allowances and require operators to apply for an emissions plan and monitor and report their emissions. A second set of draft regulations will be consulted on later in 2009 that will transpose the Aviation Directive (2008/101/EC) in full.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? This is the final IA relating to the first stage of the Regulations to transpose the Aviation Directive (2008/101/EC). Government will monitor the identifiable and quantifiable costs and benefits referred to in this IA by working closely with the regulators. The costs and benefits of including aviation in the EU ETS will be looked at further in the IA which will accompany the second stage of the Regulations.

Ministerial Sign-off for implementation-stage Impact Assessment:

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:

David Kidney

.....Date: 25 August 2009

Summary: Analysis & Evidence

Policy Option: A

Description: First Stage Transposition of EU Legislation to Include Aviation in the European Union Emissions Trading System (EU ETS)

ANNUAL COSTS		<p>Description and scale of key monetised costs by 'main affected groups' Start-up costs will be incurred by Government and the regulatory bodies to 2012 and are estimated, over the three year period, at around £1.3 million. The total fees payable by aircraft operators that will be regulated by the UK to cover the additional operating costs that will be incurred by the regulatory bodies are estimated at around £0.7-1.4 million. This estimate of the total fees is included in the Total Cost (PV) below. However, a significant proportion of these fees will be payable by aircraft operators who are regulated by the UK but are from outside of the UK, and will not therefore count as a cost to the UK. This estimate is therefore an over-estimate of this monetised cost to the UK. The costs associated with the second stage regulations, which complete the full transposition of the Directive, will be assessed as part of the forthcoming Impact Assessment for the second stage regulations.</p>
One-off (Transition)	Yrs	
£ 0.6-0.9 million	3	
<p>Average Annual Cost (excluding one-off)</p> <p style="text-align: center;">£ -</p>		
Total Cost (PV)		£ 1.9-2.7 million
<p>Other key non-monetised costs by 'main affected groups' Aircraft operators will face additional compliance costs (e.g. administrative costs), which are uncertain (see Box A). Indicative estimates suggest that the total additional compliance costs for all aircraft operators that will be regulated by the UK could be of the order of around £6.2 to £10.7 million in the first year (including one-off costs) and around £2.7 to £6.2 million in ongoing annual operational costs in subsequent years. However, a significant proportion of these additional compliance costs will be incurred by aircraft operators who are regulated by the UK but are from outside of the UK, and will not therefore count as a cost to the UK.</p>		
ANNUAL BENEFITS		<p>Description and scale of key monetised benefits by 'main affected groups'</p> <p>The UK is transposing the Aviation Directive (2008/101/EC) in two parts. The key benefits of the first stage regulations (the subject of this Impact Assessment) are that they facilitate the delivery of the benefits of the full transposition of the Directive, in particular, the substantial carbon emissions savings. It is not possible to quantify the benefits that arise from this facilitation. However, the costs associated with the first stage of regulations need to be considered in the context of the overall costs and benefits arising from aviation joining the EU ETS. The assessment of the costs and benefits of the full transposition of the Directive is not yet complete but will be presented in the Impact Assessment for the second stage regulations; it is likely that the benefits resulting from the substantial carbon savings achieved will outweigh the costs.</p>
One-off	Yrs	
£ -		
<p>Average Annual Benefit (excluding one-off)</p> <p style="text-align: center;">£ -</p>		
Total Benefit (PV)		£ Not possible to monetise
<p>Other key non-monetised benefits by 'main affected groups' Benefits will arise from the requirement of aircraft operators to collect accurate emissions data. The regulations ensure fair and consistent treatment of regulated operators. They will help facilitate the efficient functioning of the EU ETS and contribute to the delivery of significant carbon savings. The net benefits including these carbon savings will be monetised in the Impact Assessment accompanying the second stage regulations.</p>		

Key Assumptions/Sensitivities/Risks Costs to the EA and CAA have been identified above. The compliance costs for aircraft operators that have not been monetised in this IA are very uncertain.

Price Base Year 2009	Time Period Years 3	Net Benefit Range (NPV) £ -		NET BENEFIT (NPV Best estimate) £ -	
What is the geographic coverage of the policy/option?				UK/EU	
On what date will the policy be implemented?				21 days after being laid before Parliament.	
Which organisation(s) will enforce the policy?				Environment Agency Scottish Environment Protection Agency Chief Inspector (Northern Ireland)	
What is the total annual cost of enforcement for these organisations?				£ -	
Does enforcement comply with Hampton principles?				Yes	
Will implementation go beyond minimum EU requirements?				No	
What is the value of the proposed offsetting measure per year?				£ -	
What is the value of changes in greenhouse gas emissions?				£ -	
Will the proposal have a significant impact on competition?				No	
Annual cost (£-£) per organisation (excluding one-off)		Micro	Small	Medium	Large
Are any of these organisations exempt?		Yes	No	N/A	N/A
Impact on Admin Burdens Baseline (2005 Prices)				(Increase - Decrease)	
Increase of £ Not possible to quantify.		Decrease of £ -		Net Impact £ Increase – Not possible to quantify	

Key:

Annual costs and benefits: Constant Prices

(Net) Present Value

Evidence Base (for summary sheets)

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1. Introduction

1.1 Background

1. 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 to enabling the EU to achieve both its stated goal of reducing emissions by 20% in 2020 compared to 1990 levels and its commitment to increase this target to 30% if an equivalent target is agreed by developed countries. The Stern Review (2006) stated the necessity of carbon pricing as a response to climate change and highlighted the benefits of using emissions trading as the principal policy mechanism for mitigation as it provides certainty over the level of emission reductions and delivers economically efficient outcomes.
2. To date, aviation as a sector has not been included within the EU ETS. In response to the global challenge of climate change, an increasing focus has been given to determining the most efficient and effective policies for reducing GHG emissions. The proposal to include aviation in the EU ETS is strongly supported by the UK Government, as made clear in the *Future of Air Transport White Paper* (2003) as it is seen as the most effective and cost efficient policy to ensure the aviation sector takes its share of responsibility for tackling climate change.
3. In September 2005, the European Commission adopted a Communication¹ which considered a variety of policies and instruments and concluded that in view of the likely future growth in air traffic, a new market-based instrument at Community level, such as an Emissions Trading System (ETS), was preferable to other financial measures.
4. Following the Communication, the European Commission committed to publishing a draft legislative proposal by the end of 2006 on including aviation in the EU ETS, and set up a series of technical working groups which considered the various detailed design options for the workings of the scheme. The European Commission published its legislative proposal in December 2006.
5. Elements of the aviation proposal were also opened for discussion as part of negotiations on the EU's 2020 Climate and Energy Package, but that negotiation concluded with no changes to the design elements of the ETS for the aviation sector out to 2013. As stated in Article 1(20) of the Aviation Directive (2008/101/EC), the European Commission will review the functioning of the Aviation Directive (2008/101/EC) by 1 December 2014 on the basis of monitoring, and the application of the Aviation Directive (2008/101/EC), and may make proposals to the European Parliament and the Council.

