International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
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Río de Janeiro, Brasil, 13 – 17 October 2008

Agenda Item 2 Global and inter-regional activities

2.1 Inter-regional and intra-regional CNS/ATM activities and coordination

COMMON STRATEGY FOR AN ENVIROMENT FRIENDLY AVIATION

(Presented by Colombia)

SUMMARY

This Working paper presents a synopsis of the activities concerning environment friendly aviation and its development, as well as a call to States to support a common position and strategy to build the future framework to facilitate an environment friendly aviation; that is why this working paper makes emphasis in the high priority of this subject in the next years as well as in the air transport development, and look for Regional ICAO Offices support in the efforts to fulfill this objective in the future.

1. Introduction

1.1 During the last 36th ICAO Assembly held in Montreal from September 18th to 28th of 2007, the environmental issue and the impact of aviation took a transcendental value in the world view about the future of aviation.

1.2 The goal of the Convention that "the future development of international civil aviation can greatly help to create and preserve friendship and understanding among the nations and peoples of the world…" has today an additional pillar in environmental issues, this pillar has friends and foes, where the opinions are diverse on today, the future and how to tackle the subject; where the common people receive different versions through the mass media and have distorted views of the efforts made by the aviation community on the issue, consequently we have to be aware of the role to facilitate the common understanding about the fact that many of the adverse environmental effects of aviation can be reduce using comprehensive measures based on technological improvements, an efficient air traffic management, better operational practices and the proper airport and land use planning

1.3 The mayor effects that have increased the concern are based on noise impact and gas emissions to the atmosphere (See appendix A and B), although in the last Assembly was consider the progress of the Committee on Aviation Environmental Protection (CAEP) and its various panels of

experts, in the case of aircraft noise, the Balanced Approach seems to be continuing in the international community as the feasible approach to Aircraft Noise Management (ICAO Doc 9829) and this thought has been complemented by issues regarding human factors, studies of airports, seminars, an important task of developing guidance material to provide the general information about noise abatement operational procedures advantages, updates to the Airport Planning Manual (Doc 9184) and generally the hard work based on the Balanced Approach.

1.4 The voices of some States heard in the Assembly about noise were focused on declare that the restriction due to curfews in some Sates and airports should be revised, this ideas came from India and Africa; as well as the Airport International Council (ACI) that consider noise as the most important issue. It was evident the fact that noise is still an obstacle for expansion of the existing airports and construction of new ones.

1.5 However, about the emissions issues, two tendencies were visible, one moved by the seek of levies or establishment of charges to aviation for its effects on environment, tendency which is present not only inside aviation industry but represents a global force to establish price on the environment, creating a new market around them and developing new kind of business that in some way is going to affect the productive activities; on the other hand the other tendency grows strongly on the principle that aviation, as it has shown before, has the technological capabilities to contribute in the solution to the problem and that endeavor should be recognize worldwide.

1.6 There is not doubt that NOx reduction goals will be established in short term (2016) and long term (2026) by CAEP, but at the same time is foreseeable a grater effort demand for efficiency in the implementation of the new CNS/ATM systems, the Continuous Descent Arrival (CDA) or other developments where the environmental impact becomes an element of assessment.

1.7 In the environmental issues the manufacturers have a huge responsibility, because they can mitigate the effects on the source through research and development, the aircraft performance and other alternatives.

1.8 If we want a sustainable growth of aviation, there is a common responsibility for each and everyone: States, Airports, Air Navigation Service Providers and Manufacturers in achieving that purpose; so we must find the strategy to ensure the actions that support aviation and demonstrate that is an activity compatible with environment.

1.9 Finally, with regard to measures based on market criteria, we must remember that in this issue we achieve hemispheric consensus. Chili (A36 WP/285) affirmed that the emissions trading scheme should be dealt within the context of international law and stressed the need for the establishment of common but differentiated responsibilities and distinguish the treatment accorded to countries particularly vulnerable, stressed its geographical condition and the impact that these measures would have on their operational costs and harming the economic development of Chile. For its part Argentina, Brazil, Canada, Colombia, Ecuador, Mexico and Panama, St. Lucia (A36 WP/166), in conjunction with other states in other hemispheres, indicated that ICAO should continue to assume its leadership role to establish a structured long term approach, globally acceptable that combines growth and an environment friendly aviation, and as ICAO, should recognize the need to take into account the implications of environmental measures in the economic circumstances of the developing world.

