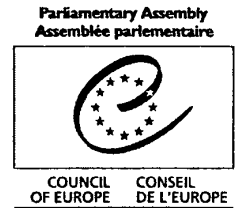


**Parliamentary Assembly**  
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## **The need to enhance European air safety**

Report  
Committee on Economic Affairs and Development  
Rapporteur: Mr Anders G. Högmark, Sweden, Group of the European People's Party

### *Summary:*

Although Europe enjoys an excellent aviation safety record in comparison with some other regions of the world, a number of accidents in 2005 caused serious public concern. This report reviews recent steps taken to improve the situation, notably by the European Union in the context of its 2004 Single European Sky initiative as well as by the 42 nation European Civil Aviation Conference (ECAC), the International Civil Aviation Organisation (ICAO) and the International Air Transport Association (IATA). The Rapporteur draws attention to the need for further improvements, with the emphasis on a coordinated international approach. For example, those European countries where this is not yet the case are urged to commit themselves to carrying out aircraft "ramp inspections" or unannounced safety checks on a mandatory basis, and to align their aviation safety legislation and their air traffic management systems with those of the European Union, so that the Single European Sky becomes a reality based on the wider Europe.

The report also addresses the related issues of aviation security as well as environmental and health concerns. Security measures should be harmonised at European level, should fully comply with the European Convention on Human Rights and should be cost-effective. With regard to the environment, the report supports the rapid inclusion of aviation in a European, and hopefully global, emissions trading system so as to avoid piecemeal initiatives which could increase travel costs and distort competition. As for health, the report urges the World Health Organisation and international aviation bodies to continue their co-operation with a view to combating the transmission of bird flu and other communicable diseases.

**A. Draft resolution**

1. Air transport accidents have on the whole become very rare in Europe, a development all the more remarkable in the light of the growing number of aircraft in operation. Thus, with one-third of global traffic, Europe accounts for only one-tenth of accidents world-wide. Nevertheless, a spate of accidents in recent years has caused considerable concern over aviation safety in Europe.

2. Central to aviation safety is the proper functioning of safety maintenance and control procedures, on the one hand, and air traffic management (ATM) systems, on the other. With regard to the former, the danger is that relentless price competition may lead to desperate cost-cutting measures on the part of airlines, which could have serious consequences for the upholding of aviation safety standards. While increasing competition is to be welcomed in the interests of the consumer, this implies greater responsibility on the part of the appropriate authorities and organisations for ensuring that safety standards are maintained and improved.

3. Apart from the need to continuously strengthen general air safety maintenance standards, more stringent rules are needed with a view to making so-called "ramp inspections", or unannounced safety checks, mandatory. Remaining differences in national safety standards and practices in the wider Europe should be harmonised through the co-ordinated efforts, already substantial, of the 42-member state European Civil Aviation Conference (ECAC), its associated body the Joint Aviation Authorities (JAA), the institutions of the European Union, notably the European Agency for Aviation Safety (EASA), and the International Civil Aviation Organisation (ICAO).

4. With regard to ATM, the European system will hardly be able to cope with increasingly congested skies and airports unless it undergoes serious reform. In this connection, the Parliamentary Assembly welcomes the adoption in March 2004 of the European Union's Single European Sky (SES) initiative, an ambitious regulatory undertaking which aims to meet future capacity needs and to improve and reinforce aviation safety in the European skies by restructuring the airspace and improving the efficiency of the ATM system. It seeks to do this in a co-ordinated and integrated manner, so as to reduce fragmentation as between states and systems and as between civil and military aviation. The Parliamentary Assembly considers it essential that the SES be extended, through negotiated agreements, to cover the entire European airspace.

5. The Parliamentary Assembly calls for the greatest possible degree of transparency with respect to the public and sharing between authorities of information concerning aviation safety. In this connection it welcomes the adoption and publication in March 2006 of the first European Union blacklist of unsafe airlines that are banned in the EU, the decision by ICAO to publish the results of the organisation's Universal Safety Oversight Audit Programme and the agreement by ICAO and the International Air Transport Association (IATA) to share safety-related information from their respective audit programmes to better identify potential safety risks and prevent aircraft accidents.

6. The Parliamentary Assembly welcomes the Global Strategy for Aviation Safety approved by ICAO Directors General of Civil Aviation at their conference held in Montreal on 20-22 March 2006, designed to achieve significant improvements and develop a safety framework for the 21st century.

7. While aviation safety is concerned with the rules for aircraft construction and operation, aviation security aims at preventing unlawful interference with the use of aircraft. Ultimately, both aim to preserve the maximum possible safety and integrity of flying passengers. The Parliamentary Assembly welcomes measures adopted by Council of Europe member states and by the European Union designed to enhance aviation security, which should be harmonised, but recalls that all such measures must fully comply with the European Convention on Human Rights. Moreover, the Assembly considers that the method of financing and the cost-effectiveness of such measures should be fully studied, in particular with a view to assessing their impact on smaller airports.

8. The Parliamentary Assembly also stresses the importance of countries and airports giving advance notice with regard to the application of new security measures in order to reduce indirect costs for passengers and aviation operators. Moreover, the Assembly underlines the need to

establish European common principles of good practice for security staff handling passengers at airports. These could then serve as a model beyond Europe.

9. The public are increasingly concerned about the environmental impact of air transport, in particular noise pollution and deteriorating local air quality and global warming caused by aircraft emissions. The Parliamentary Assembly believes that reduction and management of aircraft noise requires a balanced approach, such as that endorsed by ICAO, designed to address the local noise problem in the most cost-efficient and transparent manner, and based on solutions tailored to the specific characteristics of the airport and communities concerned. Conflicts engendered by overflight of trans-frontier communities to and from airports located close to national frontiers should be managed where possible in the first instance by the communities involved through cross-border agreements concluded in the framework of the Council of Europe's Outline Convention on Trans-frontier Co-operation between Territorial Communities or Authorities (European Treaty Series No. 106) and its Protocols, in consultation with the responsible national and European civil aviation authorities.

10. The Parliamentary Assembly welcomes efforts to improve local air quality, including legislation based on increasingly stringent international standards, economic incentives and disincentives (such as pollution taxes and differential landing charges), research promotion and technological improvements.

11. As for global warming, the Parliamentary Assembly supports the proposals of the European Commission, also endorsed by ECAC and ICAO, to include aviation in the European Union's Emissions Trading Scheme (ETS) designed to help meet the targets set under the Kyoto Protocol.

12. Regarding air passenger health, although medical in-flight incidents are uncommon, they are likely to rise in the coming years unless additional efforts are made. Reasons for this include the forecast growth in air travel, the rise in travel by older people, and the development of long-haul aircraft to carry larger numbers of passengers for longer periods. The Parliamentary Assembly welcomes the publication by ECAC of its Manual on Air Passenger Health Issues, supported internationally by ICAO, which contains recommendations concerning medical incident reporting, provision of health-related services in-flight and at airports, legal aspects and information for passengers. The Assembly welcomes cooperation between the World Health Organisation (WHO) and aviation organizations such as ECAC, ICAO, and IATA to develop guidelines designed to combat transmission of the avian flu and other communicable diseases.

13. Finally, the Parliamentary Assembly calls on the members states of the Council of Europe which are not members of the European Union to:

13.1. join ECAC if they have not yet done so;

13.2. commit themselves to carrying out ramp inspections under the ECAC Safety Assessment of Foreign Aircraft programme on a mandatory basis;

13.3. align their aviation safety and security legislation and their air traffic management systems with those of the European Union, so that the Single European Sky becomes a reality based on the wider Europe.

**B. Explanatory memorandum by Mr Högmark, Rapporteur**

**Contents**

- I. Introduction and background**
- II. Aviation industry overview**
- III. Aviation safety**
- IV. Aviation security**
- V. Environmental concerns**
  - i. Noise pollution and abatement around airports*
  - ii. Local air quality and climate change*
- VI. Air passenger health**
- VII. Concluding remarks**

**I. Introduction and background**

1. The European Civil Aviation Conference (ECAC) was established in 1955 as an inter-governmental organisation seeking to promote the continued development of a safe, efficient and sustainable European air transport system". It particularly aims to: 1) harmonise civil aviation policies and practices among its member states; and 2) promote understanding on policy matters between its member states and other parts of the world. With the accession of Georgia in April 2005, ECAC today has 42 member states.<sup>1</sup> Although ECAC indeed therefore is a pan-European voice for civil aviation, the Rapporteur, like his predecessors, believes that voice would be even fuller if the Russian Federation could be brought into the membership through continued and indeed intensified efforts on both sides.<sup>2</sup>

2. Ever since its establishment ECAC - which in the summer of 2005 celebrated its 50<sup>th</sup> anniversary in a festive ceremony symbolically held in its birthplace of Strasbourg - has throughout enjoyed a special relationship with the Council of Europe, and particularly its Parliamentary Assembly and the latter's Committee on Economic Affairs and Development. Thus, the present report is meant as an input to ECAC's Triennial Plenary Session in Strasbourg in June 2006.