1.2 Purpose

6. Under the European Treaties the UK is required to transpose Directive 2008/101/EC into UK legislation. The purpose of this Impact Assessment is to consider the costs and benefits of the first part of the UK's implementation of the Directive.
7. The Aviation Directive (2008/101/EC) will be transposed into UK legislation in two parts. These Regulations will provide a framework for applications for a free allocation and place requirements on operators to apply for an emissions plan, monitor emissions and report those emissions to their regulator.
8. This Impact Assessment is published alongside the first part of the Regulations

¹ Document number COM(2005) 459 entitled Reducing the Climate Change Impact of Aviation, 2005

transposing the Aviation Directive (2008/101/EC) into UK legislation.

9. These regulations will be laid before Parliament shortly after the European Commission publishes a final list of aircraft operators in the Official Journal of the European Union (OJEU), and will come into force 21 days after being laid before Parliament.

Options identified and structure of the Impact Assessment

10. Member States considered a wide-range of design options for the aviation emissions trading scheme. These were subject to European wide negotiations, like any new European proposal, so the arrangements for aviation joining the EU ETS were appropriate and reflected the particular characteristics of the sector.
11. This Impact Assessment focuses only on those elements of the Aviation Directive (2008/101/EC) which the UK is transposing in the first part of the transposition. It will enable UK regulators to be established in time to receive applications for emissions and benchmarking plans from aircraft operators subject to UK regulation under the terms of the Aviation Directive (2008/101/EC) shortly after the European Commission publishes, in the Official Journal of the European Union (OJEU), a final list of aircraft operators identifying the respective administering Member State for each operator in accordance with its obligations under the Aviation Directive (2008/101/EC). A second set of draft regulations will be consulted on later in 2009 that will transpose the Aviation Directive (2008/101/EC) in full.
12. The European Commission published an Impact Assessment for their 2006 proposals, which formed the basis for agreement on the inclusion of aviation in the EU ETS. Subsequently, in March 2007 the Department for Transport and the Department for Environment, Food and Rural Affairs undertook a consultation on the European Commission's legislative proposal to include aviation in the EU ETS. This consultation was accompanied by a partial regulatory impact assessment, which looked at the key design options for the scheme and impacts of the scheme, including the proposed costs and benefits, the groups affected and the administrative burden on small businesses.

Baseline for analysis

13. Analysis in this Impact Assessment examines the first part of the Regulations transposing the Aviation Directive (2008/101/EC) into UK legislation. The baseline for assessment therefore assumes that aviation is not included in the EU ETS. Only the additional costs and benefits resulting from these particular regulations are presented.

1.3 Rationale for Government Intervention

14. As with other policies, the justification for government intervention is to address a market failure. In the particular context of aviation, the market failure is that the costs applied to aviation do not reflect the external cost of climate change imposed on others in society by the GHG emissions from this sector.
15. In keeping with the global growth in demand for air travel, emissions of CO₂ from aviation have tended to grow strongly over recent decades. At the global level, international aviation accounts for some 1.2% of total CO₂ emissions and domestic aviation a further 1.5%.
16. At the UK level, CO₂ emissions inventory shows that UK aviation – including both domestic and international departing flights – accounted for some 6.3% of UK total emissions in 2007.
17. The external costs of aviation have been estimated in “UK Air Passenger Demand and

CO₂ Forecasts” published by the Department for Transport on 15 January 2009. The DfT estimated that in 2005, the central estimate of (undiscounted) cost of CO₂ emissions was £1.6 billion (2006 prices).

1.4 Advantages of emissions trading

18. An ETS determines a market price of carbon, which can be tied to the specific environmental outcome that the market is created to deliver. A cap on emissions allowances is set for sectors, and within this operators can be allocated tradable allowances. Emissions above their allocation must be covered by purchasing allowances to cover these extra emissions from elsewhere (e.g. through government auctions).
19. An ETS introduces a direct cost, proportionate to the amount of carbon emitted. This encourages further efficiencies and incentivises good behaviours by the companies within the ETS i.e. costs are higher for those that emit more, so they have the incentive to be more efficient to reduce emissions. This therefore provides a monetary incentive for companies to develop their own strategies for managing their carbon dioxide (CO₂) emissions.
20. It is important that any ETS is open so that it includes different sectors that face different costs for reducing emissions. Those for whom abatement costs are lower will have more opportunities to reduce emissions, and would be able to sell any allowances they do not need on the market; these will be bought by those for whom abatement costs are higher than the price of allowances. The market should therefore establish a price of carbon that reflects abatement costs and hence true demand for allowances across all of the sectors covered by the ETS. This contrasts with a closed scheme which can constrain growth and be inflexible.
21. Emissions trading provides a cost-effective way of reducing carbon emissions while ensuring the continued capability of the industry to respond to the strong demand for air travel. If correctly designed, regional approaches can address competitive distortions as long as all operators, regardless of nationality, are treated equally.
22. The UK Government supports the Stern Review’s advice that trading may not provide a total solution for all sectors but is key to fixing a carbon price. A mix of economic measures is required. In view of this, we are continuing to explore the role of other economic instruments for tackling aviation’s climate change impacts.

2. Government and Public Consultation

Consultation within Government

23. Development of policy has taken place through the involvement of Departments with an interest. The Devolved Administrations have also been fully consulted on the implementation policy. Support for emissions trading is emphasised in the Future of Air Transport Progress Report (Cm 6977).

Public Consultation

24. A public consultation exercise was undertaken regarding the use of economic instruments to internalise the external costs of aviation in 2003. Representatives from industry, the expert community, environmental groups and public bodies were invited to comment through a series of workshops based upon the *Aviation and the Environment: Using Economic Instruments* paper (2003). This exercise informed the drafting of ‘The Future of Air Transport’ White Paper.

25. Further meetings with similar stakeholder groups were held in advance of the UK presidency of the European Union in 2005 and informed the UK Government's response to the European Commission's consultation on reducing the climate change impact of aviation². In general, emissions trading was seen as the most favourable option for an economic instrument by all groups with varying degrees of enthusiasm. Some respondents saw it as the best and only suitable option, whereas others regarded trading as one part of a range of actions.
26. In addition to ongoing informal contact with the aviation industry and Non-Governmental Organisations, we are continuing to engage with existing EU ETS sectors through the Emissions Trading Group and with Trade Unions through the Trade Union Sustainable Development Advisory Committee (TUSDAC). We have also had discussions with the Sustainability Alliance in order to include stakeholders from professional bodies.
27. At a European level the results of the European Commission's consultation³ exercise were broadly similar. The majority of respondents regarded emissions trading as the most attractive way to mitigate the climate change impact of aviation.
28. Following publication of the European Commission's proposal, the UK consulted on this proposal in March 2007. The consultation included a partial Impact Assessment. The documents and summary of responses are available on the DfT website.⁴
29. On 4 March 2009, the UK issued a consultation on the first stage of regulations to transpose the Aviation Directive (2008/101/EC) into UK legislation. The purpose of this consultation was to seek views on the first set of draft regulations to transpose the Aviation Directive (2008/101/EC) and stakeholders were asked 33 questions about their views on various aspects of the transposition. The consultation was accompanied by an earlier version of this Impact Assessment.
30. The consultation closed on 14 May 2009 and 42 responses were received in total. The largest number of responses came from aircraft operators and their representative organisations. Together they comprised just under two thirds of all respondents. Other industry groups represented included: airport operators, aircraft and parts manufacturers, and transportation providers. The remaining responses were submitted by central government organisations/agencies, service providers and other third parties with an interest in the system. The average response rate across all questions was about 60%.
31. These consultation responses have been fully considered in the process of finalising these regulations.

