

SASIG RESPONSE TO CIVIL AVIATION AUTHORITY (CAA) CONSULTATION ON THEIR ENVIRONMENTAL ROLE

Executive Summary

- 1 SASIG considers that were the Civil Aviation Authority (CAA) to take on a greater environmental role, this must be in the form of comprehensive assessment of environmental impacts from aviation activity.
- 2 The CAA should not only be considering users but also those affected by airport operations – on the ground as well as in the air. Airport activities have a profound effect over a far wider geographic area than currently assumed – for noise impacts, air pollution impacts, land-use implications and impacts on surface access operations.
- 3 An agreed SASIG 'Policy Principle' is to "support the coordination and integration of the full spectrum of national policies on issues relating to aviation"¹. SASIG welcomes development of a CAA programme office focusing on broad environmental impacts of aviation. SASIG believes this will assist in ensuring that the CAA's approach is consistent with Government policy.
- 4 The current emphasis on environmental matters in relation to safety and capacity perpetuates substandard treatment of environmental matters as third tier considerations to be addressed in terms of mitigation. Environmental gains should be made even where changes would not necessarily yield capacity gains, assuming safe operations in all instances.
- 5 SASIG welcomes the CAA's commitment to facilitating discussion, and providing evidence and objective views to inform debate. The CAA should seek to use the relationship it has with the aviation industry to influence and encourage alterations to operational procedures and technological developments that will result in improvements to the sector's environmental performance. The CAA's facilitative role, along with development of its environmental evidence base, give it the opportunity to identify the full environmental impacts of technologies being developed by the industry, such as biofuels, and ensure these are fully considered.
- 6 The CAA's assessment of the likely cost implications of further embedding environmental criteria in their work programme is welcomed. In accordance with the 'polluter pays principle', and as recommended by Sir Joseph Pilling in his review of the CAA, it is right that suppliers and users of the service accommodate these costs - albeit this needs to be achieved in a proportionate manner to ensure viability for a range of services.
- 7 SASIG recommends that regulated aviation charges be used to mitigate the adverse effects of aviation activity.

¹ SASIG Policy Principles (June 2010) <http://www.sasig.org.uk/>

- 8 In terms of building links with other regulators and learning from environmental best practice, SASIG suggests that the CAA should in particular build relationships with the Department for Environment, Food and Rural Affairs (Defra) and their noise policy team who have produced research on health² and productivity³ impacts of noise.
- 9 The CAA's 'Insight Note' on the environment raises a number of important issues that the Government should consider in developing a national framework for aviation. However, the Government as well as the CAA must also consider the noise impacts on populations not only in the immediate vicinity of airports but also communities further away from airports where averaged noise contours indicate actual noise levels as lower, however, annoyance levels may be higher.
- 10 SASIG encourages the CAA to pursue and adopt supplementary metrics in the assessment of noise impacts, working alongside other stakeholders.
- 11 SASIG regards the establishment of an environmental programme office within the CAA as a positive opportunity for the coordination and supply of environmental research and evidence for all stakeholders.
- 12 The addition of an environmental role – if implemented adequately, as set out in this submission – should be a valuable addition to the regulatory landscape as this would support the Sustainable Development Commission's 5-pronged definition of sustainable development in the aviation sector.
- 13 Should the CAA take on additional regulatory responsibilities these must be adequately resourced, be an integral function of the regulator, and be implemented on an equal footing with existing duties.
- 14 SASIG agrees that the CAA should support international initiatives to reduce climate change emissions through measures such as the EU emissions trading scheme (ETS), leading ultimately to a scheme that achieves actual emissions reductions, on a global scale.
- 15 SASIG welcomes the CAA's commitment to research biofuels further particularly as serious concerns have been raised about the impact on future land use, competition with food production and impacts from deforestation. SASIG recommends that research be undertaken into the full lifecycle impacts of biofuels

² 'Quantifying the links between health effects and environmental noise related hypertension' - NO0232 Department for Environment, Food & Rural Affairs (Defra) (2012) <http://randd.defra.gov.uk/Document.aspx?Document=NO0232finalreport.pdf>

³ 'Estimating the productivity impacts of noise' - NO0233 Department for Environment, Food & Rural Affairs (Defra) (2012) [http://randd.defra.gov.uk/Document.aspx?Document=ProductivityImpactsOfNoise-FinalReport\(Feb2012\).pdf](http://randd.defra.gov.uk/Document.aspx?Document=ProductivityImpactsOfNoise-FinalReport(Feb2012).pdf)

- 16 The CAA's draft environmental strategy supports capacity increases in the aviation sector. SASIG supports aviation capacity increases where existing inadequate operations and conditions can and have been improved to an acceptable level, and where increased activity (i) embeds the application of acceptable thresholds addressing the negative impacts, and (ii) comes into effect after essential supporting measures are in place: surface access provision; up-front mitigation & compensation funding to address blight and pollution impacts; availability of land/property for associated uses in the form of businesses, housing and community provision. The projected economic gains of an increase in aviation capacity are jeopardised by the lack of such provision; an effective environmental strategy, in concert with a comprehensive economic evaluation, can inform the assessment and provision of increased capacity in order to actually capture the projected gains.