3. The direct trigger for the report was a Motion for a Resolution on the need to enhance European air safety presented by Mrs Antigoni Pericleous Papadopoulos, Vice-Chairperson of the Economic Committee, and several of her Assembly colleagues. The motion was written against the background of a series of accidents apparently caused by material shortcomings in the planes concerned or faulty procedures. "Council of Europe member states must", the Motion said, "act to ensure, both nationally and internationally, that air safety standards are rigorously upheld in spite of heightened competition in the aviation industry. They should use the Council of Europe's position as the parliamentary forum of the European Civil Aviation Conference - which groups the aviation authorities in a membership area roughly corresponding to that of the Council of Europe - in order to raise this issue in time for ECAC's Triennial Session to be held in Strasbourg in 2006, so that remedial policy action can be taken, not least in the rapidly expanding charter aviation industry".

4. Following a general overview of the European aviation industry, the present report takes a closer look at a few selected civil aviation issues, namely aviation safety (as highlighted in Mrs Pericleous Papadopoulos's Motion); aviation security; environmental concerns (specifically noise

pollution and abatement around airports as well as local air quality and climate change); and air passenger health.

5. Apart from relying on valuable ECAC sources and input, the report draws on information from the International Civil Aviation Organization (ICAO), the European Commission (especially the Directorate-General for Energy and Transport), the International Air Transport Association (IATA), the European Agency for Aviation Safety (EASA), Eurocontrol, the Joint Aviation Authorities (JAA), and the Airports Council International (ACI). The Rapporteur is particularly grateful to Mr Raymond Benjamin, Executive Secretary of ECAC, and his staff for their very constructive input, all the while taking full responsibility himself for the report's contents. He has also received wholehearted support from his predecessor as the Assembly's Rapporteur for European civil aviation, Senator Jean-Pierre Masseret of France, currently President of the Assembly of the Western European Union.

## II. Aviation industry overview

6. Following years of strong growth in the civil aviation industry in the mid- to late-1990s, a series of events at the beginning of the new millennium caused a significant downturn in air traffic volume. The terrorist attacks in the United States on 11 September 2001, a worldwide economic downturn, the outbreak of the so-called Severe Acute Respiratory Syndrome SARS, and the war in Iraq have all taken their toll on civil aviation activities.

7. However, the largest problems facing the aviation industry were and remain of a profitability nature. In a regulated and fragmented market, state-owned national flag-carriers for a long time operated on the primary principle of prestige, while cost-efficiency was sometimes overlooked. Faced with a slack in demand and rising costs for fuel, security and insurance as a result of the external events mentioned, the aviation industry has been forced to reverse these priorities.

8. Some scheduled airline operators, notably Sabena and Swissair, went bankrupt in 2001. Other airlines, such as Air France and KLM in 2003, have pursued marketing alliances and partnerships in order to boost profits or even survive.

9. The most important force of change has probably been the advance of low-cost carriers (LCCs). These "no-frills" airlines offer highly competitive prices in return for nothing more than basic service and, often, the use of secondary airports. Such airports are commonly located in economically disadvantaged areas. Local and regional governments often offer benefits to attract LCCs to these airports in an effort to support local employment and development.<sup>3</sup> Costs are also held down by a larger number of flights per day and non-unionised staff.

10. Full service scheduled and charter airlines<sup>4</sup> are now both facing increasing competition from the expanding low-cost sector, which accounts for around one-tenth of the total European market. Some LCCs, such as Ryanair and easyJet, rank among the top European carriers in terms of passenger-kilometres performed. The chief executive of easyJet (the largest LCC) estimates that LCCs will cover half the total aviation market by 2010.<sup>5</sup> ECAC also foresees that the LCC "model" will develop further.

11. After several years of stagnation and gloom, air travel now seems to have rebounded as demand for air transport services is picking up dramatically. Air traffic figures for 2004 beat the previous record set in 2000. Although lagging behind other regions (except Latin America and the Caribbean), international and domestic air traffic in Europe in 2004 grew by 9,4% in terms of passengers carried, 10,9% in terms of passenger-kilometres travelled, and 9,0% in terms of freight tonne-kilometres. Scheduled annual growth between 2005 and 2007 in passenger-kilometres is forecast at an average 6,9%.<sup>6</sup> As a result, operating profits improved for many European airlines in 2004.<sup>7</sup>

12. The future also looks brighter for aircraft manufacturers. In 2005, both Airbus and Boeing received a record level of orders since their best-ever year in 1998.<sup>8</sup> Europe is the second biggest

producer of civil aircraft in the world after the United States, followed by Canada and Japan. The Rapporteur believes that it is vital to maintain and strengthen aircraft manufacturing capacity in Europe. This industry is a good example of how cooperation between European countries can yield many benefits, for example in the development of technology, communications, and materials and in boosting production and sales by secondary suppliers, hence employment.

13. However, the boom in air travel is also saturating European skies (and airports). Even if airspace capacity has increased by 80% since 1990, the continent's skies are becoming increasingly congested. Over the past decade, total air traffic volume grew by more than 50%. Europe now has close to 8.5 million flights per year and up to 28 000 flights on busy days. In this regard 17 June 2005 was the busiest of all, with 30 663 movements as expressed in landings and takeoffs. And growth is set to continue. By 2020, if not before, today's traffic is expected to have doubled.<sup>9</sup>

14. Airports are at pains to keep pace with the predicted growth in air traffic. Land costs and environmental restrictions are two of many factors limiting airport expansion. In Europe, 70% of the 50 largest airports have already (or almost) reached their saturation point in terms of ground capacity. By 2025, it is estimated that over 17% of demand for air traffic (or 3.7 million flights per year) will remain unmet due to capacity constraints on the ground.<sup>10</sup>

15. Crowded skies and crowded airports clearly place a high demand on the air traffic control (ATC) and air traffic management (ATM) systems. The crisis of the European ATM system was eloquently addressed already in an earlier Assembly report of the year 2000 report on European air transport policies (Assembly Resolution 1217 (2000); Doc. 8759; Rapporteur: Mr Billing). Even though the situation has since improved, the increasing demand will present new challenges, which may at least partly, however, be met by innovative policies and improving technology, such as via the European Union's and the European Space Agency's satellite radio navigation system under the name of Galileo. Galileo is scheduled to come into operation in 2008.<sup>11</sup>

16. The European ATM network needs to be reformed if worsened congestion with the resulting higher risk of incidents is to be avoided, whether in the air or on the ground (see also Section 3 below). Apart from compromising aviation safety, the clogging of the ATM system also causes delays, even though these are also due to other factors (such as adverse weather, problems with airline operations and late arrivals of aircrafts from preceding flights), they have important convenience consequences for users and financial and reputation consequences for airlines.<sup>12</sup>

17. In response to the concerns over the ATM system and over the relative fragmentation of the civil aviation industry, the European, and EU, institutional and regulatory framework for civil aviation is currently undergoing important changes. The 2001 EU White Paper on transport policy<sup>13</sup> identified the development of a coherent policy on international air transport as an urgent priority. It called for such a policy to address: 1) the defence and promotion of EU interests with regard to air service agreements with third countries; and 2) co-operation (also with third countries) on the more technical regulation of certain civil aviation areas (including safety, ATC/ATM, environment and security). With regard to the latter, practical outcomes include the implementation of the Single European Sky initiative and the establishment of the European Aviation Safety Agency (see further Section 3 below).

18. With regard to the former, the 2002 judgements of the European Court of Justice in the so called "Open Skies" cases marked the start of the EU's external aviation policy. As already outlined by my predecessor Mr Masseret in his 2003 report on "European air transport policies: Crucial choices at a critical time" (Assembly Resolution 1341; Doc. 9823), the judgments by the European Court of Justice concerned eight member states that had signed bilateral air service agreements with the United States on liberalising transatlantic flights. The judgments effectively gave the EU exclusive competence with regard to external aviation relations. Furthermore, in 2003, the European Commission was granted authority to engage in negotiations with the US on the creation of a transatlantic Open Aviation Area (OAA)<sup>14</sup> as well as with all third countries in general for the revision of clauses relating to the ownership and control of airline companies (and other matters).<sup>15</sup>

19. A 2004 European Commission Communication<sup>16</sup> outlines a framework for accelerating aviation relations and negotiations with both the southern and eastern neighbours of the EU. Its primary concern is to liberalise aviation relations within the wider Europe, with due regard to consistency and flexibility so as to accommodate the many varying political, legal and administrative aviation contexts of the countries concerned.