3. Scope of Impact Assessment

32. This Impact Assessment will cover only those regulations that are now being transposed into UK legislation. A further consultation process will take place before the end of this year on all remaining regulations to transpose the Aviation Directive (2008/101/EC). The consultation will be accompanied by an Impact Assessment.
33. The Aviation Directive (2008/101/EC), which amends the existing EU ETS Directive (2003/87/EC), was published in the Official Journal of the European Union on 13 January 2009⁵ and entered into force on 2 February 2009. In order to provide sufficient information

² For more details see: http://europa.eu.int/comm/environment/climat/aviation_en.htm

³ The Commission's report on public consultation can be found at

http://europa.eu.int/comm/environment/climat/aviation_en.htm

⁴ <http://www.dft.gov.uk/consultations/archive/2007/aviationemissionstrading/>

⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:008:0003:0021:EN:PDF>

for these Regulations to be understood in the appropriate context, it is first useful to set out the conceptual basis of the inclusion of aviation in the EU ETS.

34. To ensure that aviation plays its part in tackling climate change, aviation will be included in the EU ETS from 2012. Upon inclusion, allowances for aviation emissions of CO₂ will be capped and operators will need to surrender allowances equivalent to the volume of CO₂ emissions they produce. The cap of aviation allowances for 2012 is 97% of the average annual aviation CO₂ emissions in 2004, 2005 and 2006, and the cap of aviation allowances for 2013 is 95% of the average annual aviation CO₂ emissions in 2004, 2005 and 2006. It means any aviation emissions produced by aircraft operators above the level of these caps must be covered through the purchase of allowances; any surplus of allowances held can be sold on the carbon market. This mechanism ensures that overall aviation CO₂ emissions are capped and that reductions are made in the most cost effective and efficient way across all the sectors covered by the EU ETS.
35. Policy responsibility for aviation and emissions trading is shared between the Department for Transport (DfT) and the Department of Energy and Climate Change (DECC), who have responsibility for the wider EU ETS. The regulators (with support from the Civil Aviation Authority) in each part of the United Kingdom will be as follows:

England & Wales: The Environment Agency,

Scotland: The Scottish Environment Protection Agency

Northern Ireland: The Chief Inspector

4. Regulations subject to transposition

A. Application for free allocation – application for benchmarking plans and submission of data to the European Commission

36. Aviation allowances will be capped under the EU ETS. The level of the cap will equate to the volume of allowances added to the EU ETS as a result of aviation's inclusion, and these allowances must therefore be allocated. The allocation mechanism *per se* is not the subject of the regulations that are being transposed into UK law as part of this particular process; the mechanism itself is not therefore part of this Impact Assessment as it covers only the regulations to be transposed.
37. A proportion of allowances will be allocated free of charge. The allocation process will be carried out using a benchmarking methodology which allocates allowances in line with the proportion of each operator's share of the activity (total Tonne Kilometres⁶) of all operators in the scheme. This will be based on "benchmark" data⁷ submitted to the regulators prior to the trading phase.
38. Where an operator wishes to apply for an allocation of allowances that are to be allocated free of charge under Article 3e of the Aviation Directive (2008/101/EC), the operator must:

⁶ 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.

⁷ In order to become eligible for free allowances, 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 the calendar year 2010, they will monitor their total activity and have their activity data verified by a verifier who is approved by the relevant regulator. By 31 March 2011, they must submit their activity data verified by a verifier who is approved by the relevant regulator.

- (a) apply for a benchmarking plan by 31 December 2009 (however, the Regulations provide the regulators with discretion to submit reports of Tonne Kilometre data where late applications are received) and be issued with a benchmarking plan;
 - (b) monitor tonne-kilometre data in 2010; and
 - (c) report verified tonne-kilometre data.
39. An application for a benchmarking plan must include the specified information along with a fee of £830. The aircraft operator shall, in 2010, monitor tonne-kilometre data in accordance with its benchmarking plan and the Monitoring and Reporting Decision (2007/589/EC).
40. The collation, reporting and monitoring of information will impose a cost on operators, but will also permit the benefit of a free allocation of allowances.

B. Application for an emissions plan

41. An aircraft operator must apply to its regulator for an emissions plan within 8 weeks of these regulations coming into force or within 8 weeks of becoming an aircraft operator.
42. The application for an emissions plan should include a description of the method planned to monitor aviation emissions. This should be in accordance with the Monitoring and Reporting Decision. The plan must be accompanied by a fee of £750.

C. Monitoring and reporting of emissions

43. From the date it is issued an emissions plan, in each calendar year from 1 January 2010, an aircraft operator must monitor its aviation emissions in accordance with its emissions plan and the Monitoring and Reporting Decision. For the same period it must prepare a report of its aviation emissions that is in accordance with the Monitoring and Reporting Decision and Annex IV of the Aviation Directive (2008/101/EC). Following the monitoring year, an operator must submit verified emissions data to its regulator by 31 March each year.
44. This data will need to be verified by an accredited aviation verifier. The general principles and methodology on the verification of aviation emissions are set out in Annex V of the Aviation Directive (2008/101/EC).

D. Power of regulators to determine emissions

45. Where an aircraft operator fails to report aviation emissions by 31 March, its regulator shall determine the aviation emissions that the aircraft operator should have reported. There will be a fee attributed to making the determination on behalf of the operator. As under the existing EU ETS (Regulation 30 of the Greenhouse Gas Emissions Trading Scheme Regulations 2005), this will be based on the regulator's cost of undertaking such a determination.
46. However, if an operator submits a late but verified report before the regulator makes a determination, the regulator will use the emissions report for its determination.

E. Civil penalties

47. To ensure the effectiveness of the scheme, legal requirements in the form of regulations are placed on aircraft operators who fall within the remit of the EU ETS. Failure to comply with the regulations will result in some cases in the operators facing financial penalties. The amount of the civil penalty varies depending on which regulation is breached.

