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WORLDWIDE AIR TRANSPORT CONFERENCE (ATCONF)

SIXTH MEETING

Montréal, 18 to 22 March 2013

Agenda Item 2: Examination of key issues and related regulatory framework

Agenda Item 2.1 : Market access

NIGHT FLIGHT RESTRICTIONS

(Presented by the Secretariat)

EXECUTIVE SUMMARY

This paper examines the issue of night flight restrictions, also known as curfews. It assesses the current situation, discusses its impact on international air transport, and provides information on ICAO related work and policy guidance, particularly with respect to the "Balanced Approach" to noise management.

Action: The Conference is invited to:

- a) review the information and assessments presented in this paper;
- b) endorse the conclusion presented in paragraph 4; and
- c) adopt the recommendations in paragraph 5.

References: ATConf/6 reference material is available at www.icao.int/meetings/atconf6.

1. **INTRODUCTION**

1.1 Airport night flight restrictions or curfews are rules imposed on aircraft operators that prohibit aircraft take-offs and/or landings during a specified period of time. Such night flight restrictions may apply to all aircraft or only to certain aircraft, according to their noise performance. Most restrictions are adopted as a measure by which to address the adverse effects of aircraft noise on the affected airport and nearby communities. While the measure of night flight restrictions can help reduce the aircraft noise problem at the airport, it can also have an impact on the operation of air services, particularly international services to/from the airport, and the economic well-being of the local community and the country at large.

2. ASSESMENT OF THE CURRENT SITUATION

Night curfews are imposed at airports in many parts of the world. The issues arising from such measures have existed for many years and continue to remain despite the fact that advancement in aircraft engine technology has contributed considerably to noise abatement in the past two decades. Due to continuous traffic growth and due to increased pressure from airport neighbours, there is growing pressure to impose operating restrictions on night flights in some regions of the world. The pressure is quite intense for some major hubs and, in some cases, at secondary airports which are located in very densely populated areas. In many instances, inadequate land-use management policies have allowed urban encroachment around airports, resulting in an increase of the number of people significantly exposed to aircraft noise in spite of an actual reduction in noise emissions. Furthermore, conditions for allowing airport expansion sometimes requires a strong commitment from both airports and aircraft operators to limit or reduce the general noise level. In addition, as the number of flights increase, the population in the vicinity of the airport often

around the airport.

becomes more concerned with health problems, including those caused by aircraft noise. For instance, it has been reported that noise can be one of many environmental stressors, and there is evidence that acute noise exposure can cause temporary elevations in heart rate. Of note is the fact that the reported level of annoyance from aircraft noise is often increased by factors that are not related to noise, such as congestion due to road traffic in the vicinity of airports, the fear of air accidents, or financial concerns about the value of property

- 2.2 States or local governments impose restrictions on night flights at airports largely in response to the pressures and concerns highlighted above. As of mid-2012, approximately 250 domestic and international airports worldwide imposed some form of night time operational restrictions.
- 2.3 The situation varies widely across the regions. In Africa, Asia/Pacific, and Latin America and the Caribbean, only 1 per cent of all airports open to scheduled air traffic imposed some sort of night flight restrictions. The proportion increases to 4 and 5 per cent respectively for Middle East and North America airports to 12 per cent for airports in Europe¹.
- As for airports handling international scheduled passenger and/or all-cargo air services, 161 are subject to some form of night flight restrictions. Of these 161 international airports, 66 per cent are located in Europe, 16 per cent in North America, 8 per cent in Asia/Pacific, 5 per cent in Latin America and the Caribbean, 3 per cent in Africa, and 2 per cent in the Middle East. Additional data on the current night flight restrictions at the regional level is provided in the Appendix to this paper.
- 2.5 The above indicates that more than two thirds of the airports subject to some form of night flight restrictions are handling international air services, thus the impact on these services can be serious, affecting, particularly, medium-haul and long-haul flights from other regions. In 2008, during the Conference on the Economics of Airports and Air Navigation Services (CEANS), African States pointed out that night curfews imposed at some airports, particularly in Europe, have given rise to increased operational problems and financial burden for African airports and airlines. Some African airports have to be kept open for operations during the night in order for the departing flights to arrive in Europe after 0600 hours. These concerns were expressed by one State from another region during the 37th Session of the ICAO Assembly.