20. Finally, the Russian Federation clearly plays an essential role in European aviation, both with regard to the EU and a wider Europe through ECAC. As the Directorate-General for Energy and Transport of the European Commission puts it: "Russia offers good prospects for growth for airlines, aircraft manufacturers and service providers in Europe. Russian international passenger traffic is largely concentrated on European destinations. Around 75% of all Russian passenger traffic is directed towards European destinations and this is forecast to grow annually at a rate of 5,8% (IATA) in the years to 2007. For the EU, the Russian Federation is currently the fourth largest foreign aviation market". In this regard, the Rapporteur wishes to stress the importance of continuing close contacts and discussions of common interest, such as security and aircraft production, and with a view to the Russian Federation becoming an ECAC member in the future. Of particular concern, however, are payments for transit rights, notably flights over Siberia, which the EU and other ECAC countries would like the country to abandon.

### III. Aviation safety<sup>17</sup>

21. Air transport accidents have on the whole become very rare in Europe, a development all the more remarkable in the light of the growing number of aircraft in the air. Thus, with one-third of global traffic Europe accounts for only one-tenth of accidents world-wide.<sup>18</sup> A number of accidents in recent years have, however, caused considerable concern over aviation safety in Europe.

22. In October 2001, a scheduled Scandinavian passenger jet bound for Copenhagen crashed with a small aircraft during take-off in Milan. All 104 passengers and six crew members aboard, as well as four people in a smaller plane involved and four airport workers died.<sup>19</sup> In July 2002, a Russian chartered airplane heading to Barcelona collided with a cargo jet over Lake Constance in southern Germany, killing a total of 71 people. Both these accidents are considered to have as their primary cause failings in the air traffic control.

23. In January 2004, an Egyptian charter flight bound for Paris crashed shortly after take-off into the Red Sea, killing all 148 people on board. Although the cause of this accident is not known with certainty, the operating carrier was, at the time of the accident, banned from flying into Switzerland due to safety concerns.

24. In August 2005, a Tunisian charter flight from Bari to Tunisia crashed into the sea just off the coast of Palermo, Sicily, killing 16 of the 39 people aboard. The accident can presumably be ascribed to neglectful refuelling procedures, as the immediate cause of the crash was that the flight inexplicably ran out of fuel. Later that same month, a plane of a private Cypriot air carrier en route from Cyprus to Athens crashed into a mountain killing all 121 people on board. The suspected cause of the accident was a catastrophic loss of cabin pressure due to a malfunctioning air pressure and heating system.

25. Furthermore, just two days later, a West Caribbean Airways passenger flight heading from Panama to Martinique crashed into the mountains by the Colombian/Venezuelan border killing all 152 passengers, mostly French, and eight crew members on board. Shortly before the crash, the crew had reported trouble with both engines to air traffic control.

26. These recent larger accidents along with a number of smaller accidents (and incidents) on charter as well as regular flights raise concerns with regard to safety maintenance and control procedures, on the one hand, and the ATM system, on the other hand. The proper functioning of both are of course absolutely crucial for aviation safety. With regard to the former, it is believed that relentless price competition is leading to desperate cost-cutting measures on the part of airlines,

which could have serious consequences for the upholding of aviation safety standards. This in turn causes people to be concerned over which airlines (and aircraft) are safe to fly. Apart from general air safety maintenance measures, more stringent rules are clearly needed in order to make ramp inspections mandatory.<sup>20</sup> With regard to ATM, as outlined in Section 2 above, the European system will hardly be able to cope with the increasingly congested skies and airports unless it undergoes serious reform.<sup>21</sup>

27. In order to address these serious shortcomings, the Rapporteur is heartened by a number of recent efforts undertaken by both EU and ECAC.

28. The Rapporteur particularly welcomes the Single European Sky (SES) initiative, launched in 1999 and adopted in March 2004.<sup>22</sup> The SES initiative is an ambitious EU regulatory undertaking for the provision of air navigation services, the organisation and use of airspace, and the interoperability of the ATM network. The primary aims of this "package" of regulations are on the one hand to meet future capacity needs and on the other to improve and reinforce aviation safety in European skies by restructuring the airspace and improving the efficiency of the ATM system. It seeks to do this in a co-ordinated and integrated manner, so as to reduce fragmentation as between states and systems and as between civil and military aviation.

29. Europe clearly needs an ATM system that is first and foremost safe, but also efficient. Integration and faster implementation of technological innovation should contribute to efficiency. Europe's ATM network also has to be based on a demand-driven service provision. In order to achieve this ambitious objective, the SES initiative calls for concerted efforts on all fronts and on the part of all stakeholders. Further provisions have to be made at the EU level to complete the legal framework. With regard to the individual EU member states, competent and independent national supervisory authorities have to be established.<sup>23</sup> In addition, a commitment from the entire aviation industry is essential. Last, but not least, the expert participation of Eurocontrol is an important element for the successful implementation of the SES initiative. To this end, the European Community became a Eurocontrol member in its own right in 2002.

30. The technical implementation and modernisation of the SES initiative lies with the SESAR (formerly SESAME) programme, which seeks to plan the future of the European ATM system and to co-ordinate the development and implementation of new technologies and operational concepts. It was initiated by European ATM equipment manufacturers, but is now supported by the entire aviation industry and co-funded by the European Commission (and Eurocontrol). The programme is currently in its "definition phase", aiming to produce an ATM Master Plan by 2007. The SES framework also makes provision for the European aviation safety system to include surveillance, inspection and penalties for non-observance.

31. European aviation administrations have long sought to harmonise their aviation safety standards and procedures through the Joint Aviation Authorities (JAA), which is a body associated with ECAC. There are still, however, considerable differences in national practices. Apart from causing concerns over the actual level of aviation safety in Europe, such divergences also place a burden on manufacturers, who may have to produce different versions of the same aircraft and equipment depending on the country and operators (seeking to compete in other countries than the country in which they are registered). Against this background and within the framework of the SES initiative, the European Agency for Aviation Safety (EASA) was established in 2002 and became operational in September 2003.

32. EASA is an independent executive agency of the EU responsible for the production of common rules in the field of airworthiness (as well as environmental protection) for all EU member states. Individual member states can in consequence not deviate from or impose additional requirements to those established by EASA. The work of EASA will contribute to ensuring a high and uniform level of safety for civil aviation activities throughout the EU. From the perspective of civil aviation industry operators and manufacturers, it will also assist in the creation of a truly single European market without distortion to competition.



33. EASA's main tasks are to: 1) assist the European Commission in the preparation of relevant legislation and support member states and industry in the application of this legislation; 2) adopt its own standards (certification specifications and guidance material), conduct technical inspections and issue certificates where centralised action is more efficient; and 3) assist the European Commission in monitoring the effective application of European Community legislation. In a sense, EASA will serve as a "one-stop-shop" for safety application and certification procedures. In this initial stage of taking over responsibility for airworthiness matters from EU member states and JAA, EASA's work focuses on the certification of aircraft, components and maintenance. In the coming years, EASA's competences will extend to the regulation of air operations, the licensing of flight crews and the oversight of third-country aircraft flying into or out of the EU. In the longer term, it is also envisaged that it will play a role with regard to safety regulations of airport operations and air traffic management. Finally, EASA will work closely with non-EU countries and international aviation organisations in order to promote European safety standards and world-wide harmonisation.<sup>24</sup>

34. With regard to the wider Europe, one of the basic principles upon which ECAC was founded is the creation of a safe (and reliable) air transport system. Aviation safety hence represents one of the most important aspects of ECAC's work.

35. In 1996, ECAC launched the Safety Assessment of Foreign Aircraft (SAFA) programme to complement the ICAO assessments under the voluntary Universal Safety Oversight Audit Programme (USOAP).<sup>25</sup> One important aspect of the SAFA programme is that it is non-discriminatory, applying as it does equally to aircraft from ECAC and non-ECAC countries. ECAC states can hence carry out ramp inspections<sup>26</sup> on all foreign aircraft (both ECAC and non-ECAC). The assessments are carried out by ECAC-trained SAFA inspectors from the various ECAC member states.<sup>27</sup> Since the start of the programme, 550 inspectors from 34 member states have been trained. In case of irregular findings during an inspection, the relevant national aviation authority is contacted to ensure that the concerned operator takes corrective measures. Finally, all inspection data and other information are kept in a centralised database, set up by JAA and accessible (now on the Internet) to all ECAC member states.<sup>28</sup> In 2005, 32 ECAC states carried out a total of 5 457 inspections of 748 different operators (and 182 different (sub) types of aircraft) from 133 states.

36. Within the EU, member states are obliged to carry out ramp inspections as outlined by the SAFA programme, in order to assess if aircraft and operators using EU airports comply with international safety standards. The 2004 Directive<sup>29</sup> on the safety of third-country aircraft using European Community airports establishes a harmonised system of inspections of foreign aircraft when using European airports. It also provides for the exchange of information between members states and for the possibility of extending, to the whole EU, measures taken by one member state against a third-country aircraft or operator that does not comply with the defined safety standards. Furthermore, the Directive requires co-ordination of EU and ECAC safety activities.