1.10 The Latin American Civil Aviation Commission (LACAC) (A36 WP/130) emphasized the issue of geographic scope, the principle of common but differentiated responsibilities, and the dilemma for the States of appropriate balance between mitigation and growth. Under this light, the

LACAC member States estimated necessary and possible the achievement of further progress to implement measures properly integrated, such as:

- The dissemination and timely access to technological advances
- The implementation of more appropriate operational procedures
- The organization and proper air traffic management.
- The use of planning mechanisms at airports; planning and management in land use.
- Including the implementation of measures based on market criteria to control or reduce emissions.

But all of them should be integrated into ICAO specific guidance and be part of an acceptable Global Plan to include emissions trading with a mutual consensus approach.

2. Discussion

2.1 The impact of aviation to the environment continues to be one of the most important challenges to ICAO and the Civil Aviation community at large. Joint and integrated actions of all aviation stakeholders are therefore required.

2.2 Now is important to work together on a environmentally-friendly aviation, in which can participate no only States but also stakeholders such as international organizations and manufacturers since cooperation in the hemisphere is a great support to assure efficiency, safety and other aspects of civil aviation. Consequently, it is an imperative to make progress to understand the impact of environment on aviation and to develop policies accordingly.

2.3 The hemisphere requires this cooperation to work on this issue from a scientific perspective, and we are should committed in building scenarios on future events in relation with environmental aspects, in particular, the next meeting on aircraft emissions with States Representatives of the highest level.

2.4 The hemisphere should protect the aviation and ensure its development under a block position, where States, airlines, manufacturers, air navigation providers, and all of those recognize the importance of aviation for the continent.

2.4.1 We need to emerge this block, is likely to consolidate a pact that contains recommendations to act, strategies to maintain the united block and mechanisms to ensure that the problem is correctly understood by each state, its aviation community, the passenger and, the media.

2.5 This block should work to provide correct information on aviation activities in the perspective of protecting the environment, guiding and orienting the work to benefit the community, to contribute to the education and to share knowledge, including media communications; let’s remind that States and aviation development could be punished them without scientific knowledge.

2.6 It should appreciate the efforts of manufacturers in researching and developing, especially on fuel efficiency and alternative fuels for aviation that will allow international air transport operations with lower consequences for environment;

2.7 It should appreciate the effort of GREPECAS in search for efficiency and its positive impact achieved now and in the future; GREPECAS has been working for efficiency, to save fuel and to improve performance flight, so that their activities are directly related to positive impacts on environment. GREPECAS is a force that should contribute substantially in the friendly environment of aviation.

2.8 We have taken big amount of information on the important of environment and aviation from international organizations and associations, including LACAC, GEASA, ACI, IATA and ALTA, for this debate. We have also expressed our vision as States and, are required to put in place those individual and collective efforts with integrated measures and to be part of a global plan or at least, regional.

2.9 In this line, other movements as “ASPIRE TO GREEN” have called on the global aviation community to act together on the challenge of reducing aviation greenhouse gas emissions, focusing on technologies instead of taxes; new procedures, not penalties; and unified solutions, nothing unilateral; that bring together to Australia, New Zealand and the United States; a similar initiative has been developed in Asia and the South Pacific.

2.10 There is another agreement called AIRE, “Atlantic Interoperability Initiative to Reduce Emissions” signed by European Commission and the FAA to coordinate two major programs on air traffic control infrastructure modernization, SESAR “Single European Sky ATM Research Program” in Europe and NextGEN in the United States and its objectives are the application of new technologies and operational procedures which will have a direct impact in the short and medium term on greenhouse gas emissions. AIRE will base on “gate to gate” test campaigns and experiments, which will make it possible to assess the new measures, environmental benefits and technical feasibility. The Commission and the FAA have ensured that this initiative is being undertaken with the close involvement of partners from the industry, the operators and providers of aviation navigation services.

3. Conclusion

3.1 Technological measures, operational and infrastructure improvements to address environmental issues and in particular those relating to aviation emissions are the point of attention of all stakeholders in the Western Hemisphere, while market measures and economic measures will constitute important challenges in the future; certainly, this issue will bring the attention by the regional groups concerned.

3.2 These groups of States, including LACAC, will seek for initiatives on this matter that strengthen and continue together with the construction of the action from now, to face the challenges ahead, the application of new technologies CNS/ATM and, a technical approach to achieve efficiency of the services and infrastructure of continental air space.