3. **DISCUSSION**

- 3.1 Night flight restrictions have a particular impact on all-cargo carriers, particularly on express delivery operations. Indeed, the business model for express delivery service, on which the modern "just in time" manufacturing systems depend, is built around late-day pick-ups and morning deliveries. For this reason, night flying is essential to the model. Night flight restrictions also significantly impact network carriers by reducing their ability to offer connecting services in the morning or evening.
- 3.2 Night curfews are a difficult, complex and often controversial issue affecting many stakeholders. Authorities responsible for making decisions to allow, restrict, or prohibit night flights must weigh a range of factors, including environmental and health considerations as well as the implications for air transport operations and economic development. In each case, decisions are influenced by the specific situation or conditions surrounding the particular airport. One example is the recent court ruling of a European country that bans all flights at the country's largest airport during the "core night" period from 2300 to 0500 hours.
- 3.3 In response to concerns voiced by Member States, ICAO has addressed the issue of night curfews. As early as in 1989, ICAO, in its Assembly Resolution A27-11 (still in force), invited States "to consider the possible relaxation of operating restrictions for aircraft meeting the requirements of Chapter 3 of Annex 16 *Environmental Protection*, including the easing of night curfews and/or quotas for off-schedule arrivals by such aircraft". The 2003 Fifth Air Transport Conference (ATConf/5) also addressed the issue in the context of market access. It was noted that the abolishment of night curfews would increase airport

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¹ ICAO statistical regions.

capacity and assist in resolving the problem of airlines unable to exercise traffic rights at certain airports. However, this would create difficult environmental and political problems at the airports concerned.

- At the 2008 CEANS many States again called for ICAO to address the issue, especially in light of recent improvements in aircraft engine noise abatement technology. In response, in 2009 the ICAO Council directed the Secretariat to undertake a study, in the context of its environmental programme, on the effect of night curfews imposed in one region on another region. Initial work of the study indicated that a number of influencing factors, including time zones, airline economics and passenger demand, contribute to the impact of night curfews. These conclusions were corroborated by the Committee on Aviation Environmental Protection (CAEP) in its 2009 study on the environmental impact of night curfews. The findings of the study were discussed further at the 37th Session of the ICAO Assembly and the issue of night curfews has been discussed subsequently during the 192nd and 194th ICAO Council Sessions. Subsequently some ICAO Contracting States have requested that the ICAO Secretariat conduct a further, global, assessment of night curfews and, accordingly, draft Terms of Reference for a study have been prepared with input from the Airports Council International (ACI) and the International Air Transport Association (IATA); the study will be carried out pending availability of resources.
- 3.5 The partial or total removal of night curfew restrictions could considerably improve market access, alleviate slot problems and contribute to economic development and trade. Land-use management and planning are also critical tools to limit the exposure of local residents to aircraft noise. However, it would be difficult to prescribe an across-the-board solution to the issue of curfews, given the need to evaluate specific airport conditions and weigh the full range of relevant factors.
- 3.6 To address the aircraft noise problem, the ICAO Assembly has endorsed a "Balanced Approach" to noise management (Assembly Resolution A37-18, Appendix D; Doc 9829, *Guidance on the Balanced Approach to Aircraft Noise Management*). The approach "consists of identifying the noise problem at an airport and then analysing the various measures available to reduce noise through the exploration of four principal elements, namely, reduction at source, land-use planning and management, noise abatement operational procedures, and operating restrictions, with the goal of addressing the noise problem in the most cost-effective manner".
- 3.7 The Balanced Approach calls for an airport-by-airport approach where the following procedural steps allow for identification of the most suitable solution for the noise issue at the airport in question:
 - a) assessment of the current and future noise impact at the airport concerned, compared to the noise objective to be achieved;
 - b) evaluation of the likely costs and benefits of the various measures available;
 - c) selection of measures with the goal to achieve maximum environmental benefits most cost-effectively;
 - d) provision for dissemination of the evaluation results;
 - e) provision for consultation with stakeholders at different stages from assessment to implementation; and
 - f) provision for dispute resolution.
- 3.8 One of the most important elements of the Balanced Approach is consultation with stakeholders, including members of the public whose quality of life may, potentially, be impacted, entities directly affected economically by operations at the airport level, and aircraft operators. Such consultation would allow the views of all stakeholders to be considered and offers a transparent and defensible process for taking, in many cases, difficult decisions. The decision process regarding the elements of a Balanced Approach, both with respect to developing and implementing appropriate solutions to noise problems at airports, is ultimately the responsibility of individual States and should be addressed in conformity with ICAO rules and policies.

