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ASSEMBLY — 38TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 17: Environmental Protection

DEVELOPMENT OF AVIATION ENVIRONMENTAL EDUCATION PROGRAM

(Presented by the Republic of Korea)

EXECUTIVE SUMMARY

There is a growing interest in aviation environmental issues. ICAO has published documents and manuals related to the emissions inventory, the Emissions Trading System (ETS) and Carbon Calculator; however, since they are somewhat complex for government officials and managers to understand and develop ways in which to follow ICAO's strategies and policies on environmental issues, it is evident that the development of an education program is required. The Incheon International Airport Corporation (IIAC) developed a training course related to aviation environmental issues, named the Airport GHG Management Course in 2012, as a TRAINAIR PLUS program in 2012. The course is designed mainly for staff and managers within the airport operation. The government of the Republic of Korea (ROK) is now planning to develop another environmental course for all managers in the aviation sector, including airlines, government and airports. The new course will cover general and theoretical aviation environmental issues with a particular focus on aircraft greenhouse gas emissions and the issue of climate change.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective C – <i>Environmental Protection and Sustainable Development of Air Transport.</i>
<i>Financial implications:</i>	No financial implications.
<i>References:</i>	Doc 9885, <i>ICAO Guidance on the Use of Emissions Trading for Aviation</i> Doc 9889, <i>Airport Air Quality Manual</i>

1. INTRODUCTION

1.1 ICAO adopted Annex16 as the standard for environmental issues, but it only addresses the Aircraft Noise (Volume 1) and Aircraft Engine Emissions (Volume 2) and is not a comprehensive countermeasure to the growing issue of greenhouse gas (GHG). The UN has cooperated with ICAO about the issue of international aviation GHG reduction and the Committee on Aviation Environmental Protection (CAEP) is developing GHG reduction, aircraft noise and air quality policies under ICAO.

1.2 The aviation authorities, airports and airlines of Member States shall equip themselves with the ability to comprehensibly follow ICAO environmental policies established through the CAEP. In particular, the development of education and training programs in preparation for emission inventory methods is needed in order to efficiently enact and participate in the market-based measure.

1.3 Although ICAO has published manuals related to the airport emission inventory, the ETS and Carbon Calculator are somewhat complex for officials to understand. Hence, the development of an education program is imperative.

2. DISCUSSION

2.1 The Incheon International Airport Corporation (IIAC) has obtained institutional approval and certification to become an education program developer and to run a TRAINAIR PLUS program. It has developed an ICAO education program concerning GHG management at airports.

2.2 The TRAINAIR PLUS program developed by the IIAC is a program limited to its airport GHG. The government of the Republic of Korea (ROK) is now planning to develop another environmental course for all managers in the aviation sector, including airlines, the government and airport. The new course will cover the general and theoretical aviation environmental issues with a particular focus on aircraft GHG emissions and the issue of climate change.

2.3 It is possible to develop the new education program on aviation environmental issues in consultation and direct cooperation with the IIAC, the experienced and certified ICAO education program developer.

2.4 The objectives of the proposed education program are to provide essential and basic knowledge for managers and practitioners in aviation field and to assist them to understand the importance of mitigating climate change in aviation and the rationale of market-based measures. In addition, the program will cover methods of aircraft engine emission inventory as they relate to GHG. The contents of the program will be tentatively composed of five modules as in the following table:

Module No.	Module Title	Examples of Source
1	Climate Change and Aviation	- IPCC; Aviation and the global atmosphere - Nicholas Stern: Economics on Climate Change - Other books, reports and academic papers
2	Climate Change Mitigation Measurements Aviation	- ICAO Document of CAEP and lecture materials - Other books, reports and academic papers
3	Market Based Approach and ETS	- ICAO Document of CAEP and lecture materials - Academic Papers
4	Aircraft Emissions and Air Transport Operations	- ICAO Document of CAEP and lecture materials - Academic Papers
5	Carbon Management Practice Reviews	-ICAO carbon calculator, IFSET, other cases related to offset program, and lecture materials

3. CONCLUSION

3.1 As mentioned above, there is a growing interest in aviation environmental issues requiring a further understanding by officials involved in implementation and explication to the public and those international organizations charged with handling the matter. It follows that an education program related to civil aviation environmental issues is required for experts of Member States.

3.2 This paper proposes an education program on aviation environmental issues to be developed in cooperation between the government of the ROK, Korea Aerospace University and the IAC. This paper invites that the suggested education program will be included in the education and training system of ICAO and proposes that each treaty power shall contribute to making and operating the education programs of ICAO.

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