48. If an operator fails to apply for a benchmarking plan, setting out how they will monitor tonne-kilometre data, there will be no financial penalty since this is voluntary. However, the operator will not receive a free allocation of allowances if it fails to submit an application for a benchmarking plan.
49. In the case where the operator fails to apply for an emissions plan within 8 weeks of these regulations coming into force or within 8 weeks of becoming an aircraft operator, or fails to resubmit a rejected application for an emissions plan within 31 days of the date of the notice informing the operator their plan is rejected, civil penalties will be due as follows:
- a. For a failure before 1 January 2012, civil penalty of £500, applicable from the date of service of the notice imposing a civil penalty for the breach.
 - b. For a failure on or after 1 January 2012, civil penalty of £1500, applicable on a similar basis.
 - c. £50 for every day it is late, up to a maximum of 90 days for a failure before 1 January 2012 and £150 for every day it is late for a failure on or after 1 January 2012 (not restricted to working days), applicable from the date of the receipt of the notice. The penalty will cease when the operator is compliant (i.e. submits an application for an emissions plan).
 - d. At 90 days, the penalty is capped at the outstanding amount.
 - e. Normal civil proceedings for recovery of debt follow, but not before the service of a further notice and the effluxion of one month.
50. If the operator fails to monitor aviation emissions from 1 January 2010 in accordance with its emissions plan approved under Regulation 12 and the Monitoring and Reporting Decision, the following schedule of financial penalties will apply:
- a. Civil penalty of up to £500 will be due for a failure before 1 January 2012. Civil penalty of up to £1,500 will be due for a failure on or after 1 January 2012.
 - b. Up to £50 for every day following service of the notice for so long as the aircraft operator fails to monitor for a failure before 1 January 2012 and up to £150 for every day on or after 1 January 2012 (not restricted to working days). The penalty will cease accruing when the operator is compliant (i.e. begins to report aviation emissions).
 - c. At 90 days, the penalty is capped at the outstanding amount.
 - d. Normal civil proceedings for recovery of debt follow, but not before the service of a further notice and the effluxion of one month.
51. If the operator fails to submit verified emissions data in the form of a report from fuel burn figures by 31 March 2011 and every year thereafter whilst it is subject to the scheme, the following schedule of civil penalties will apply:
- a. Civil penalty of £1,250 for a failure before 1 January 2012, applicable from 1 April 2011. Civil penalty of £3,750 will be due for a failure on or after 1 January 2012, applicable from 1 January 2012.
 - b. £125 for every day it is late for a failure before 1 January 2012 and £375 for every day it is late for a failure on or after 1 January 2012 (not restricted to working days) applicable from the date of the receipt of the notice. The penalty will cease accruing when the operator is compliant (i.e. submits the verified emissions report).

- c. At 90 days, the penalty is capped at the outstanding amount and the regulator makes a determination of emissions (determination fee applies).
 - d. Normal civil proceedings for recovery of debt follow, but not before the service of a further notice and the effluxion of one month.
52. In the case where the operator does not comply with the specific requirements of the Monitoring and Reporting Decision as set out in the Regulations or does not comply with an information notice served on it by its regulator in the timeframe specified in the notice, it will incur the following financial penalties:
- a. Civil penalty of up to £500 will be due for a failure before 1 January 2012. Civil penalty of up to £1,500 will be due for a failure on or after 1 January 2012.
 - b. Up to £50 for every day of non compliance for a failure before 1 January 2012 and up to £150 for every day of non-compliance on or after 1 January 2012 (not restricted to working days) applicable from the date of service of the notice. The penalty will cease accruing when the operator is compliant (i.e. complies with the information required in the notice).
 - c. At 90 days, the penalty is capped at the outstanding amount.
 - d. Normal civil proceedings for recovery of debt follow, but not before the service of a further notice and the effluxion of one month.
53. In the case where an operator has misreported total activity data or emissions data in a verified emissions report or a benchmarking plan, it will incur a civil penalty of £1,000 for inaccurate reporting.
54. Where an operator is suspected to be committing fraud through the intentional misreporting or falsification of activity and emissions related records for financial gain, its regulator would notify the police and invite them to investigate with a view to possible prosecution, if appropriate.
55. Regulators have the ability to waive, modify, postpone or extend the deadline for payment of the civil penalties in limited circumstances.

F. Recovery of unpaid civil penalties

56. Where a civil penalty is not paid by the due date, regulators may take such steps as necessary to recover the amount owing after the due date for payment.

G. Detention and sale of aircraft for unpaid civil penalties

57. For breaches of regulatory requirements after 1 January 2012, where an aircraft operator has not paid a civil penalty within 6 months of the due date regulators may take such steps as are necessary to detain, pending payment, any aircraft of which the aircraft operator is the operator at the time when the detention begins.

H. Appeals

58. Aircraft operators have the right to appeal against most decisions by their regulators, including a refusal to submit the requisite report required for free allowances and the imposition of penalties.

I. Notices

59. Any notice served or given under these Regulations by an authority or regulator shall be in

writing or by electronic communication. Submissions to the regulators shall be sent electronically unless the regulator agrees otherwise.

J. Submission of plans

60. This is covered under A and B above.

K. Functions of the regulator: Northern Ireland

61. Any functions conferred or imposed by these Regulations on the Chief Inspector may be delegated by him to any inspector appointed under regulation 8(1) of the Northern Ireland Regulations.

5. Costs and Benefits

62. The costs and benefits of the regulations will be discussed in this section, placing monetary values on them where at all possible. It should be recognised that it is not always possible to place a monetary value on some of the costs and benefits; where this is the case a full qualitative description has been provided.

63. Given the scope of this Impact Assessment, and in particular, recognising that a further consultation process on the remaining regulations required to transpose the Aviation Directive (2008/101/EC) will be taken forward later this year, the assessment presented here relates only to the first set of regulations to transpose the Aviation Directive (2008/101/EC).

64. It is fully recognised that even if it is not possible to present a cost or benefit in monetary terms, it may still be relevant and should therefore taken into consideration.

5.1 Costs

Costs to Participants

65. These regulations will impose costs on the participants of the EU ETS. However, the UK is keen to ensure that any requirements placed on participants are kept to the minimum necessary to ensure the integrity of the scheme.

66. Given the costs incurred will be to ensure compliance with UK legislation it is inevitable that aircraft operators will need to invest in appropriate resources and plan ahead to meet these requirements.

67. As aviation will be included in the EU ETS, it would be expected that over time, some costs associated with these regulations will decline as aircraft operators increase the extent to which they are adept in fulfilling the requirements placed on them, and therefore increase their efficiency.

68. All aircraft operators who fall within the remit covered by the EU ETS and are allocated by the European Commission for regulation by the UK will be covered by these regulations, but they may not all experience the same level of cost. There are likely to be some aircraft operators for whom compliance with the regulations will be more costly. There could be several reasons for this, such as because they do not currently have mechanisms in place to provide the information required of them under the regulations; or because the regulations place a disproportionate administrative burden on them given their available resources.

69. On 5 August 2009, the European Commission adopted a list of aircraft operators that have

undertaken a relevant aviation activity on or after 1 January 2006, specifying the administering Member State for each aircraft operator. This is scheduled to be officially published on 22 August in the Official Journal of the European Union (OJEU). The European Commission's latest list suggests that, when aviation joins the EU ETS, around 890 current aircraft operators will initially be regulated by the UK, and will therefore be subject to these regulations. A preliminary version of this list was subject to a consultation exercise by the European Commission, which ended on 31 March 2009.