Consultation question 1):

Do you think we have identified our strategic fit and our relationship to the environment debate correctly? (See pages 7-15 of the consultation document)

- 17 SASIG recognises the CAA has expertise in certain key areas, and agrees that focus must be maintained on the core role of a regulator. The existing requirement for the CAA to promote aviation would need to be re-framed if the regulator were to also take on an effective environmental role.
- 18 Aviation activities have profound effects over a far wider geographic area than currently assumed or recognised – in terms of noise & air pollution impacts, land-use implications, and surface access operations, and these must be reflected in any greater environmental role that the CAA may take on.
- 19 SASIG welcomes recognition of the need to better mitigate existing environmental impacts on communities.
- 20 SASIG recognises the CAA's role in negotiations at the European and international levels. The inclusion of aviation in the European Union Emissions Trading Scheme (EU ETS) is an important development in regulating carbon emissions from the industry. However, no mechanism has yet been developed to achieve actual emissions reductions, and this needs to be the case.
- 21 SASIG recommends that the CAA should have direct participation in the relevant International Civil Aviation Organisation (ICAO) working group to influence development of a carbon dioxide (CO₂) certification standard for aircraft. This is notwithstanding the fact that technological gains are traditionally over-estimated by the industry, and marginally effective at achieving emissions reductions – be that carbon dioxide, other greenhouse gases, or noise – which is partly due to the level of activity in the sector.
- 22 In developing a long-term, overarching environmental strategy, addressing global environmental issues such as climate change, the CAA must not preclude assessment and application of measures that would provide improved conditions for existing communities, in terms of reducing noise and improving local air quality.

Consultation question 2):

Does the CAA's proposed approach to environmental issues reflect your impression of our capability and role? (See pages 11-15 of the consultation document)

- 23 SASIG broadly agrees that the approach set out reflects the CAA's capability and role. SASIG agrees the CAA has a key role in evidence gathering, review and reporting on the environmental impacts of the aviation sector.
- 24 It is appropriate that the CAA has a consumer protection role – if this is to be added to with an effective environmental role, the CAA must take equal account of not only users of aviation services, but also those affected by the provision of such services.
- 25 The CAA's work on noise and air quality will in turn be useful for land use considerations, illustrating the relationship between airports and their physical surroundings.
- 26 The CAA should use its expertise to ensure environmental evidence is up to date and relevant.
- 27 SASIG considers that the CAA is an appropriate party to have direct participation in the relevant International Civil Aviation Organisation (ICAO) working group to influence development of a carbon dioxide (CO₂) certification standard for aircraft, and should therefore continue its work in this area.
- 28 An aircraft CO₂ emissions standard is a mechanism that could provide incentives for industry stakeholders to improve aircraft fuel efficiency through the implementation of new airframe and engine technology. As the UK's aviation regulator the CAA should be directly contributing its expertise to the development of the standard.
- 29 This must not, however, preclude operational measures focused on noise management – the first and last sections of each flight, i.e. sections closest to populated areas, should be operationally optimised for noise reduction. In the 'Key commitments' section of the consultation document (p.15), noise reduction rather than fuel efficiency should be the driving force for implementing standards that optimise departure procedures.

Consultation question 3): In terms of the proposed future activities, desired outcomes and interim markers (p.16-44)

(a) Do you agree with the scope and focus of our proposed workplan?

(b) What do you perceive to be the key benefits from the CAA developing its environmental work?

(c) Are there more areas that we have not identified where you think the CAA could be more active?

- 30 SASIG sees development of a CAA environmental programme office as an opportunity for the CAA to coordinate and drive forward research on noise, air quality and climate change impacts in a positive way.

- 31 The CAA's 'Environmental Strategy' work area should not only review and report on the environmental impacts across the sector but should also seek to drive forward environmental initiatives as part of a proactive approach to reducing environmental impacts from aviation. The CAA's environment programme office could be pivotal in this respect.
- 32 SASIG suggests that improving links with other bodies, for instance the Department for Environment, Food & Rural Affairs (Defra), will be important for the CAA in providing a high-quality evidence base for topics such as noise and air quality.
- 33 The CAA should be more proactive in developing and applying threshold limits for noise, local air quality and climate change impacts, and cease to perpetuate the concept of 'trade-offs'.
- 34 The focus of working through the Department for Transport's Aircraft Noise Monitoring Advisory Committee (ANMAC) is insufficient, for the following reasons:
- only 3 of the countries' airports are addressed;
 - the group meets too infrequently; and
 - Minutes/notes from the meetings are supplied too late after meetings to be of use.
- 35 The CAA should be more proactive in acquiring and applying research on noise impacts, looking beyond the 3 airports designated for noise control purposes.
- 36 In seeking to provide greater information and transparency, the CAA should consider the impacts of night flights, the impacts of a night flight ban, and the wider geographical impacts of noise, that go beyond the immediate vicinity of airports and areas covered by aviation noise modelling.
- 37 The CAA should move away from sole reliance on averaged noise contours, as although these measures can be quoted as indicating an improvement in the noise climate – reduced area covered, and reduced number of people within a set contour – they do not represent the actual extent of the population who are severely affected by aviation noise.
- 38 It is disingenuous to not put into the fuller context of communities some distance from airports being negatively impacted by aviation noise the statement that "aviation noise is a local issue, centred on neighbourhoods around airports"⁴. This approach calls into question the value of the CAA being handed responsibility for greater environmental role, only for the CAA to then be found lacking in meeting that responsibility.