3.3 GREPECAS plays an important role to implement these improvements and to contribute directly to environment; so the environmental matters should be considered as a part of its work.

4. Action of the GREPECAS

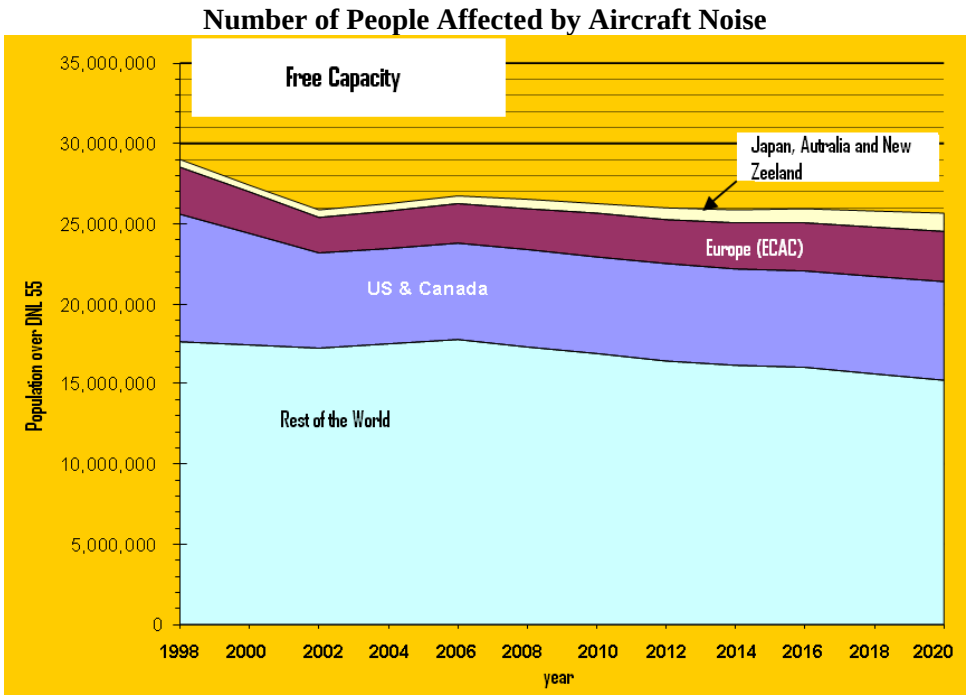
a) To take note of this information and to recognize the importance of initiatives in relation with a environmentally-friendly aviation.

b) To consider a decision to make in the process of improving the efficiency and deployments of new technologies within the air navigation system, the working groups, other subgroups, and stakeholders of GREPECAS consider and analyze the positive impacts to environment.

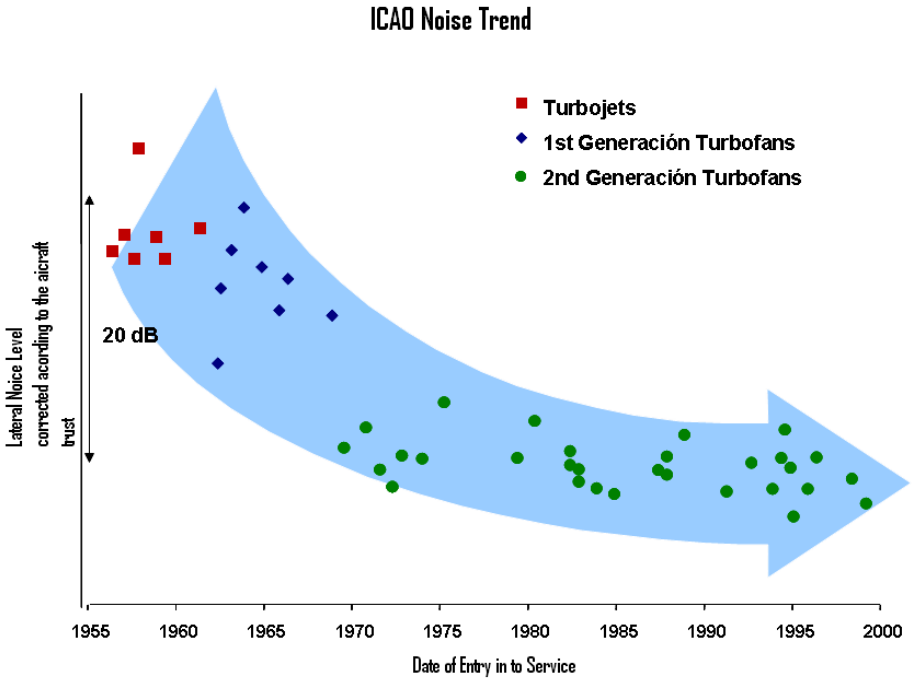
c) To support strongly the initiatives around the principle of environmentally-friendly aviation, based on the strength of aviation, in its capability to develop and deploy new technologies and in improving efficiency of the air navigation system.