70. Full analysis has not yet been undertaken on how many of the circa 890 aircraft operators, which the European Commission's latest list suggests will be regulated by the UK, are from the UK. Initial analysis suggests that around 170 of these aircraft operators have a registered address or (in the case of private operators) a correspondence address in England, Wales, Scotland or Northern Ireland. However, this does not include, for example, companies with registered addresses outside the UK that are based in the UK and / or have aircraft based here. Therefore, the final number of aircraft operators from the UK that will be subject to these regulations is uncertain; however, based on the initial analysis of the European Commission's latest list, it is expected to be only a minority of the aircraft operators that will be regulated by the UK
71. Given the uncertainties surrounding the costs that aircraft operators will need to incur to comply with these regulations, the total costs to participants have not been fully monetised in this Impact Assessment. It is expected that there will be a significant variation in the total costs of compliance between aircraft operators as costs will depend on a variety of factors, including their size, activity and internal procedures.
72. However, some costs to aircraft operators have been monetised in this Impact Assessment where this has been possible, and are therefore included in the monetised costs in this impact assessment.
73. Aircraft operators will have to pay fees to the regulatory bodies under these regulations, which will cover the costs to the regulatory bodies of receiving, reviewing and approving benchmarking plans and emissions plans. There will be a £830 fee for applying for a benchmarking plan and a £750 fee for applying for an emissions plan. Assuming that around 890 aircraft operators will initially be regulated by the UK in line with the European Commission's latest list, the total fees would be between around £0.7 million (assuming that all of the circa 890 aircraft operators only apply for an emission plan) and around £1.4 million (assuming that all of the circa 890 aircraft operators apply for both a benchmarking plan and an emissions plan). However, a significant number of these aircraft operators will be from outside of the UK. Therefore, a significant proportion of these fees will be payable by aircraft operators from outside of the UK, and will not therefore count as a cost to the UK.
74. It is assumed that all of the fees payable by current aircraft operators will be incurred in the first year of the scheme as these are one-off fees under these regulations.
75. In addition, Box A includes indicative estimates that illustrate the likely order of magnitude of the costs to participants that have not been included in the monetised costs elsewhere in this Impact Assessment because aviation-specific evidence is not available.

Box A: Indicative estimates of the costs to participants that have not been included in the monetised costs elsewhere in this Impact Assessment

In addition to the costs to participants that have been monetised in this Impact Assessment (e.g. the fees that will be paid to the regulatory bodies by current aircraft operators), participants will incur additional costs as a result of these regulations (e.g. monitoring and reporting annual emissions). There is currently little evidence on the level of these costs that will be specific to aircraft operators, and so due to the uncertainty over these estimates, these impacts have not been monetised elsewhere in this Impact Assessment. We will seek to gather evidence on the costs to operators as part of the consultation on the remaining regulations which will transpose the Aviation Directive (2008/101/EC) into UK law.

Available survey evidence from a small sample of 37 operators in non-aviation sectors of the EU ETS⁸ has, however, been used to produce indicative estimates that illustrate the likely order of magnitude of the additional costs that could be incurred by aircraft operators as a result of these regulations. This survey evidence is the best source of data that is currently available for this purpose. The limitations of this evidence are described below, but we believe that it is valuable to demonstrate the order of magnitude of costs in the absence at this stage of aviation-specific cost data.

Aviation costs may differ from these estimates due to a variety of factors, including: the requirements being placed on aviation by these regulations being different to the requirements placed on the other sectors at the time they were surveyed; the size and type of operators being different from other sectors; and the information already held by operators being different from other sectors.

There is likely to be a range of compliance costs for aircraft operators within the aviation sector. In particular, the costs that are incurred by some aircraft operators may differ significantly from the costs that are incurred by other aircraft operators. For example, aircraft operators with large fleets may incur significantly different costs to aircraft operators with single aircraft.

In addition, the survey evidence is from 2006 and is based on a small sample size of 37 operators, representing 63 installations. Therefore, there is a risk that the responses received may not be representative of installations in non-aviation sectors of the EU ETS.

But, as stated above, the survey is considered to be the best available evidence and is a valuable source of information.

The estimates that follow in this Box exclude the costs to participants that have been monetised elsewhere in this Impact Assessment to avoid double counting. The following costs to participants are also excluded from these estimates because of the greater uncertainty over their likely values.

- Verification costs. The survey evidence does not include verification costs. Therefore, no data on these costs to be incurred by aircraft operators to comply with these regulations is currently available.
- Additional fees that will be paid to the regulatory bodies by new entrants. These costs are very uncertain because no evidence on the likely rates of new entrants that will be regulated by the UK is currently available.

Two scenarios are presented. The first presents indicative estimates of the costs that could be incurred in the first year (including one-off costs), and the second presents indicative estimates

⁸ Source: AEA Technology (2006) Costs of Compliance with the EU Emissions Trading Scheme. Report for the Environment Agency.

of the ongoing annual operational costs that could be incurred in subsequent years.

Indicative estimates that illustrate the likely order of magnitude of the total administrative costs of compliance that could be incurred in the first year (Note: the costs to participants that have been included in the monetised costs elsewhere in this Impact Assessment are excluded).

- The estimates of the ‘total administrative costs of compliance that could be incurred in a single year’ include both the ‘annual operational costs’ incurred by participants and the ‘one-off and voluntary costs’ incurred by participants. One-off costs include those costs associated with joining the scheme, and the setup costs of monitoring and management systems for non-aviation sectors of the EU ETS.⁸
- The survey evidence is for installations in non-aviation sectors in the first year of the EU ETS. For these installations, it is said that the one-off costs and much of the voluntary costs “would only be incurred in the first year of operation under the Scheme”, and that “only annual operational costs would be incurred” in later years of the scheme.⁸ The estimates below assume that this will also be the case for aviation.
- The survey evidence suggests that the ‘total annual administrative costs of compliance that could be incurred in a single year’ (including ‘one-off and voluntary costs’) could be of the order of magnitude of £7,000 to £12,000 for each installation in non-aviation sectors of the EU ETS on average.⁹
- The estimates below assume that the order of magnitude of these costs for an installation in non-aviation sectors of the EU ETS is the same as the order of magnitude of these costs for an aircraft operator.
- The European Commission’s latest list suggests that around 890 aircraft operators will be regulated by the UK (see paragraph 69).
- Assuming that around 890 aircraft operators will be regulated by the UK, and that all one-off and voluntary costs are incurred in a single year, the survey evidence therefore implies that the total administrative costs of compliance that could be incurred in a single year by all aircraft operators that will be regulated by the UK could be of the order of magnitude of £6.2 million to £10.7 million in a single year.
- However, because a significant number of these aircraft operators will be from outside of the UK, a significant proportion of these costs will be incurred by them and will not therefore count as a cost to the UK (see paragraph 70).

Indicative estimates that illustrate the likely order of magnitude of the ongoing annual operational costs that could be incurred by participants in subsequent years.

- The annual operational costs are defined as those costs that are “associated with ongoing activities to meet the administrative requirements of the EU ETS”.⁸ This excludes ‘one-off and voluntary costs’.¹⁰
- The survey evidence suggests that the annual operational costs for participants could be of the order of £3,000 to £7,000 for each installation in non-aviation sectors of the EU ETS on

⁹ AEAT (2006) estimates the average ‘total administrative costs of compliance that could be incurred in a single year’ (including ‘one-off and voluntary costs’) for a range of different sized emitters in non-aviation sectors of the core EU ETS at between £7,399 and £11,995 for each installation.

¹⁰ Voluntary costs are defined as the costs “associated with voluntary activities e.g. seminars attended to develop understanding but that are not deemed critical in complying with information obligations”.⁸ The survey evidence does not present voluntary costs separately from one-off costs.