- 3.9 Where States have specific problems or differences with respect to the effects of night curfews on the market access or operation of airlines, the difficulties may be addressed with States concerned through consultation and dispute settlement mechanisms under air services agreements or through other available mechanisms.
- 3.10 Since the adoption of the method of Balanced Approach, ICAO has urged States to follow this approach to noise management when addressing noise problems at international airports; ICAO Assembly Resolution A37-18 again urged States to adopt this approach, taking full account of ICAO guidance provided in Doc 9829, relevant legal obligations, existing agreements, current laws and established policies.
- Many States have used the Balanced Approach in aircraft noise management. For example, the European Union (EU) adopted regulations on noise-related operating restrictions in 2002. In December 2011, the European Commission proposed the replacement of existing regulations on noise management at EU airports with a new framework integrating practical steps to support the implementation of measures based upon the principles of the Balanced Approach. The proposal is currently being considered by the European Council and the European Parliament. In the United States (U.S.), an aviation noise policy was adopted in 1990, which is consistent with the Balanced Approach. In 2004, the U.S. Federal Aviation Administration accepted Doc 9829 as additional guidance material in noise management. Nevertheless, while the Balanced Approach has guided many States in addressing noise problems at airports, a certain number of noise-related measures are still adopted without proper implementation of the Balanced Approach.

4. **CONCLUSION**

4.1 In light of the discussion above, the following can be concluded:

The issue of night curfews is linked to specific local situations, but has an impact on market access and the operation of international air services from other regions. As air traffic continues to grow, this issue will continue to exist. It would be difficult to develop a global solution as the situation varies from airport to airport and from State to State. An appropriate approach for States in aircraft noise management is to adopt the ICAO Balanced Approach, and to resolve difficulties with concerned States through available consultation and dispute settlement mechanisms.

5. **RECOMMENDATIONS**

- 5.1 The following recommendations are proposed for consideration by the Conference:
 - a) States should give due consideration to the concerns of other States and the negative impact on international air services when dealing with issues of night flight restrictions and make every effort to resolve the problems with States concerned through consultation and available dispute settlement mechanisms;
 - b) States should respect and follow the ICAO Balanced Approach principle in their regulatory action on aircraft noise management at airports, giving due regard to the views of all stakeholders, examining alternative means of addressing the problems, evaluating the likely costs and benefits of various measures and striving for the most cost-effective solutions;
 - c) ICAO should continue to play a leadership role in developing policy guidance and should work in close cooperation with States and the industry to explore appropriate ways to address night flight restriction issues, including possible new avenues, taking into account the interests of States, the industry, and other aviation stakeholders; and
 - d) ICAO should continue to monitor States' practices in handling this issue and keep States informed of any significant developments. ICAO should also raise State awareness of ICAO policy guidance and encourage its use by States.

APPENDIX

FLIGHT RESTRICTION SITUATION AT THE REGIONAL LEVEL

- 1. The Boeing Company has developed a database of worldwide regulations on noise that has been used to collect information for this working paper. It must be noted that the Boeing survey labels any airport with any form of night time operational restriction as having curfews; many of the airports concerned could be reclassified as having only partial curfews. In addition, a few airports in the Boeing database are labelled as having curfews when, in fact, details indicate that the curfews no longer apply This database was used, in conjunction with other data collected by the ICAO Secretariat, to provide a "snapshot in time" of the curfew situation at the airports the survey covers. It contains information on 651 of the world's major international and regional airports subject to noise and emission restrictions, of which 241 have operating restrictions at night.
- 2. Figure 1 below shows the number of commercial airports subject to operating restrictions at night by regions. Figure 2 shows the same data for international airports only. Figure 3 shows the regional distribution of airports handling international scheduled passenger and/or all-cargo air services that are subject to some sort of night flight restrictions, based on ICAO statistical regions.

Figure 1

Airports subject to night flight restrictions				
Region	Number of airports			
Europe	126			
Africa	5			
Middle East	6			
Asia/Pacific	15			
North America	81			
Latin America/Caribbean	8			
World	241			

Figure 2

International airports subject to night flight restrictions				
Region	Number of airports			
Europe	107			
Africa	5			
Middle East	3			
Asia/Pacific	13			
North America	25			
Latin America/Caribbean	8			
World	161			

Figure 3
Regional distribution (in %) of international airports subject to night flight restrictions