37. In an effort to further reinforce the safety inspection system based on this 2004 Directive, the European Commission published, in February 2005, a proposal for a regulation on the information of air transport passengers on the identity of the operating carrier and on communication of safety information by member states. Subsequently, in March 2006, as an important first initiative in response to public concerns over the safety levels of airlines, the EU (through the careful assessment of the Aviation Safety Committee) adopted and published an aviation "blacklist" of those airlines banned from operating within the EU. The list is based on the principle that companies banned in one member state are banned in all member states. It currently includes a total of 92 companies facing a complete ban and three companies facing operational restrictions.<sup>30</sup> The list is available online<sup>31</sup> and passengers should be informed if they are scheduled to fly on a banned airline/carrier. Passengers are also supposed to be able to claim compensation if their airline is "blacklisted" after they have purchased their ticket (or if their carrier is changed to an airline that is on the list). Finally, the Commission has also launched a consultation process on a working document on airport capacity, efficiency and safety in Europe.

38. ECAC also hosts a Group of Experts on Accident Investigation (ACC). This is a group of high-level experts specialised in the investigation of aviation accidents. It prepares statistics on all types of

aviation accidents (and the consequences of these for ECAC members) and assesses trends related to accident and incident investigations. The Group also works towards developing a harmonised approach among the ECAC member states (also with regard to assistance of victims of aviation accidents).

39. Immediately following the charter flight accidents of August 2005, ECAC met with the European Commission, EASA, JAA and Eurocontrol in Romania in order to re-affirm their commitment to "maintain and enhance the already high level of safety in aviation in Europe". To these ends, the representatives adopted an Action Plan for Safer European Aviation, incorporating several measures already underway within the EU, such as: 1) increasing monitoring by national and European authorities in order to ensure full compliance with existing safety rules and procedures; 2) increasing transparency so that passengers know the identity of the airlines they will be using in advance; 3) establishing European common criteria for imposing European-wide bans on unsafe aircraft/airlines (with a view to publishing those banned on the Internet) (Cf. para. 36 above); 4) strengthening the system of inspections of third-country aircraft (namely the SAFA Programme); and 5) adopting European measures for assessing foreign airlines prior to giving them authorisation to fly into Europe.

40. The ECAC work programme for 2004 – 2006 with regard to aviation safety addresses the need to: 1) strengthen its member states' safety oversight capability,<sup>32</sup> and 2) harmonise the approach of member states in the investigation of accidents and incidents. Furthermore, aviation safety is the first priority of the overall 2007 - 2009 ECAC work programme.

41. In March 2006, ICAO released the preliminary safety (and security) statistics for air carrier operations in 2005. Worldwide, with regard to scheduled air services, there were a total of 18 aircraft accidents<sup>33</sup> with as many as 713 passenger fatalities (compared to 203 passenger fatalities from nine accidents in 2004). With regard to non-scheduled operations, there were a total of 18 accidents with 278 passenger fatalities (compared to 18 accidents with 207 passenger fatalities in 2004). Later the same month, ICAO convened an aviation safety conference of Directors General of Civil Aviation. The purpose of the conference was to assess the current status of aviation safety worldwide as well as to identify ways to make further (and significant) improvements and develop a safety framework for the 21<sup>st</sup> century (a Global Strategy for Aviation Safety). The conference also called for greater transparency and information sharing and agreed to post results from the ICAO safety assessment programme (USOAP) on the web.

42. In conclusion, since aviation safety does clearly not end at Europe's borders, your Rapporteur believes that the full potential of all the efforts undertaken (and of the Single European Sky in particular) can only be achieved by enlarging its scope geographically. Bilateral agreements and co-operation between third countries and international aviation organisations such as ECAC (but also ICAO) are essential in this regard. Moreover, the Rapporteur believes that, in order to encourage full disclosure of incidents and problems, it is important to maintain a non-punitive culture in which confidence and cooperation reign.

#### **IV. Aviation security**

43. After aviation safety, one of ECAC's main priorities for the coming years is aviation security<sup>34</sup>. ECAC has had its own voluntary aviation security (AVSEC) audit programme for a number of years through which it carries out audits of all airports in the European region. After an initial audit, a formal commitment is made by the Member State in question to correct any deficiencies identified. ECAC stresses the importance of follow-up audits and technical assistance (both bilateral and multilateral) to ensure to the greatest possible extent that these commitments are implemented. A very important joint ICAO-ECAC initiative with regard to aviation security is the European Aviation Security Training Institute (EASTI), established in Brussels in 1997, which has gained a valuable role in organising training courses and workshops. In particular, it is currently developing an aviation security e-learning project. Furthermore, ECAC is also hosting a series of multilateral workshops on various security-

related topics. Finally, ECAC and ICAO<sup>35</sup> signed a Memorandum of Understanding on aviation security audits and related matters in 2004.

44. Historically, security measures have usually been reactive in the sense that they were tightened immediately following acts of terrorism, only to fall back to normal levels after a while. Following the Lockerbie incident in 1988 and especially the events of 11 September 2001, however, considerable steps have been taken by most countries (and relevant organisations) in order to improve and standardise aviation security measures. As a result, the security "base-line" has continuously risen.

45. Within the EU, the legal framework with regard to the field of civil aviation security post-9/11 is primarily based upon Regulation 2320/2002<sup>36</sup>, which establishes common rules within the EU member states. In particular, the Regulation: 1) outlines compulsory security requirements and standards, based on procedures developed in ECAC, to be applied at airports (with regard to screening of passengers, luggage, parcels and mail, catering, crew and airport staff); 2) authorises (unannounced) inspections to be carried out by the European Commission for monitoring purposes; 3) requires all member states to implement their own quality control programmes; and 4) sanctions the development of further legislation by the European Commission. With regard to the second point, the European Commission has set up its own team of inspectors and training programme in collaboration with EASTI. With regard to the fourth point, subsequent additions to the 2320/2002 Regulation include for example a Commission Regulation<sup>37</sup> establishing a common definition of critical parts of security restricted areas at airports (namely by obliging all staff, including crew, to undergo a complete security screening before accessing such areas) and a Council Directive<sup>38</sup> obliging airlines to communicate passenger data.

46. While the Rapporteur clearly recognises the importance of aviation security, the recent years' extensive range of additional measures, both in Europe and worldwide, cause concern about both human rights and costs.

47. With regard to the former, your Rapporteur stresses the need to establish common principles of good practice for security staff handling passengers at airports. All should be treated with courtesy and professionalism when arriving at airports, as at all ports of entry.

48. With regard to costs, it is clear that the implementation of existing and upcoming aviation security measures is expensive. Within Europe, financing differs from country to country. In some member states, the costs are primarily borne by governments, while in others they are mainly covered by special departure taxes (i.e., paid by the passengers) or financed directly by air transport operators (i.e., the aviation industry, namely the airports and airlines). A 2003 study by ACI Europe on financing civil aviation security costs in Europe states that the "application of security measures as laid down in ECAC Doc. 30 will entail substantial costs for all operators". Furthermore, within a given country, the responsibility for financing security measures may also differ from airport to airport.

49. A more uniform approach to financing aviation security would clearly be desirable on a European level (for all parties concerned). Aviation-related industry organisations have on several occasions (such as ACI Europe in 2001 and 2003<sup>39</sup>, but also as recently as in January 2006<sup>40</sup>) called upon governments (and the EU as a whole) to develop and implement a comprehensive policy for financing the highest possible level of aviation security as they consider countering terrorism a national security duty. When it comes to applying uniform rules based on some sort of security tax, the 2003 ACI Europe study is particularly concerned with ensuring that smaller airports are not being penalised (in terms of bearing the costs) simply because they are smaller. In any case, it is important that any security financing policy or approach includes a careful analysis of the cost-effectiveness of providing and undertaking various security measures.

50. Finally, your Rapporteur also wishes to stress the importance of countries (and airports) giving advance notice with regard to the application of new security measures in order to reduce indirect costs for passengers and aviation operators. In this regard, ECAC's ongoing dialogue with the US authorities is particularly appreciated.

51. According to preliminary ICAO security statistics (released in March 2006), in 2005 six acts<sup>41</sup> of unlawful interference worldwide were recorded, with three persons killed and 60 injured.

## V. Environmental concerns

### *i. Noise pollution and abatement around airports*

52. A specific environmental concern of increasing public interest with regard to civil aviation is 'noise pollution' around airports. Although noise emissions from aircraft have been significantly reduced and today's aircraft engines are much quieter than in the past, the enormous increase in the number of flights is outstripping technological improvements. According to IATA, today's aircraft are around 75% quieter than the first jet engines of the 1960s. Noise reduction at source is pushed forward by technological progress (as sanctioned by successive certification standards and new fleet investments). The research sector has set itself the target of a further 50% reduction in noise emissions by 2020.<sup>42</sup>

53. Nevertheless, a 2003 European Commission study<sup>43</sup> of 53 EU airports with more than 50 000 movements of civil subsonic jet aircraft per year concluded that the total number of people exposed to aircraft noise will increase in the period up to 2015. Indeed, the number of people "highly annoyed" will increase at a rate of between 1% and 4% per year, depending on the scenario envisaged. This means that, by 2015, the number of people seriously affected by noise pollution will have increased between 10% and 50% when compared with the situation in 2003. No matter what the scenario (in terms of single noise-reduction actions), the benefits in the long-term (i.e., 2015) of each action will have been almost, or even completely, offset by the increase in noise exposure due to the rise in traffic volume.