¹¹ AEAT (2006) estimates the average ‘annual operational costs’ for a range of different sized emitters in non-aviation sectors of the core EU ETS at between £3,238 and £6,538 for each installation.

average.¹¹ This includes the administrative costs of annual emissions reporting, maintenance of monitoring and management systems, and other reporting requirements for installations in non-aviation sectors of the EU ETS.

- The estimates below assume that the order of magnitude of these costs for an installation in non-aviation sectors of the EU ETS is the same as the order of magnitude of these costs for an aircraft operator.
- The European Commission's latest list suggests that around 890 aircraft operators will be regulated by the UK (see paragraph 69).
- Assuming that around 890 aircraft operators will be regulated by the UK, the survey evidence therefore implies that the total annual operational costs for all aircraft operators that will be regulated by the UK could be of the order of £2.7 million to £6.2 million each year.
- However, because a significant number of these aircraft operators will be from outside of the UK, a significant proportion of these costs will be incurred by them and will not therefore count as a cost to the UK (see paragraph 70).

Therefore, the indicative estimates suggest that the administrative costs for all of the aircraft operators that will be regulated by the UK could be of the order of £6.2 to £10.7 million in the first year (including one-off costs) and of the order of £2.7 million to £6.2 million in ongoing annual operational costs in subsequent years. However, because a significant number of these aircraft operators will be from outside of the UK, a significant proportion of these costs will be incurred by them and will not therefore count as a cost to the UK.

We will seek to gather more information and evidence from aircraft operators on the compliance costs in due course.

76. A detailed qualitative discussion of the different costs to participants as a result of these regulations follows.
77. Costs that aircraft operators will incur as a result of the inclusion of aviation in the EU ETS – but which will not be incurred as a result of these regulations – are excluded from the scope of this Impact Assessment. For example, aircraft operators will not be required to pay the annual subsistence charges that are payable by EU ETS permit holders as a result of these regulations. These costs will be considered in the Impact Assessment that accompanies the second set of draft regulations to transpose the Aviation Directive (2008/101/EC) in full, which will be consulted on later in 2009.

Application for free allocation – submission and approval of benchmarking plans and submission of data to the European Commission

78. It will be necessary for the operators to collate accurate and verifiable data of their activity and report it in the required format at the appropriate time. This will require resources. The costs this imposes on operators 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.
79. There are no financial penalties if the application is not submitted, but the operator will not be awarded any free allowances, which it may have to buy at an unknown cost in the future. This cost would be dependent on the volume of allowances bought and the market price at the time of purchase.
80. In addition, the regulators will charge those operators they regulate £830 for approving

benchmarking plans. This cost will be a one-off charge.

81. Given the costs involved, for those very small operators who have relatively low levels of emissions, and therefore will not be required to purchase many allowances for compliance, they may find the administrative costs of this application an ineffective use of resources. It may be judged that for some, the costs of application outweigh the benefit of the small free allocation they would receive.

Application for an emissions plan

82. It will be necessary for an application for an emissions plan to include a description of the measures which are planned to monitor the emissions from its aviation activity in accordance with the Monitoring and Reporting Decision. The costs this imposes on operators 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. Where this is the case, the costs would be likely to be higher.
83. When operators apply for an emissions plan to their regulator, they will be required to pay a fee of £750 to cover the handling administration costs.

Monitoring and reporting of emissions

84. It will be necessary for the operators to collate accurate and verifiable data of their activity and report it after independent verification in the required format at the appropriate time. This will require appropriate monitoring systems to be put in place and will therefore require resources. The costs this imposes on operators 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. Where this is the case, the costs would be likely to be higher.
85. Verification of emissions will also impose a cost on the operator. Verifiers charge a fee for their services which varies between verifiers but is generally based on a daily rate. The UK Accreditation Service (UKAS) will have overall scrutiny on the role of the verifiers but will not regulate fees.

Civil penalties

86. Where regulations are complied with, no civil penalty will be imposed.
87. For those operators who do not comply with the regulations then a range of costs could be incurred depending on the nature and duration of the non-compliance.
88. The penalty charges that would be imposed on aircraft operators for non-compliance should be effective, dissuasive and proportionate. In particular, the total penalty charge that would be imposed on an aircraft operator for a failure to comply with these regulations must be sufficiently in excess of the costs of compliance to incentivise aircraft operators to comply with these regulations.
89. In determining the appropriate penalty charges, estimates of the average costs of compliance in non-aviation sectors in the core ETS have been considered (these are from the same survey as referred to in Box A). Although the costs of compliance for aircraft operators could differ from these estimates, they are a valuable source of evidence on the order of magnitude of potential compliance costs.
90. The penalty charges included in these regulations have been designed so as to provide a sufficient incentive for all aircraft operators to comply with these regulations. UK Government will keep the penalty charges under review to ensure that they remain

effective, dissuasive and proportionate.

91. The penalty charges are lower before 1 January, but they have been set at such a level so as to ensure they are effective, dissuasive and proportionate. 2012 breaches are less serious and so lesser penalties are appropriate to be imposed upon aircraft operators for non-compliance with the aviation EU ETS. In this period a breach of the regulations would not have a material impact on the EU ETS.
92. To illustrate how the charges may work a couple of scenarios are useful to consider.
93. Firstly, for a failure on or after 1 January 2012, an operator who is late applying for an emissions plan will incur a financial penalty of £1,500 plus £150 for each day that it is late following receipt of the notice. Assuming the notice was received immediately, and the application is a month late and is therefore 30 days overdue, then the total financial penalty would be £6,000.
94. To ensure that the financial penalties are proportionate and do not accumulate indefinitely, a cap of 90 days is applied for certain civil penalties, meaning that the maximum financial penalty for this delay would be £15,000 assuming the operator had not complied before this time. From this point on, usual debt recovery proceedings undertaken by the regulators would follow after the one month notice period has expired.
95. Secondly, for a failure on or after 1 January 2012, if verified emissions data is not submitted on time or at all, then a financial penalty would again be due. An operator who is late submitting emissions data will incur a financial penalty of £3,750 plus £375 for each day that it is late following receipt of the notice.
96. Assuming the notice was received immediately, if 30 days is reached then the financial penalty due would be £15,000. After 90 days, the financial penalty would be capped at the outstanding amount of £37,500 for this civil penalty alone if the operator was still in non-compliance. If the operator does not pay the penalty the usual debt recovery proceedings undertaken by the regulators would follow after the due date for the penalty has passed.
97. Thirdly, if data is reported on activity and emissions, then a fee is due of £1,000 for inaccurate reporting.

Detention and sale of aircraft for unpaid civil penalties

98. The costs imposed from this regulation would only occur for non-compliance. They would vary significantly depending on the aircraft seized, length of detention and the nature and duration of any legal proceedings.

