

**ASSEMBLY — 35TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 15: Environmental protection**

**THE NEED FOR A SCIENTIFICALLY SUBSTANTIATED APPROACH  
TO THE INTRODUCTION OF MARKET-BASED MEASURES TO  
LIMIT OR REDUCE AIRCRAFT ENGINE EMISSIONS**

(Presented by the Russian Federation)

**SUMMARY**

This paper presents a proposal from the Russian Federation concerning the need for a scientifically substantiated approach to the introduction of market-based measures to limit or reduce aircraft engine emissions, in particular carbon dioxide (CO<sub>2</sub>) emissions. Attention is drawn in particular to the need for a weighted and balanced approach in the implementation of the proposed measures by Contracting States. It is proposed in the further work of the ICAO Committee on Aviation Environmental Protection (CAEP) to concentrate attention on reducing nitrogen oxides (NO<sub>x</sub>) emissions which represent a real threat to human health and the environment.

Action by the Assembly is in paragraph 4.

**REFERENCES**

A35-WP/56, A35-WP/76, A35-WP/77  
Doc 9790, *Assembly Resolutions in Force* (as of 5 October 2001)  
Doc 9836, *Report of the Sixth Meeting of the Committee on Aviation  
Environmental Protection (CAEP/6)*

## 1. INTRODUCTION

1.1 On 28 May 2004 the Council of ICAO, at the fifth meeting of its 172nd Session, approved a draft working paper for the 35th Session of the ICAO Assembly on “market-based measures regarding aircraft engine emissions”, in view of the changes proposed in a letter sent to the Secretary General of ICAO on behalf of 22 States, including the Russian Federation. The essence of the proposed changes basically involved a more balanced approach to the introduction of such market-based measures by Contracting States. During the discussion of the draft working paper, the Council came to the conclusion that further studies were needed in this area and it requested the Secretary General to present a paper to the Council during its 173<sup>rd</sup> Session in November-December 2004 which would contain the programme of further developments and studies on this matter and on other related matters. Recognizing the existing problem of the impact of aircraft engine emissions on the environment and on the population, the Russian Federation, among other States, expressed concern about a number of States seeking to extend the provisions of the Kyoto Protocol to air transport and to unilaterally introduce economic measures aimed at reducing greenhouse gas emissions by aircraft engines. In this regard, the attention of the Council was also drawn to the fact that the proposed market-based measures would be concentrated exclusively on carbon dioxide (CO<sub>2</sub>) emissions, while nitrogen oxides (NO<sub>x</sub>) which represent a real threat for health and the environment would not be taken into consideration.

## 2. DISCUSSION

2.1 During the Sixth Meeting of the Committee on Aviation Environmental Protection (CAEP/6) held at ICAO Headquarters from 2 to 12 February 2004, experts approved recommendations to reduce the environmental impact of aircraft noise and aircraft engine emissions, including more stringent Standards with respect to nitrogen oxides (NO<sub>x</sub>) emissions, starting from 2008. During the discussion on these matters, a template agreement was approved on voluntary measures to reduce the level of carbon dioxide (CO<sub>2</sub>) emissions by aircraft engines. After consideration of possible options for the implementation of a system of open aircraft engine emissions trading, it was recommended that the further work of ICAO in this area should be concentrated on two approaches, namely: voluntary measures related to the introduction of levies for emissions and emissions trading. However, the CAEP meeting was unable to arrive at a consensus on the use of this guidance because of a number of outstanding issues. This was reflected in the CAEP/6 report on this matter.

2.2 The Russian Federation notes on the whole the significant progress achieved in the work of CAEP. At the same time, what causes concern is the lack of a comparative analysis of the environmental impact of NO<sub>x</sub> and CO<sub>2</sub> emissions, as well as a comparative analysis of aircraft engine emissions to the extent that the costs can be properly identified and directly attributed to air transport. There is not a sufficiently convincing and detailed assessment given of the legal aspects of the possibility of charging for emissions in view of the fact that the ICAO policy provides for charges only for the provision of facilities and services (for services rendered). There is also no scientifically substantiated definition of the concepts of “harm caused” and “damage caused”.

2.3 A number of environmental scientists with a worldwide reputation state that the present-day global warming is occurring not because of the increase in the concentration of greenhouse gases, but rather because of the increase in solar activity. There is presently no substantiated justification for the efforts made in the area of reducing emissions of anthropogenic carbon dioxide into the atmosphere and it should

furthermore be noted that the increasing global temperature leads to large volumes of CO<sub>2</sub> from the water in the ocean entering the atmosphere. There are weighty reasons to believe that the “cause” and “effect” of global warming have not been studied sufficiently by scientists. This must be a matter of concern. Up until recently, there was no theory at all about the greenhouse effect and the influence of “greenhouse gases” on the thermal regimes of the troposphere, while the nature of many model forecasts of climate changes was as a rule that of intuitive and incorrectly formulated tasks. It is important to note that as of today there is not one reliable piece of evidence of the influence of “greenhouse gases” on the Earth’s climate. It is known that the present-day water in the ocean contains 50 to 60 times more carbon dioxide than the air in the atmosphere, from which it logically follows that the influence of human beings on this process is insignificant and it can be disregarded in the first approximation.