⁴ 'CAA and the Environment' consultation document (2012) p.8.

- 39 The CAA should take a proactive approach by not only seeking the "provision of higher quality (noise) data from the industry"⁵ but also commissioning and/or utilising data from non-industry groups to broaden the understanding of exposure to nuisance from aviation noise.
- 40 SASIG urges the CAA to continue developing environmental metrics, in particular noise metrics, taking into account the latest environmental data and findings from studies undertaken by a range of organisations including Government departments, other regulators, environmental bodies and local communities.
- 41 When considering the benefits and disbenefits of dispersion and concentration of flight paths, the CAA should support and facilitate local determination in each instance with the provision of data and evidence as requested locally.
- 42 SASIG recommends that the CAA take a proactive approach to providing predictability and accountability in the airspace management system.
- 43 The CAA should assist further with understanding the interactions between airspace use and land use, particularly with regard to facilitating discussion between Local Authorities and ANSPs (air navigation service providers) – notably NATS Plc as the major ANSP in the UK in the context of airspace change proposals (ACPs). As with considering ground noise when looking at interactions between airport operations and land uses surrounding airports, the broad range of pressures being placed on both areas must be taken into account - it is not the case that airport operations should dominate and essentially 'sterilise' land around airports by limiting appropriate uses of that land.
- 44 SASIG recommends that the CAA fully consider local air quality impacts on the health of communities. In terms of airports in the Greater London region, the CAA should look to facilitate integration of measures in the Mayor's Air Quality Strategy (2010) into relevant air quality strategies at airports. In addition, the CAA should consider guidance and information such as the 'Air Quality and Climate Change Integration for Local Authorities' (2011) published by Environmental Protection UK, along with locally produced strategies.
- 45 Where the CAA takes a facilitative role, and in order to establish the CAA's role in this context, SASIG suggests that minimum requirements for engagement be set and applied consistently, in order that all involved recognise fair input.
- 46 The ability of the CAA to "serve as a forum for resolving issues" is obviously restricted to those areas directly within the remit of the CAA as aviation regulator.
- 47 The CAA should ensure pricing mechanisms require airport operators to charge airline operators, and therefore passengers, sufficient to enable the operators to be more generous than they have been in the past over environmental mitigation issues and surface access provision.

⁵ 'CAA and the Environment' consultation document (2012) p.15
http://www.caa.co.uk/docs/697/CAA_and_the_Environment_Consultation.pdf

- 48 Due to the reliance of scenario modelling on demand forecasts, investigation should be pursued into the extent to which demand forecasts are influenced by people responding on the basis of existing provision, not a theoretically unconstrained system, and the potential for these responses to reinforce the present pattern of demand. The CAA should consider this in the design of their passenger surveys.
- 49 There is also a need to model future scenarios containing new airport provision across the country in order to contribute to the debate around a new airport.
- 50 SASIG is interested in the potential new requirement for the CAA to ensure consumers are provided with better information about the environmental impacts of aviation, however, the passage of the Civil Aviation Bill (2010-2012) is yet to conclude, thus the details of this are not yet known.
- 51 SASIG welcomes the CAA's commitment to undertake further research biofuels, on the basis that we encourage research into the life-cycle impacts of all alternative fuels, due to concerns about impacts on land use, competition with food production and impacts from deforestation.
- 52 The inclusion of aviation in the EU ETS was a positive first step in terms of bringing the aviation sector more in line with sectors that had been operating within the EU ETS for some time. There are, however, limitations to the scheme that the CAA should work, with others, to resolve.
- 53 The CAA should continue to work with the Environment Agency to ensure that the EU ETS is adhered to by the industry, supporting and highlighting deficiencies in the Environment Agency's powers to impose civil penalties on airline operators for failure to comply with their obligations.
- 54 As the EU ETS covers just 25% of global aviation emissions, this can only be an interim solution, not an alternative to a full global agreement. SASIG supports the CAA's role in progressing the EU ETS towards a scheme that achieves actual emissions reductions overall, along with the European scheme being improved and leading ultimately to a global scheme.
- 55 SASIG considers it worthwhile investigating further the CAA's role in facilitating greater engagement between airline and airport operators and community stakeholders in aviation activities. This is not, however, free of reservation that this may not provide the desired outcome.
- 56 Joint working to mitigate noise is in line with our previous calls for the Government to progress a programme of two-way communication with members of the public to improve information and education about aviation noise. The resourcing of such a dialogue should support the identification of measures that could reduce the noise burden on communities, and provide greater certainty and predictability regarding aviation activities (on-airport and in-flight). The practical detail of the CAA's stated aim has obviously yet to be realised.