54. The study concludes that although some noise abatement measures (such as a limitation or ban of night flights) seem more effective (in terms of reducing noise pollution) than others, no single practical action can guarantee a stable noise climate for the future. Any action taken must hence be accompanied by complementary measures. In 2001, ICAO endorsed the concept of a "Balanced Approach" to aircraft noise abatement and management. This approach seeks to identify the noise problem at an airport and then to analyse the various measures available to reduce noise, namely: 1) reduction at source; 2) land-use planning and management; 3) noise abatement operational procedures; and 4) aircraft operating restrictions. The overriding goal is to address the local noise problem in the most cost-efficient manner, based on the belief that the solutions need to be tailored to the specific characteristics of the airport concerned.

55. The Balanced Approach seeks to reconcile the need for noise mitigation measures to be flexible and specific enough to meet local requirements with the need that they also be universal enough to satisfy the global requirements of airlines and manufacturers, as these cannot be expected to modify their products or services beyond certain limits. ICAO also urges both states and airports to apply transparency when considering measures.<sup>44</sup>

56. With regard to choice of measures, both ICAO and IATA argue against applying operating restrictions as a first resort and for considering the other elements of the Balanced Approach first.<sup>45</sup> In this regard, your Rapporteur would like to specifically address night flight restrictions and the importance of balancing environmental needs with the development of the aviation industry, which is of great significance for job creation and the competitiveness of our economies.

57. Night time flight restrictions are increasing, especially in Europe. Major airports across Europe have developed controls and financial incentives to control noise at night. At some airports night flights are totally banned. Apart from potentially increasing daytime congestion, such restrictions can have a serious impact on the economy. A 2005 European Commission study<sup>46</sup> of 76 EU airports stresses the need to balance the benefits of night flight restrictions with the economic costs due to the importance of night flights to the industry. Late evening (22.00 - 22.59) and early morning (06.00 - 06.59) departures and arrivals are essential for the operational efficiency of airlines (namely for short-

haul operators to maximise aircraft utilisation) as well as for efficient business links across Europe (not only for daily business travellers but also for express delivery companies that rely on door-to-door, next-day deliveries). With regard to the eight-hour period between 23.00 and 07.00, the study approximates that 8% of aircraft movements take place during this time period (and 60% of these movements are freight aircraft). However, only 2% of total movements are jet movements in the core six-hour period between 24.00 and 06.00. Night flights have a number of different economic effects, including: direct impact (jobs and business turnover at the airport); indirect impacts (jobs created outside the airport boundary at suppliers); induced impact (jobs and income created by the spending of the direct and indirect employees); and catalytic impacts (namely wider economic effects in terms of improving productivity and attracting investment and tourism). Overall, the study estimates that between 360 000 and 500 000 jobs within the EU are dependent on night flights.

58. In line with IATA's night flight policy, the Rapporteur believes that decisions on time operational restrictions should be left to the localities and regions in question with as little interference as possible from the national government, as the latter may not be able to fully measure local circumstances. Furthermore, night flight restrictions should not be used as a first resort. Airports should rather be given the opportunity to use other measures, such as giving incentives to more quiet aircraft. If night flight restrictions are used, however, they should be the result of close stakeholder consultation and include a complete and transparent assessment of all costs and benefits. Responsibility for these cost-benefit assessments should lie with recognised competent authorities, such as, in France, the French Airport Noise Pollution Control Authority. This is an independent appraiser of issues related to the management of airport noise pollution for local residents, local authorities and air transport operators. Finally, the Rapporteur recognises the difficulty of evaluating the economic impact caused by single components of a noise limitation scheme once the scheme is there. But he finds it discouraging that - according to a 2004 European Commission study<sup>47</sup> of EU airports with more than 50 000 movements of civil subsonic jet aeroplanes per year - no formal cost-benefit analyses of noise limits schemes in general (i.e., not only those with night flight restrictions) have been carried out for the major European airports.

59. Many states have already introduced the concept of the so-called Balanced Approach in their regulations. In the EU, the Balanced Approach was enshrined in the 2002 Directive on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at European Community airports<sup>48</sup>. Another 2002 Directive<sup>49</sup> on the assessment and management of environmental noise requires competent authorities in the member states to draw up harmonised noise maps and implement action plans to address noise around main transport infrastructures, including airports.

60. Although there are many difficulties in defining (and comparing<sup>50</sup>) noise limits and although there are many different mitigation schemes in Europe, harmonisation of noise limit schemes within the EU would contribute to a smoother functioning of the internal market according to a 2005 European Commission study.<sup>51</sup> Nevertheless, the study points to the importance of allowing for flexibility in terms of recognising the situation at each individual airport. It also stresses the importance of transparency as well as the need to be able to identify the worst performers and take appropriate action.<sup>52</sup>

61. Aviation environmental matters have been high on ECAC's agenda since the 1970s. To this end, it has set up a Group of Experts on the Abatement of Nuisances Caused by Air Transport (ANCAT), which includes representatives from national administrations and the aviation industry. With specific regard to noise pollution, ECAC (together with the European Commission and Eurocontrol) hosted a Workshop on Operational Noise Abatement Procedures around Airports in December 2004. Particularly noteworthy are ECAC's efforts (through the ANCAT Group of Experts) towards defining a standard methodology for the computation of noise contours around airports. In May 2004, ECAC presented the latest revision of its guidance document on this subject, incorporating up-to-date methodology and introducing practical guidance on how to apply such models. The ANCAT Group of Experts has also developed a harmonised methodology for the classification of noise performance of civil aircraft. This methodology has, however, not (yet) been incorporated into EU legislation.

62. Finally, the Rapporteur would like to draw attention to the particular problem of noise, and indeed other forms of pollution, in the specific situation of airports located close to national frontiers. To the extent that take-off and landing patterns at such airports may disturb trans-frontier communities, leading to overflight restrictions being imposed by the country concerned, trans-frontier conflicts may arise. The Rapporteur believes that such conflicts should be managed where possible in the first instance by the communities involved through cross-border agreements concluded in the framework of the Council of Europe's Outline Convention on Trans-frontier Co-operation between Territorial Communities or Authorities (European Treaty Series No. 106) and its Protocols, in consultation with the responsible national and European civil aviation authorities.

ii. *Local air quality and climate change*

63. Apart from noise pollution, emissions from aircrafts cause concern with regard to both local air quality and climate change.

64. While some aircraft emissions affecting local air quality have been substantially reduced over the years,<sup>53</sup> aircraft engines and airport traffic have adverse effects (in many areas significant) on the local air quality through the emission of nitrogen dioxide (NO<sub>2</sub>) and particulates (PM<sub>10</sub>). The poor air quality in turn can pose a significant threat to the health of the people living in the area. Irrespective of the source of the emissions, levels of both pollutants are subject to mandatory EU limits (based on international standards set by ICAO). Many areas with busy airports (and busy surrounding road networks) have difficulties in meeting these limits. The South East of the UK, for example, is particularly concerned about the poor air quality given the expansion at the main London airports. A combination of measures are usually involved in seeking to improve local air quality, including legislation based on international standards, economic incentives (including trading schemes at individual airports) and disincentives (such as pollution taxes and landing charges), research and technological improvements.

65. Growing attention is being paid to the significant and increasing contribution of air transport to climate change through the emission of greenhouse gases (namely CO<sub>2</sub>). Forecasts presented in a December 2003 White Paper by the UK Department for Transport on the future of air transport imply that, by 2030, aviation emissions would amount to around one-fourth of UK's total contribution to global warming. The aviation industry clearly needs to share responsibility in addressing the problem of climate change.

66. One way to combat climate change and reach emissions targets under the Kyoto Protocol<sup>54</sup> is through emissions trading, a concept endorsed by both ECAC and ICAO. Within the EU, the Emissions Trading Directive<sup>55</sup> obliges the member countries to set out national emissions targets as well as to specify the total amounts of emissions allocated to each entity (such as industry sector and larger facility). These allocations grant the entities a formal right to emit a certain amount of greenhouse gases (namely CO<sub>2</sub>). Through the EU Emissions Trading Scheme (ETS), which opened in January 2005, these allowances/permits can be traded on an EU market. This scheme allows entities that can either reduce their emissions below their allowances or that do not need all of them to sell them to entities that wish to purchase additional allowances. The EU ETS is the world's largest existing multi-country and multi-sector scheme, covering around 12 000 energy-intensive installations in all EU member states. The European Commission is currently undertaking a review of experience with the scheme to date. The review is expected to be completed by June 2006.