APPENDIX A

NOISE TRENDS

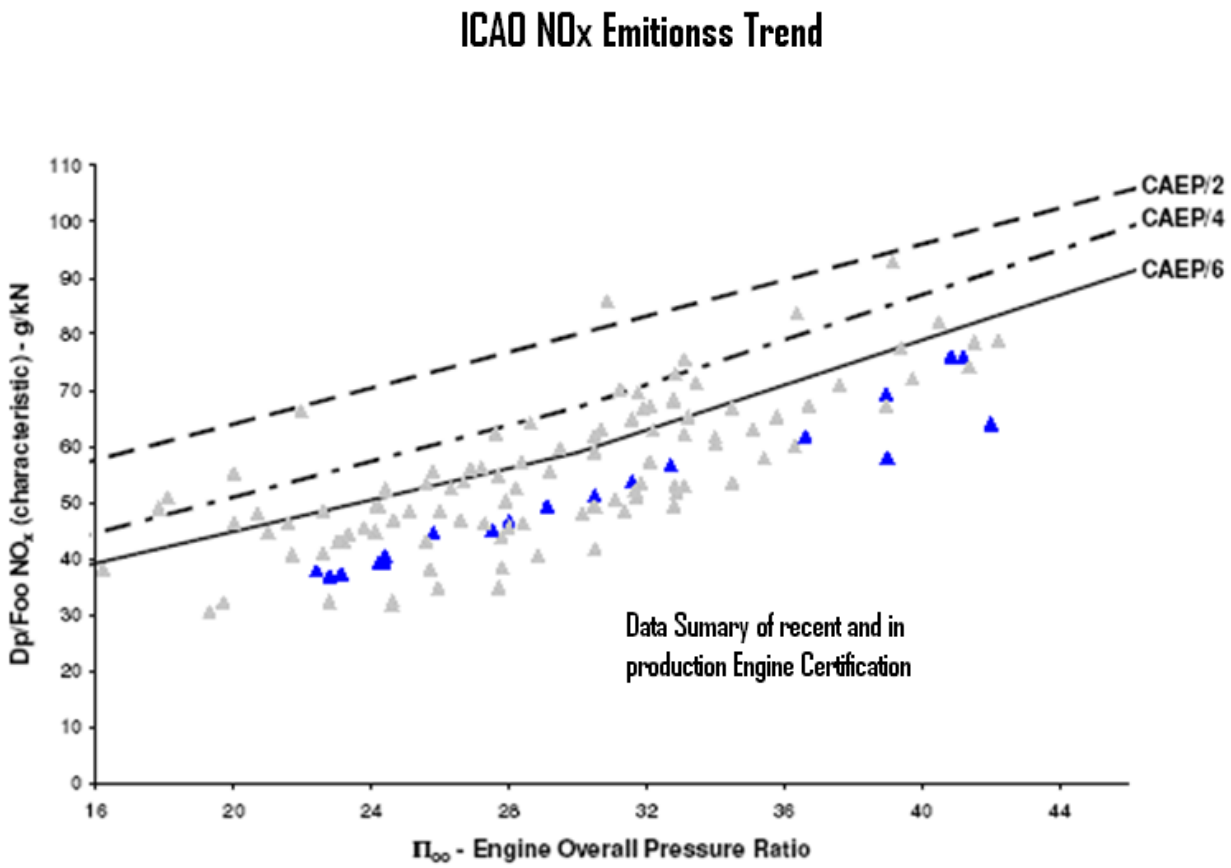


Source: Transport Canada Presentation – GEASA VII
DNL (Day-Night Sound Level) is an indicator that shows noise exposure on a 24 hours basis



APPENDIX B

GAS EMISSION TRENDS



Source: Transport Canada Presentation – GEASA VII

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