Appeals

99. The costs to operators would only be incurred in the case of an appeal (i.e. not in the normal course of business).

Costs to Government and the regulatory bodies

100. The estimated costs to Government and regulatory bodies are likely to predominantly be administrative. Efficiencies would be sought by those bodies to ensure their roles are carried out robustly but at least cost.
101. The regulators will have a range of duties, with some potentially significant set up costs. The Environment Agency of England and Wales (EA) will be responsible for regulating the majority of UK regulatees and will also operate the registry system for all UK regulatees. The EA will therefore incur the vast majority of set up costs. Estimates of the total project

start up costs for the Environment Agency of England and Wales and the Civil Aviation Authority have been recently reviewed and are now estimated to be the following:

	2009-10	2010-11	2011-12
Civil Aviation Authority	0.13 million	0.05 million	0.05 million
Environment Agency	0.62 million	0.39 million	0.03 million
Total (£)	0.75 million	0.44 million	0.08 million

102. The above estimates indicate that total set up costs will be around £1.3 million. Discounted these costs amount to around £1.2 million over the three year period. However, the above estimates exclude set up costs for the Scottish Environment Protection Agency and Chief Inspector (Northern Ireland), which are expected to be a small percentage of the EA and CAA set up costs.
103. The costs to regulatory bodies of receiving, reviewing and approving benchmarking plans and emissions plans are expected to be covered by the fees that will be paid by aircraft operators. These costs are therefore not monetised in this Impact Assessment to avoid double counting.
104. There may also be additional costs for the regulatory bodies that will not be covered by the fees that will be payable by aircraft operators. For example, there may potentially be enforcement costs. However, there is no evidence on these costs. These costs are therefore not included in the monetised costs in this Impact Assessment.

5.2 Benefits

105. There is a range of benefits that will flow from these regulations.
106. The key benefits of these regulations are that they facilitate the delivery of the benefits of the full transposition of the Aviation Directive (2008/101/EC); without these regulations, the benefits of full transposition cannot be realised. Full transposition is expected to result in significant CO₂ savings. Although the benefits of the first stage regulations cannot be monetised, the Impact Assessment for the second stage regulations, which completes the full transposition of the Aviation Directive (2008/101/EC), will assess and monetise the benefits of the full transposition.
107. When compared to the base case in which aviation is not included in the EU ETS, there are also likely to be benefits from the requirement to collect consistent emissions information and to focus on the environmental impact of their emissions. Operators will be more environmentally aware and therefore be able to more readily identify potential emissions efficiencies (i.e. where fuel – which is directly related to emissions – can be saved etc). There may also be benefits from the perception of participants being corporately responsible in terms of their environmental performance.
108. There are also benefits in the form of appropriate and proportionate enforcement of regulations, resulting in the fair and consistent treatment of all regulated operators.
109. The regulation will help to ensure that the EU ETS functions efficiently as a result of well-defined systems and practices. The financial penalties will help ensure compliance and credibility in the scheme. The overarching benefits will come with the full inclusion of aviation within the EU ETS. An Impact Assessment accompanying the second stage regulations will explore the costs and benefits associated with Aviation entering the EU ETS. This will compare the costs associated with Aviation entering the EU ETS against the

benefits of carbon savings associated with the Aviation emissions cap. Although the analysis for this second stage of the regulations is not yet complete, it is likely there will be net benefits resulting from the substantial carbon savings achieved. The analysis will use a similar approach as for the April 2009 Impact Assessment for the EU Climate and Energy Package¹², which showed a range of net benefits of -£11.4bn to +£221.5bn to the UK.

6. Specific Impact Tests

6.1 Small Firms Impact Test

110. The Impact Assessment Guidance states that any new proposal that imposes or reduces the cost on business requires a Small Firms Impact Assessment Test. Assessment of the potential impact of the inclusion of aviation within the EU ETS on small emitter operators has relied on the Department for Business Enterprise and Regulatory Reform's *Small Firms Impact Test: Guidance for Policymakers* (Jan 2009). The costs and benefits of these regulations are likely to vary across aircraft operators; however, ongoing engagement with stakeholders should help ensure that no disproportionate costs or benefits arise.
111. Aircraft operators operating fewer than 243 flights per period for three consecutive four-month periods and aircraft operators operating flights with total annual emissions lower than 10 000 tonnes CO₂ per year are considered small emitters. Commercial small emitters will be exempt from the EU ETS. There are also simplified procedures for those small emitters that are not exempt from the EU ETS.
112. In addition, flights performed by aircraft with a certified maximum take-off mass of less than 5,700kg will be exempt from the EU ETS.¹³
113. A competition assessment is provided in Annex A; this will be expanded upon in the second Impact Assessment later this year.

6.2 Race/Disability/Gender Equality

114. In line with the Department's Guidance on Equalities, we have applied various filters on race, disability and gender. We have found no evidence on impacts on race/disability/gender equality to warrant a full Equalities Assessment.

6.3 Human Rights

115. The proposals include provisions allowing 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).
116. The imposition of civil penalties on regulated bodies for breach of regulatory requirements is not unusual. The penalties will need to be reasonable. There will be a right of appeal against the imposition and/or amount of any penalty imposed by a regulator to (as appropriate) the relevant authority – namely the Secretary of State, the Welsh Ministers, the Scottish Ministers and the Planning Appeals Commission. The appellate body will be empowered, inter alia, to quash the penalty imposed or substitute a lesser sum. This will provide appropriate right of access to an independent and impartial tribunal.

¹² Available online at:

http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/carbon_budgets/carbon_budgets.aspx.

¹³ A full list of exemptions can be found in Annex I of the Directive (2008/101/EC), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:008:0003:01:EN:HTML>.

117. 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. Further, the exercise of the power of detention is subject to judicial review and no aeroplane may be sold without the leave of the court.

Specific Impact Tests: Checklist

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	No	Yes
Small Firms Impact Test	Yes	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	No	No

Annex A Competition Assessment

Potential implications for competition

1. When compared to the base case, where aviation is not included in the EU ETS, the regulations (set out in the Impact Assessment - Chapter 4, sections A-K) will impose additional costs to airline operators covered by the scheme. The potential implications of these regulations on competition are presented in this assessment.

Affected Markets

2. This section identifies the markets that may be affected by the regulation set out in this Impact Assessment. It briefly identifies the markets that might be affected, their size and level of segmentation.
3. All flights departing from or arriving at an airport situated within the EU will be covered by the EU Emissions Trading Scheme. However, there are several exemptions.
4. Aircraft operators operating fewer than 243 flights per period for three consecutive four-month periods and aircraft operators operating flights with total annual emissions lower than 10 000 tonnes CO₂ per year are considered small emitters. Commercial small emitters will be exempt from the EU ETS.
5. In addition, flights performed by aircraft with a certified Maximum take-off mass of less than 5,700kg will be exempt from the EU ETS.¹⁴

Primary Market

Market Identification

5. The primary market that may be affected by the implementation of regulations will be all those aircraft operators allocated for regulation by UK Government, although all airlines covered by the EU ETS will face similar monitoring and reporting procedures and costs.

Market size and segmentation

6. The Aviation Directive (2008/101/EC) states that an operator with a valid operating licence granted by the UK will be allocated for regulation to the UK. All other operators, including those from outside the EU will be regulated by the Member State with the greatest estimated attributed emissions from flights performed by that aircraft operator in 2006, or for an operator who began operations after 2006, the first calendar year in which they began operating. The European Commission has published a draft list showing which aircraft operators are to be allocated to which EU member states. Following a period of

¹⁴ A full list of exemptions can be found in Annex I of the Directive (2008/101/EC), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:008:0003:01:EN:HTML>.

consultation, this list will be finalised during 2009, and is therefore only draft at this stage and thus subject to change.