67. In a September 2005 Communication<sup>56</sup> on reducing the climate change impact of aviation, the European Commission makes a number of recommendations, including the inclusion of aviation in the EU ETS, additional funding for research and technology developments, further ATM improvements and continued efforts within ICAO with regard to emissions stringency and other measures. In order to consider the various options for including aviation in the EU ETS, the European Commission (namely the Directorate-General for Environment) has set up an Aviation Working Group (AWG), composed of representatives from member states, airlines, airports, aviation manufacturing industry and environment-related non-governmental organisations (NGOs). A complete report is expected to be presented in April 2006.

68. The external costs relating to both local air quality and climate change can be considerable. While external costs are not easy to calculate, a report presented in the 2003 UK White Paper mentioned above, estimated, for the year 2000, the local air quality costs for all passenger at UK airports in the range of GBP 119-236 million, while the climate change costs (in terms of CO<sub>2</sub> emissions) were as high as GBP 1,4 billion.

69. The costs of reducing emissions from air travel in order to improve local air quality and tackle climate change are, however, also high. In deciding who should cover the costs for relieving the environmental damage caused by air travel (just as with the costs of noise abatement measures), it is important to balance environmental needs with the development of the aviation industry as a whole. In general, your Rapporteur favours approaches that do not place too much of the financing burden on local/regional airports (which are usually smaller and hence less able to cope with expensive counter-measures) and passengers in the form of increased taxes and charges.

70. Furthermore, while the Rapporteur recognises that the problem of climate change can only be addressed effectively, and uniformly, at a European (and international) level, the problem of local air quality should be solved on a local, case-by-case, basis in terms of what measures to use most cost-effectively at any given airport.

71. Finally, as with noise pollution, since technological and operational efficiency improvements will clearly not be sufficient to offset the anticipated growth of emissions, alternative solutions should be sought in order to improve local air quality around airports and address the problem of climate change.

72. Within ECAC, a sub-group on emissions trading was set up in April 2005 to provide a forum for discussion on the technical aspects of emissions trading within the aviation industry. Another recent sub-group concentrates on the legal aspects and cost-effectiveness of local emissions-related charges.

73. In conclusion, the problem of emissions trading will not be an easy one to solve. It is very important that such a system be introduced as quickly as possible, at least at European, but preferably at global level, so as to avoid piecemeal national initiatives which would not only be more costly but would not yield the desired effects on the environment. The aviation industry must bear responsibility for its emissions on the polluter pays principle, but in so far as the real cost will be borne by the passenger, this could create new problems for the young and the elderly, for example, who depend on cheap air travel. International travel is of course vital to inter-cultural exchange, tolerance, understanding and respect. Multilateral solutions to the problem of environmental pollution are therefore essential in order to keep costs as low as possible.

## **VI. Air passenger health**

74. Medical in-flight incidents are relatively rare. Serious incidents are even more uncommon with only one in every 1 000 flights being diverted as a result and less than one death per million passengers.<sup>57</sup> Nevertheless, air passenger health issues have increasingly attracted public attention over the past decade and so it is right that these should be covered in the present memorandum.

75. Passengers (and crews) are expressing concerns with regard to both the provision of medical treatment during flight as well as the potential adverse effects of air travel *per se* on the health of passengers. The latter include worries over conditions specifically related to air travel, such as: cabin pressure (which causes alterations in the blood oxygen saturation level, although this is a problem only for passengers with serious problems in this regard); cabin ventilation (fears that the supply of fresh outside air is being reduced to save fuel, and concerns over the medical effects of filtering recirculated cabin air); use of insecticide sprays (in order to disinfect cabins in compliance with WHO and international health regulations); cabin temperature (either too hot or too cold); cabin humidity (which is relatively low as the air at high altitudes is almost without moisture); cosmic radiation (namely raised levels of ionising radiation); seating and immobility (potentially causing cramps,

peripheral oedema and other circulatory problems, such as deep-vein thrombosis<sup>58</sup>); jet lag (crossing time zones causes disruption of the circadian rhythm and various body functions); and stress (both pre-flight and in-flight stress could cause passengers to be fearful, or drunk, and lead them to act in an unruly and aggressive manner).

76. Despite many concerns, however, the cabin environment in itself is generally not considered a risk to passenger health. According to research<sup>59</sup>, there is no evidence of health hazards for passengers resulting from cosmic radiation<sup>60</sup> or the use insecticide sprays. Furthermore, a recent report from the British Medical Association (BMA) found no evidence of airlines compromising the quality of air in the cabin in order to save money.<sup>61</sup> Nevertheless, although some airlines have taken out a few rows of seats to create more space for passengers, sitting in a cramped area for a long period of time causes discomfort and reduces passengers' well-being to some extent. The same holds true with regard to dry air, jet lag and stress.

77. In general, health issues for air passengers have been largely overlooked by health professionals, something which may come as a surprise considering the huge numbers of people travelling. The BMA report calls for both national and international actions towards safeguarding the health of air passengers. In order to understand and counter the medical risks posed by flying, it points to the need for much better regulation on in-flight medical equipment and quality of staff training on delivering emergency care.<sup>62</sup> Finally, the BMA report particularly stresses the importance of informing passengers on the general conditions of air travel and the potential health risks of flying. Needless to say, the Rapporteur does not wish operators to have to provide full hospital equipment or have registered doctors or nurses onboard. He also recognises the impressive efforts undertaken to identify, prevent and treat health problems occurring during air travel. Still, he thinks there is room for improvement.

78. In order to assess its role in protecting air passenger health, ECAC organised a Symposium on Selected Aspects of Passenger Health in Air Transport in 2002. Although medical in-flight incidents are uncommon, the Symposium concluded that they are likely to rise in the coming years unless additional efforts are made. The reasons behind such an expected increase include the forecast growth in air travel coupled with the rise in travel amongst older people. There is also the development of long-haul aircraft to carry a larger number of passengers for longer periods.

79. Recognising the need to better understand the causes of medical incidents during air travel and whether a causal relationship actually exists between the occurrences of such incidents and the conditions of air travel *per se*, the Symposium prioritised information sharing and multi-disciplinary research. It also recommended international harmonisation in the provision of appropriate services and the development of common guidelines and practices. Furthermore, the Symposium particularly called for the immediate consideration of relevant technical matters and the development of economically reasonable guidelines in a number of specific areas,<sup>63</sup> also recognising the legal aspects of providing medical assistance to passengers. Finally, the Symposium stressed the importance of improved communication with passengers with regard to health-related matters and the further development of passenger information sources.

80. In more concrete terms, the Symposium led to the establishment of an ECAC Working Group on Air Passenger Health Issues. The purpose of the Working Group has been to serve as a European forum of information and discussion on passenger health issues in co-ordination with the work undertaken at an international level by ICAO and WHO as well as in co-operation with the European Commission and industry representatives. The work and recommendations developed by the Working Group has been compiled into a Manual on Air Passenger Health Issues, adopted<sup>64</sup> in April 2005. The Manual is organised around the areas identified by the Symposium and addresses the following issues: 1) Medical incident reports (including recommendations for a harmonised reporting form and guidelines for compiling the form and using the data from it); 2) Provision of health-related services in-flight and at the airport (including recommendations and guidelines on first-aid kit and medical emergency equipment, training of cabin crew and airport staff, the use of telecommunications and telemedicine, and aircraft design and cabin layout); 3) Legal aspects (including provisions for insurance cover to encourage the provision of medical services on board by volunteering passenger



doctor or health professional); and 4) Information for passengers (including recommendations on availability of and access to health-related information and advice both prior to and during air travel).

81. The Manual is supported internationally by ICAO<sup>65</sup> and the Rapporteur recognises the Manual's contribution to providing visibility to the important, but previously neglected, subject of air passenger health.

82. Another organisation, IATA, has appointed a Medical Advisory Group specialised in aviation medicine and occupational health, which, among other things, reviews and updates practices relating to on-board medical care and other health-related matters.

83. Finally, an important current health concern is the avian influenza (or "bird flu"). The virus behind this disease is constantly mutating and "it is likely that at some, unpredictable, point in the future a strain of influenza will emerge that transmits easily between humans".<sup>66</sup> The aviation industry would clearly play an instrumental role in helping to limit its spread. In December 2005, the ECAC Directors General of Civil Aviation Meeting adopted a number of guidelines to raise awareness of and preparedness for the possible risks associated with the avian flu. ICAO, seeking to coordinate international efforts, held a meeting in February 2006 with specialists from various organisations, such as the World Health Organization (WHO), IATA and ACI, towards developing guidelines and a global preparedness plan. The draft guidelines are currently being reviewed by the ICAO member states. In short, however, they are generic enough to be applied to other contagious diseases and are expected to become part of the WHO global influenza preparedness plan. Furthermore, ACI has issued an avian influenza bulletin and is actively discussing this issue. Similarly, IATA has developed a public health emergency response plan and checklist. The Rapporteur strongly urges the aviation community, through ECAC, ICAO, IATA, ACI and other organizations, to continue its collaboration with the WHO on the avian flu and other communicable diseases.