2.4           Leading scientists from the Russian Academy of Natural Sciences (Academicians Kapitsa, Sorokhtin and many others), as well as their foreign colleagues from the United Kingdom, the United States, Canada, Australia, Sweden and others, have repeatedly noted that when studying the changes to the Earth’s present climate, consideration must be given to the fact that there are experimental data (from satellites and balloon probes) that show the slight cooling of the planet’s climate over the last 20 years. The results of drilling a glacier cover in the Antarctic show that changes in the temperature over the last 420 thousand years always went ahead of the corresponding changes in the concentration of CO<sub>2</sub> in the thickness of the glacier cover. This indisputably shows that the changes in the concentration of CO<sub>2</sub> in the atmosphere are the effect of global changes in temperature, and not the cause of them.

2.5           At the Seminar on Climate Change held by the Russian Academy of Sciences in July of this year in Moscow, one of the participants in the press conference, Piers Corbyn, the head of the company “Weather Action” that deals with climate studies, stated that the theory of global warming as a result of the greenhouse effect, which was now spreading in the mass consciousness, was moving more and more away from science and was turning into its own sort of mystic dogma and that this theory had no scientific value and corresponded to the interests of lobby groups.

2.6           When discussing the consequences of possible reductions in CO<sub>2</sub> emissions, account must be taken of the fact that the increased volumes of carbon dioxide entering the atmosphere are a positive factor for agriculture and biological productivity. It should be noted that carbon dioxide is useful for life on Earth. There is a view among agriculture experts that the 10% increase in the yield of agriculture crops observed in the last decades took place only as a result of the influence of the increase in the content of carbon dioxide in the atmosphere.

2.7           It should be noted that civil aviation is far from being the main source of atmospheric pollution, much less in this regard than such industries as the metallurgical industry, power generation, vehicle transport, etc. In 1999 the Intergovernmental Panel on Climate Change (IPCC) completed the preparation of a special report in which it was noted that aviation activity has an insignificant influence on global warming and a significant proportion of uncertainty is maintained in this area. In this regard, the matter of introducing economic measures to regulate carbon dioxide emissions in conditions of uncertainty appears to be **premature**.

2.8           In the conclusions of the paper presented by the Council to the 35th Session of the Assembly, it was noted that the system of open emissions trading would be an economically effective solution to the problem of reducing carbon dioxide emissions in the long term, however it could not be implemented until the Kyoto Protocol entered into force and a maximum volume of CO<sub>2</sub> emissions was agreed upon. Some States and regional organizations have announced their plans to implement emissions trading systems.

However, at present none of these systems includes emissions trading for carbon dioxide **with respect to civil aviation**.

### 3. CONCLUSIONS

3.1 It was noted in this paper and in the CAEP/6 report that there are outstanding issues in the area identified and on many of them there is no common point of view, in particular with respect to the economic substantiation of collecting levies. The matter of the proposed charges for greenhouse gas emissions can be considered only when it is scientifically substantiated and analysed with respect to the existence of the preconditions for introducing charges for civil aviation. There is also the need to assess the economic consequences and legal aspects of introducing charges and levies for emissions from the point of view of competitiveness and ensuring fairness. In A35-WP/56, it is noted that this matter is complex and at this stage remains unresolved.

3.2 In Resolution A33-7, “Consolidated statement of continuing ICAO policies and practices related to environmental protection”, Contracting States are invited to continue their active support for ICAO’s environment-related activities on all appropriate occasions. They are urged to refrain from **unilateral** measures, aimed at operating restrictions, that might be harmful to the development of international civil aviation.

3.3 The position of the Russian Federation which takes an active part in the work of CAEP is one of support for ICAO’s efforts aimed at environmental protection. We call upon Contracting States to continue joint actions in this area, on the basis of scientifically substantiated approaches, avoiding hasty decisions that may be harmful to international civil aviation activities, **without any positive impact on the environment**. In particular, we consider it necessary in the further work of the Committee on Aviation Environmental Protection to pay attention mainly to nitrogen oxides (NO<sub>x</sub>). In view of the inverse relationship, it is necessary as a matter of priority to undertake a comparative analysis of the environmental impact of NO<sub>x</sub> and CO<sub>2</sub>.

3.4 The Russian Federation on the whole supports the report of the Council of ICAO on “market-based measures regarding aircraft engine emissions”, as well as the draft revision of Appendix I to Resolution A33-7, set forth in A35-WP/76. The Russian Federation is in favour of continuing studies in this area within the framework of the work of CAEP. However, it considers that it is impermissible to unilaterally introduce charges for aircraft engine emissions before the completion of a comprehensive and detailed study of this matter.

### 4. ACTION BY THE ASSEMBLY

4.1 The Assembly is invited to:

- a) note this paper;
- b) agree that the matter of introducing market-based measures to limit or reduce aircraft engine emissions has not been studied sufficiently from both the scientific and economic points of views;

- c) call upon Contracting States to refrain from the unilateral introduction of charges for aircraft engine emissions before the completion of a comprehensive and detailed study of this matter;
- d) recommend to the Council of ICAO to include in the work programme of the Committee on Aviation Environmental Protection a comparative analysis of the impact of NO<sub>x</sub> and CO<sub>2</sub> emissions on the environment;
- e) recommend to the Council of ICAO in further activities to pay due attention to nitrogen oxides (NO<sub>x</sub>) emissions which represent a real threat to the environment and human health.

— END —