



**WORKING PAPER**

**ASSEMBLY — 39TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 22: Environmental Protection – International Aviation and Climate Change – Policy, Standardization and Implementation Support**

**KENYA - RECENT DEVELOPMENTS IN THE COLLECTION, MONITORING AND REPORTING OF CO<sub>2</sub> EMISSIONS FROM INTERNATIONAL AVIATION**

(Presented by Kenya)

**EXECUTIVE SUMMARY**

This paper is intended to share Kenya’s experience and progress in the collection, monitoring and reporting of data related to CO<sub>2</sub> emissions from international aviation. These developments were part of a set of initiatives undertaken by Kenya to update and strengthen its voluntary action plan for CO<sub>2</sub> mitigation from the aviation sector, submitted to ICAO in December 2015.

This paper highlights Kenya’s achievements to date, and the key role played by ICAO’s capacity building programme since the last Assembly. This paper also describes remaining challenges, and the proposed next steps.

**Action:** The Assembly is invited to:

- a) note the information provided;
- b) support States in implementing an efficient and sustainable data Monitoring, Reporting and Verification (MRV) strategy;
- c) support and strengthen capacity building on CO<sub>2</sub> emissions reduction, building upon the successful experience of the ongoing assistance project, and further facilitate States’ access to financial resources, technical support and technology transfer;
- d) encourage Member States to formulate assistance requests to ICAO for the development and implementation of their voluntary action plans, and for the improvement of their environment related data collection, monitoring and reporting capacity;
- e) encourage Member States to build partnerships on climate change related matters and foster cooperation and knowledge exchange at the regional and global levels.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective E – <i>Environmental Protection</i> .
<i>Financial implications:</i>	Additional financial resources are required.
<i>References:</i>	Resolution A38-18 of the ICAO Assembly ICAO-European Union Capacity Building for CO <sub>2</sub> Mitigation from International Aviation Kenya Action Plan for the Reduction of CO <sub>2</sub> Gas Emissions in Aviation Sector

## 1. INTRODUCTION

1.1 In its Resolution A38-18, *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*, the International Civil Aviation Organization (ICAO) encouraged its Member States to submit voluntary action plans outlining their respective policies and actions, and annual reporting on international aviation CO<sub>2</sub> emissions to ICAO, preferably by the end of June 2015 and once every three years thereafter. These action plans shall contain relevant baseline data and expected results on CO<sub>2</sub> emissions from international aviation at the State level, allowing ICAO to compile the information globally and monitor the progress towards the achievements of the global aspirational goals of a global annual average fuel efficiency improvement of 2 per cent until 2020 and a global fuel efficiency improvement rate of 2 per cent per annum from 2021 to 2050.

1.2 Since Resolution A38-18 was approved in 2013, the ICAO Secretariat has undertaken significant actions to assist Member States in their effort to reduce CO<sub>2</sub> emissions from international aviation. In the Eastern and Southern African (ESAF) Region, one workshop on action plans was organized in 2014 and 15 experts trained from 8 Member States. In addition, two joint assistance projects with the European Union and the United Nations Development Programme (UNDP) – Global Environment Facility (GEF) respectively were started to further increase support and build capacity on the elaboration and implementation of action plans in developing States. Other initiatives such as ICAO's Performance Based Navigation (PBN) Programme<sup>1</sup> further contributed to the mitigation of CO<sub>2</sub> from international aviation. Assisting States in collecting and reporting more robust CO<sub>2</sub> emissions data has been included as a critical component in these capacity building activities.

1.3 During its 39th Assembly, ICAO will furthermore present a recommendation on a global Market Based Measures (GMBM) scheme for international aviation. One critical requirement for a GMBM is that CO<sub>2</sub> emissions data be collected, verified and reported by all ICAO Member States. The States' readiness to implement a GMBM will therefore depend on their capacity to develop an efficient Monitoring, Reporting and Verification (MRV) strategy in their aviation sector. Inputs from stakeholders collected during the Global Aviation Dialogues (GLADs) revealed that most States do not have such a system in place as of now, and that further assistance will be required for the reporting of CO<sub>2</sub> emissions.