Secondary Market

Market Identification

7. The secondary market can be identified as air passengers who may be affected by cost increases (if airline operators' pass-through increases to ticket prices).

Market Size and Segmentation

8. All passengers who fly to or from an EU airport may be affected if airlines pass the costs of complying with the regulations through to fares.

Competition Impact

9. In line with the OFT Competition Assessment Guidance (2007), the impact of regulation and monitoring procedures on each of the markets identified has been taken into account by addressing four key questions, relative to the base case (aviation not included in the EU ETS).

Direct limits on the number of suppliers?

10. This criterion assesses the extent to which the regulations would directly limit or increase the number of suppliers in the market. This may happen if the regulation were to have any of the following features:
 - the award of exclusive right to supply; or
 - procurement from a single supplier or restricted group of suppliers; or
 - the creation of a form of licensing scheme; or
 - a fixed limit (quota) on the number of suppliers.
11. None of the monitoring and reporting procedures would appear to have elements within them that would directly limit or increase the number of suppliers.

Indirect limits on the number of suppliers?

12. This criterion assesses the extent to which the regulations would indirectly limit or increase the number of suppliers in the market. This may happen if the regulation increased or reduced the costs (relative to the base case) of:
 - new suppliers relative to existing suppliers;
 - some existing suppliers relative to others; or
 - entering or exiting an affected market.
13. New entrants will be subject to these regulations.
14. The extent to which there might be indirect impacts on suppliers would depend on the prevailing conditions in primary and secondary markets.

Potential Anti-competitive effects

15. Some existing suppliers may be affected relative to others; compliance may entail different costs depending on the size of the firm and the administration burden relative to the resources available. Smaller non-commercial airlines may be affected more due to the higher relative cost imposed through regulations. However, simplified procedures have been introduced for small emitters.
16. The regulations will impose additional costs to aircraft operators. The level of pass-through to passengers is difficult to predict due to differences in the size of airline operators and business models. The competitiveness effects of aviation's inclusion will be considered in more depth in the second Impact Assessment expected later this year.
17. Competition effects may also be evident if the cost to operators as a result of being regulated by the UK vary significantly from those costs under alternative member state regulation. Given that the civil penalties have been designed to be effective, dissuasive and proportionate, there should be no undue competition effect – and these costs will not be faced if the aircraft operator is in compliance. More generally, the costs of complying with the regulations in the UK would not be expected to vary significantly from the costs if regulated by other Member States.
17. Where airlines are in competition with international operators, who are not covered by the EU ETS, competitive distortions may arise. The Government has undertaken work with a number of UK-based airlines to increase its understanding of any possible competitive distortions that may arise. Further information on this work is available upon request, from:

EU ETS Aviation Team
Department of Energy and Climate Change (DECC)
3-8 Whitehall Place
London SW1A 2HD
Email: eu.ets@decc.gsi.gov.uk

Telephone queries should be directed to:
DECC 0300 068 5277
DfT 0207 944 3230

Limits on the ability of suppliers to compete

18. This criterion assesses the extent to which regulations might limit or increase the ability of suppliers to compete. This is likely to be the case if they control or substantially influence:
 - the price(s) a supplier may charge;
 - the characteristics of the product(s) supplied;
 - innovation to introduce new products or supply existing products in new ways;
 - the sales channels a supplier can use, or the geographic area in which a supplier can operate;
 - the ability of suppliers to advertise their products; or
 - the suppliers' freedom to organise their own production processes or their choice of organisational form

Limits on the incentive of suppliers to compete

19. This criterion assesses the extent to which regulations would reduce or increase suppliers' incentives to compete vigorously. This is likely to be the case if regulations lead to the following:
 - exempts suppliers from general competition law;
 - introduces or amends intellectual property regime;
 - requires or encourages the exchange between suppliers, or publication of information on prices, costs, sales or outputs; or
 - increases the costs to customers of switching between suppliers.
20. Assessing these factors, it can be concluded that the regulations are unlikely to limit the incentive of suppliers to compete.

Conclusions

21. The competition assessment has sought to provide an overview of the potential impacts of the regulations on the primary and secondary markets indicated.
22. We have relied in OFT Competition Assessment Guidance (August 2007) to address four key questions: direct impacts on number of suppliers; indirect impacts on number of suppliers; ability of suppliers to compete; and, incentives of suppliers to compete.
23. From this competition assessment it can be concluded that the specific regulations discussed within this Impact Assessment should not have a significant effect upon competition. The second Impact Assessment (expected later this year) will address the wider competitiveness impacts of aviation's inclusion within the EU ETS.

UNITED KINGDOM

TRANSPOSITION NOTE

Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community ('the Aviation Directive')

<u>Article</u>	<u>Information on implementation</u>
	<p>The Directive will be transposed in the United Kingdom in two statutory instruments. The Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2009 ('the 2009 Regulations') will transpose parts of the Aviation Directive ahead of the transposition deadline of 2 February 2010. This early transposition is in accordance with Commission Decision 2007/589/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council. The remainder of the Aviation Directive will be transposed in a further statutory instrument and a transposition note setting out how the Aviation Directive is transposed in full will accompany that statutory instrument.</p>
1(1), (2)	{Scope}
1(3)	The necessary definitions for the 2009 Regulations are set out in regulation 2.
1(4) to (22)	<p>This Article amends Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowances trading within the Community ('the EU ETS Directive'). The Article amends the EU ETS Directive by inserting several new Articles in the EU ETS Directive. References to the new Articles in the EU ETS Directive that are required for transposition in the 2009 Regulations and how they are transposed are set out below:</p> <ul style="list-style-type: none">- <i>Article 3e EU ETS Directive</i>: this is transposed in Part 2 of the 2009 Regulations. This Part provides for operators that wish to apply for a free allocation of allowances to do so where they comply with the criteria in the Part.- <i>Article 3g EU ETS Directive</i>: this is transposed in regulations 14 and 15 of the 2009 Regulations. These regulations require aircraft operators to apply for a plan and provides for the regulators issuing the plan to aircraft operators.- <i>Article 14(3) EU ETS Directive</i>: this is transposed in regulations 16 and 17 of the 2009 Regulations, which require aircraft operators to monitor and report emissions.- <i>Article 15 EU ETS Directive</i>: this is transposed in regulation 17, which requires that a report of emissions must be verified in accordance with Annex V of the EU ETS Directive.- <i>Article 18a EU ETS Directive</i>: this is transposed in regulation 3 of the 2009 Regulations, which provides that only aircraft operators allocated to the UK on a list produced by the Commission fall under the 2009 Regulations.- <i>Article 25a EU ETS Directive</i>: this is transposed in the way that aircraft operators fall under UK regulation. To do so they must perform an activity set out in Annex I of the EU ETS Directive. If Annex I is amended under Article 25a of the EU ETS Directive to exclude an activity any operator performing that activity will automatically fall outside of the 2009 Regulations.