## VII. Concluding remarks

84. One conclusion which the Rapporteur hopes can be drawn from this report is the need for a healthy European aviation industry capable, as it has been so far, of contributing to overall European growth and development, including in fostering international understanding. For this change is necessary in many areas of civil aviation but also in the understanding that governments and international organisations demonstrate toward the problems that the industry faces.

85. Another constant theme has been the need for pan-European co-operation on many aspects of civil aviation, notably aviation safety, where all Council of Europe and ECAC member states should ensure that air safety standards are rigorously upheld. Another is the importance of pressing forward with the reforms and initiatives under the Single European Sky package. A third is noise pollution and abatement around airports, where our conclusion has been that the reduction of aircraft noise at source will not be enough to reduce (or even maintain) current noise levels in view of the expected rise in air travel. A fourth is the need to support the extension of emissions trading to aviation with a view to reducing pollution, but on a European or preferably global basis and as quickly as possible so as to avoid piecemeal initiatives which could have a disproportionate impact on travel costs. And a fifth would be air passenger health, where the industry will have to be more active in the coming years.

Doc. 10912

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*Members of the Committee:* Mr Evgeni Kirilov (Chairperson), Mrs Antigoni Pericleous Papadopoulos (Vice-Chairperson), Mr Márton Braun (Vice-Chairperson), Mr Konstantinos Vrettos (Vice-Chairperson), MM. Ruhi Açıkgöz, Ulrich Adam, Hans Ager, Abdülkadir Ateş, Mrs Doris Barnett, Mrs Veronika Bellmann, MM. Radu-Mircea Berceanu, Akhmed Bilalov, Vidar Bjørnstad, Jaime Blanco, Luc Van den Brande (Alternate: Karim Van Overmeire), Patrick Breen, Milos Budin, Erol Aslan Cebeci, Mrs Ingrida Circene, MM. Valeriu Cosarciuc, Ignacio Cosidó, Giovanni Crema (Alternate: Andrea Rigoni), Iván Farkas, Joan Albert Farré Santuré, Relu Fenechiu, Mrs Urszula Gacek, MM. Carles Gasóliba (Alternate: Joan Puig Cerdà), Francis Grignon, Alfred Gusenbauer, Kristinn H. Gunnarsson, Nick Harvey (Alternate: James Clappison), Norbert Hauptert, Anders G. Höglmark, Ivan Ivanov, Ms Verica Kalanović, MM. Karen Karapetyan, Orest Klympush, Anatoliy Korobeynikov, Zoran Krstevski, Jean-Marie Le Guen (Alternate: Michel Hunault), Harald Leibrecht, Rune Lund, Gadzhya Makhachev (Alternate: Ms Liudmila Pirozhnikova), Edward Maniura, David Marshall, Jean-Pierre Masseret (Alternate: Ms Josette Durrieu), Miloš Melčák, José Mendes Bota, Mrs Ljiljana Miličević, MM. Neven Mimica, Gebhard Negele, Bujar Nishani, Conny Öhman, Mrs Ganira Pashayeva (Alternate: Aynur Guliyeva), MM. Jakob Presečnik, Jeffrey Pullicino Orlando, Luigi Ramponi, Maurizio Rattini, Maximilian Reimann, Dario Rivolta, Mrs Maria de Belém Roseira (Alternate: Mr Maximiano Martins), MM. Volodymyr Rybak, Kimmo Sasi, Bernard Schreiner, Samad Seyidov, Panagiotis Skandalakis (Alternate: Ioannis Dragassakis), Leonid Slutsky, Ms Geraldine Smith (Alternate: Baroness Gloria Hooper), Mr Christophe Spiliotis-Saquet, Mrs Aldona Staponkienė, MM. Frans Timmermans, Dragan Todorović, Mrs Ágnes Vadai, Mrs Jelleke Veenendaal, MM. Oldřich Vojtíš, Varujan Vosganian, Robert Walter, Paul Wille, Tadeusz Wita, Mrs Rosmarie Zapfl-Helbling, Mr Kostyantyn Zhevago.

N.B: The names of the members who took part in the meeting are printed in bold

*Head of Secretariat:* Mr Newman

*Secretaries to the committee:* Ms Ramanauskaite and Mr de Buyer

## Endnotes

<sup>1</sup> I.e., the current 25 EU member states and Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Iceland, the FYR of Macedonia, Moldova, Monaco, Norway, Romania, Serbia and Montenegro, Switzerland, Turkey and Ukraine.

<sup>2</sup> Nevertheless, the Rapporteur is pleased to see that high-level meetings with the Russian Federation remain high on ECAC's agenda following the signing of a protocol of intention in February 2002. Most recently, in early 2005, meetings were held with the Ministry of Transport and the Federal Authority for Transport Oversight to discuss and agree on the implementation of a transition period of 12 months for a five-channel GPWS (Ground Proximity Warning System).

<sup>3</sup> The European Commission has, however, recently decided that part of the aid that Belgian regional authorities have given Ryanair (to operate from the Charleroi airport not far from Brussels) is incompatible with EU law and that it hence has to be reimbursed. The phenomenon of the low-cost carriers was described in considerable detail by the Rapporteur's predecessor as Assembly Rapporteur for European civil aviation, Mr Jean-Pierre Masseret of France, in his report on "European Air transport policies: crucial choices at a critical time" (Resolution 1341 (2003)).

<sup>4</sup> Nevertheless, charter (i.e., non-scheduled) traffic in Europe remains the largest regional component of the world charter market (ICAO Journal, Vol. 60 No.5 2005).

<sup>5</sup> The Economist, "A way out of the wilderness", 1 May 2003.

<sup>6</sup> ICAO Journal, Vol. 60 No.5 2005.

<sup>7</sup> ICAO Journal, Vol. 60 No.5 2005.

<sup>8</sup> The Economist, "Air war", 25 June 2005.

<sup>9</sup> Eurocontrol.

<sup>10</sup> ECAC and Eurocontrol Study on "Airport Capacity: Challenges to Growth": December 2004.

<sup>11</sup> In Europe, the organisation in charge of the maintenance and development of the ATM system is Eurocontrol, or the European Organisation for the Safety of Air Navigation, currently with 35 member states. (Russia is not yet a Eurocontrol member.)

<sup>12</sup> It is estimated that delays cost European airlines between €1,3 and €1,9 billion per year (Directorate-General for Energy and Transport).

<sup>13</sup> "European transport policy for 2010: time to decide", COM (2001) 370 final, 12 September 2001.

<sup>14</sup> The negotiations aim to replace the existing agreements between the US and individual member states. They cover all arrangements governing air transport between and within the EU and the US (including rules governing market access, the setting of air fares, the application of competition rules, and the maintenance of high standards of aviation safety and security). The negotiations should also address the potential removal of the special restrictions that currently apply to foreign ownership and control of airlines. A 2003 report by The Brattle Group estimates that the OAA would generate up to 17 million extra passengers per year and \$ 5 billion per year in consumer benefits, apart from boosting employment both in the EU and the US (25 June 2003 European Commission press release on the EU-US Summit).

<sup>15</sup> Another issue of relevance for both the EU and the US is the dispute over the way the two are assisting their respective aircraft manufacturers, Airbus for the former and Boeing for the latter. The Americans maintain that Airbus receives illegal subsidies through "launch aid" (namely loan guarantees that lower the risk of developing new models). The Europeans in their turn argue that Boeing is the beneficiary of a variety of direct and indirect aid in the form of R&D subsidies. Both the EU and the US have filed complaints with the World Trade Organization (WTO) and both risk in the end being found guilty. However, if the WTO were to grant the injured party the right take countervailing measures would, if carried out, not be beneficial to the aviation industry and could even cause a transatlantic trade conflict. The Rapporteur certainly recognises the importance of the aircraft manufacturing industry from a national and European perspective and can understand that subsidies can be justified initially (i.e., in the 1970s and 1980s) using the 'infant industry' argument. But he also believes that we need to overcome this altogether too lengthy dispute by finding the right compromise between the two sides. See also The Economist, "Special Report: Boeing v Airbus", 25 June 2005.

<sup>16</sup> "A Community aviation policy towards its neighbours", COM (2004) 74 final, 9 February 2004.

<sup>17</sup> Aviation safety is concerned with the rules for the construction and use of aircraft (while aviation security is aimed at preventing unlawful interference).

<sup>18</sup> European Commission, Directorate-General for Energy and Transport.

<sup>19</sup> According to a survey of operating personnel in Europe, both pilots and air traffic controllers indeed consider runway incursions to be the most serious safety issue facing airports today. Ramp accidents and incidents also constitute a significant safety concern (ICAO Journal, No. 2, March/April, 2004).

<sup>20</sup> See also the SAFA programme below.