## 2. DEVELOPMENTS

2.1 Following the 37th Session of ICAO Assembly and the participation in several capacity building workshops organized by ICAO on action plans development, Kenya created an Aviation Environmental Working Group (AEWG) comprising of the main relevant stakeholders of the aviation sector and submitted a first draft action plan to ICAO in 2013. This document, which was one of the first action plan in the African region, described the main initiatives for CO<sub>2</sub> emissions mitigation in the aviation sector in Kenya. However, collecting relevant data from the national stakeholders was still a challenge at that time and the action plan therefore only included limited quantitative data on CO<sub>2</sub> emissions.

2.2 Prior to the 38th Session of ICAO Assembly, Kenya formulated a request for assistance to ICAO and subsequently was selected and became one of the fourteen beneficiary States of the three-year ICAO-European Union Project on *Capacity building for CO<sub>2</sub> Mitigation from International Aviation*. With the project support, Kenya enhanced the AEWG and submitted a consolidated action plan to ICAO in December 2015.

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<sup>1</sup> <http://www.icao.int/safety/pbn/Pages/default.aspx>

2.3 The development of the updated action plan went hand in hand with a significant improvement of Kenya Civil Aviation Authority (KCAA)'s data collection, monitoring and reporting system, which led to the inclusion of robust trends for baseline and expected CO<sub>2</sub> emissions in the action plan. This progress was achieved through three joint actions:

- 1) First, a dedicated software, the Aviation Environmental System (AES), developed by ICAO, was implemented at KCAA to facilitate the collection and processing of CO<sub>2</sub> emissions data by the State. The AES is a monitoring, reporting and verification (MRV) tool developed in the scope of the ICAO-European Union project that has been installed in all the selected States of the project including Kenya. This tool has enabled KCAA to collect data related to traffic and fuel consumption from national air carriers through a standardized format, to analyze the submitted information and to easily report aggregated data on fuel consumption and CO<sub>2</sub> emissions from international aviation to ICAO.
- 2) KCAA complemented this technical improvement by a regulatory measure, the issuance of an Aeronautical Information Circular<sup>2</sup> requesting all national airlines to report monthly their CO<sub>2</sub> emissions to KCAA in an AES-compatible format.
- 3) In parallel, an awareness raising campaign was launched to sensitize all national carriers to the climate change issue and the need to monitor and report their CO<sub>2</sub> emissions to the State. Technical support was provided on demand to facilitate the adoption of the new data submission format and therefore ensure that "No stakeholder is left behind".

2.4 Kenya is committed to build on these early achievements and keep improving its CO<sub>2</sub> emissions monitoring system, in order to capture at least 90 percent of the international and domestic traffic served by national carriers by the end of 2016. The outcomes of the 39th Session of ICAO Assembly on GMBM will determine whether new MRV requirements should be integrated to the existing system, which has already proved to be effective for emissions monitoring, and therefore, would avoid duplication of efforts and will be ready to deploy within a short timeframe. Additional resources and support will be needed to achieve this step.

### 3. CONCLUSION

3.1 Data collection, monitoring and reporting remains a key challenge in most States, in particular developing countries and States having particular needs. In order to promote the development of robust action plans and increase States' readiness to address incoming MRV requirements, Kenya urges ICAO to increase its capacity building programme on CO<sub>2</sub> emissions reduction, building upon the successful experience of the ICAO-European Union assistance project, and further facilitate States' access to financial resources, technical expertise and technology transfer.

3.2 Kenya encourages Member States, in particular from the Africa-Indian Ocean (AFI) region, to formulate assistance requests to ICAO for the development and implementation of their voluntary action plans for CO<sub>2</sub> emissions reduction from international aviation, and for the improvement of their environmental data collection, monitoring and reporting capacity.

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<sup>2</sup> AIC 8/15 from 21 July 2015.

3.3 In order to further develop regionalized assistance to States and continue to foster regional cooperation and knowledge exchange, Kenya encourages Member States to build partnerships on climate change related matters, for instance through the “*Buddy Programme*”<sup>3</sup> or additional dedicated regional capacity building projects.

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<sup>3</sup> <http://www.icao.int/environmental-protection/Pages/ActionPlan-Questions.aspx>