<sup>21</sup> Nevertheless, the need for technological development necessarily has to be balanced against financial (and social) considerations.

<sup>22</sup> Through the following four Regulations of the European Parliament and of the Council: 549/2004, 550/2004, 551/2004 and 552/2004.

<sup>23</sup> In order to separate regulatory and supervisory functions from the provision of actual services, each EU member state is required to create, (where it does not already exist) an independent national supervisory authority. The authority is to ensure that all service providers in their respective countries meet the safety standards and requirements set out by relevant EU entities (such as EASA – see below).

<sup>24</sup> The scaling down of JAA's activities (and the consequent integration into EASA's activities) will be monitored by ECAC and is expected to be completed by 2006/2007.

<sup>25</sup> ECAC and ICAO signed a Memorandum of Understanding in 1997 (and amended it in 1999) on mutual support and co-operation. Furthermore, the IATA Operational Safety Audit (IOSA) programme is also an internationally recognised and accepted assessment system designed to evaluate the operational management and control systems of airlines.

<sup>26</sup> Following a common procedure (and format) for the assessment of aircraft documents and manuals, flight crews license the seeming condition of the aircraft, and the presence and condition of mandatory cabin safety equipment.

<sup>27</sup> The SAFA inspectors also have the opportunity to participate in inspections performed in other member states to allow for the sharing of valuable practical experience. This exchange programme also contributes to the SAFA programme being implemented in a harmonised way throughout ECAC.

<sup>28</sup> Furthermore, a "SAFA alarm function" has recently been developed in co-operation with Eurocontrol, which will alert ECAC member states of flight plans to and from ECAC airports for those aircraft or operators that have been subject to a SAFA alarm message.

<sup>29</sup> 2004/36/EC of the European Parliament and the Council.

<sup>30</sup> The list is to be updated as necessary and at least every three months.

<sup>31</sup> [http://europa.eu.int/comm/transport/air/safety/doc/flywell/2006\\_03\\_22\\_flywell\\_list\\_en.pdf](http://europa.eu.int/comm/transport/air/safety/doc/flywell/2006_03_22_flywell_list_en.pdf)

<sup>32</sup> Through: i) the identification of major problem areas and corrective actions and the development of analytic tools under the SAFA programme; ii) collective consideration and appropriate actions on recurring USOAP findings affecting the majority of ECAC member states; and iii) actively monitoring the transition from JAA to EASA from a pan-European perspective.

<sup>33</sup> Not including aircraft accidents caused by acts of unlawful interference.

<sup>34</sup> While aviation safety is concerned with the rules for aircraft construction and use, aviation security aims at preventing unlawful interference with the use of aircraft.

<sup>35</sup> ICAO has its own audit programme, the Universal Security Audit Programme (USAP), launched in June 2002. The programme undertakes universal, mandatory and regular audits of the aviation security systems in all ICAO member states towards promoting global aviation security (by identifying problems and providing recommendations).

<sup>36</sup> In force since 19 January 2003.

<sup>37</sup> 1138/2004/EC of 21 June 2004.

<sup>38</sup> 2004/82/EC of 29 April 2004.

<sup>39</sup> Study on financing civil aviation security costs in Europe, 19 May 2003.

<sup>40</sup> In a 16 January 2006 European Air Transport Industry Policy Paper on Civil Aviation Security together with IATA and several other European industry organisations.

<sup>41</sup> Namely two unlawful seizures, two facility attacks, and two other acts of unlawful interference.

<sup>42</sup> As a result of such standards, many of the noisiest aircraft have already been banned from European airports. Furthermore, as of January 2006, a more stringent ICAO noise certification standard will be applied to new aircraft designs, making them at least one-third quieter than those currently certified. Aircraft manufacturers have followed suit - for example, with regard to the development of the Airbus 380, the more stringent noise requirements led to a significant redesign of some areas of the engine and the airframe. ("New aircraft and new technologies for increased efficiencies", presentation by Mr. Philippe Jarry, Senior Vice-president, Product and Services Policy, Airbus, during the ECAC/EU Dialogue with the European Air Transport Industry: "What Future for the European Air Transport Industry", Budapest, Hungary: 16-17 October 2003).

<sup>43</sup> "Study on Current and Future Aircraft Noise Exposure at and around Community Airports: Final Report", ANOTEC Consulting for the Directorate-General for Energy and Transport: 10 November 2003.

<sup>44</sup> By: 1) assessing the noise problem at the airport concerned based on objective and measurable criteria; 2) evaluating the likely costs and benefits of the various measures available; 3) based on that evaluation, selecting measures that achieve maximum environmental benefit in the most cost-efficient manner; and 4) disseminating evaluation results for the purposes of stakeholder consultations and dispute resolution.

<sup>45</sup> Should operating restrictions be considered, then they should: be based on the noise performance of the aircraft; be limited to restrictions of a partial (rather than complete) withdrawal wherever possible and introduced gradually over time (to give operators sufficient advance notice); and consider all possible consequences for air services and operators without suitable alternatives.

<sup>46</sup> "Assessing the Economic Costs of Night Flight Restrictions: Final Report", by M P D Group and Environmental Resources Management for the Directorate-General for Energy and Transport: February 2005.

<sup>47</sup> "Study on the Different Aspects of Noise Limits at Airports: Final Report", Sofreavia and BIPE for the Directorate-General for Energy and Transport: 5 October 2004.

<sup>48</sup> 2002/30/EC of the European Parliament and of the Council.

<sup>49</sup> 2002/49/EC of the European Parliament and of the Council.

<sup>50</sup> Although it is hard to compare noise limits (also due varying definitions), noise level limits are not linked to airport size, but rather to national policies and more national general environmental noise concepts ("Study on the Different Aspects of Noise Limits at Airports: Final Report", Sofreavia and BIPE for the Directorate-General for Energy and Transport: 5 October 2004).

<sup>51</sup> "Sound Noise Limits: Options for a Uniform Noise Limiting Scheme for EU airports", CE (Solutions for environment, economy and technology) for the Directorate-General for Energy and Transport: January 2005.

<sup>52</sup> In fact, to date, very few countries (namely only France and UK) have implemented penalties in cases of overrun ("Study on the Different Aspects of Noise Limits at Airports: Final Report", Sofreavia and BIPE for the Directorate-General for Energy and Transport: 5 October 2004).

<sup>53</sup> Since the 1960s, levels of carbon monoxide, unburned hydrocarbons and smoke have been reduced by around 90% or more (IATA).

<sup>54</sup> The Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in December 1997 towards seeking to reduce the emissions of CO<sub>2</sub> and other greenhouse gases. Although the Kyoto Protocol has not yet come into force, the EU has made its targets legally binding. EU member countries have committed themselves to reduce, by 2008-2012, their emissions of Kyoto greenhouse gases to, on average, 8% below their 1990 levels.

<sup>55</sup> 2003/87/EC

<sup>56</sup> COM (2005)459.

<sup>57</sup> ECAC Manual on Air Passenger Health Issues: April 2005 and Proceedings from the ECAC Symposium on Selected Aspects of Passenger Health in Air Travel, Dubrovnik, Croatia: 23-24 October 2002.

<sup>58</sup> Namely, the formation of potentially lethal blood clots. Also known as the "economy class syndrome" as it is thought that long periods of sitting down in one position, particularly a cramped one, are more likely to create conditions of poor circulation needed for the formation of clots.

<sup>59</sup> ECAC Manual on Air Passenger Health Issues: April 2005.

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<sup>60</sup> Nevertheless, legislation requires airlines to assess the level of exposure of crew (though not of passengers).

<sup>61</sup> "The Impact of Flying on Passenger Health: A Guide for Healthcare Professionals", The British Medical Association, Board of Science and Education: May 2004.

<sup>62</sup> While most airlines provide medical care to varying degrees, the BMA report reveals that there are no international obligations on airlines to do so. In Europe, cabin crew must be trained in first aid, but there are few requirements on training standards. Furthermore, the standards for medical equipment vary considerably. There are few rules on the content of medical kits and airlines are not obliged to carry automated external defibrillators (basic machinery for resuscitating heart attack victims).

<sup>63</sup> Including: 1) specifications for on-board medical equipment and their usage by cabin staff and/or doctors; 2) training of cabin crew with regard to assistance to passengers; 3) use of air/ground/air communications to assist in establishing diagnosis and treatment and in making diversion decisions; 4) the potential of telemetric transmission of medical data; and 5) guidelines regarding aircraft design and/or cabin layout to facilitate medical treatment of passengers on board.

<sup>64</sup> By Recommendation ECAC/28-1 on Air Passenger Health Issues.

<sup>65</sup> In September 2004, the ICAO Assembly also adopted a resolution on the protection of the health of passengers and crews (as well as on the prevention of the spread of communicable disease through international travel). The resolution particularly states that such protection is to be considered as an integral part of safe air travel.

<sup>66</sup> ICAO (Aviation Medicine Section: Avian Influenza).

