



Panama's Experience with the Development of its State Action Plan

By Dorsa Sabeth (Panama)

BACKGROUND

The State Action Plan on CO₂ Emissions Reduction initiative led by ICAO outlines objectives shaped over time to develop a process that leads Member States to better understand the impacts associated with the aviation industry's international carbon emissions. A key characteristic of this initiative is that it is a voluntary tool that States can use to communicate information regarding their carbon emissions to ICAO. The objectives of this initiative were outlined in the 2010 Assembly Resolution A37-19: Consolidated statement of continuing ICAO policies and practices related to Environmental Protection – Climate Change. In that Resolution, all States are encouraged to submit to ICAO a description of the efforts they have taken to reduce carbon emissions stemming from international aviation. The 2013 Assembly Resolution A38-18, further ratifies these objectives.

It is important to note that the goals set for the international aviation community contribute to 10 of the 17 United Nations Sustainable Development Goals (SDGs). These goals include the actions that are required to deliver a sustainable future, combat climate change and its impacts at a global level, that need to filter down from the International to the Regional, National and Local levels.

PANAMA'S EXPERIENCE

Panama's development of a State Action Plan began when the senior management of the Civil Aviation Authority of Panama (AAC – the acronym in Spanish) realized the significant impact that carbon emissions from international aviation can have on greenhouse

gases and, as a consequence, climate change. Out of a sense of shared responsibility, the AAC quickly understood its responsibility in the process and decided that a coordinated approach involving environmental conservation groups and the aviation industry was crucial to understand and assess the current status and future projections of carbon emissions generated by the aviation sector in the country.

Panama started developing its own State Action Plan (SAP) immediately after the 39th Assembly of ICAO in September 2016. One of the key items discussed was environmental protection, including proposals for updating the objectives put forth in Assembly Resolution A38-18 and supported by Assembly Resolution A39-2. Specifically, this pertained to the measuring and reporting of carbon emissions, in the context of three key factors: the global aspirational goals of improving fuel efficiency by 2%, keeping the global net carbon emissions from international aviation from 2020 at the same level, and the work towards the elaboration of a long-term goal for international aviation's absolute emissions contribution.

Since then, Panama has been fully engaged in drafting its State Action Plan, aware of the importance that such a document will have in organizing and streamlining relevant policies, mitigating negative environmental impacts, and providing a better understanding of the role of international aviation on this subject. As such, the development of the State Action Plan would allow the country to plan, report on, and communicate its efforts to address carbon emissions and develop an integrated course of action for mitigation. This was a two-year process that started with an internal restructuring of the organization of the AAC that designated organizational



FIGURE 1: Presentation of Panama's State Action Plan to key aviation stakeholders



components including identifying the focal points to be responsible for carrying out SAP-related activities in the different Offices within the Civil Aviation Authority.

An initial internal assessment led to the creation of the Environmental Protection Unit, which was located under the Air Transport Bureau. This included the hiring of an additional environmental engineer to aid in the monumental task of collating and analyzing data. All of these steps helped to consolidate the Civil Aviation Authority's commitment to ICAO's long-term objectives regarding the State Action Plan. Through subsequent meetings and follow up conversations, a rough plan was laid out and the strategies were set in motion. A number of activities were identified that needed to be undertaken to reach the proposed goals including: data management, preparing an emissions base line, identifying ICAO basket of measures for carbon emissions reduction, capacity building activities, as well as stakeholder identification and involvement. These important first tasks were undertaken in parallel with identifying and developing a plan for the next steps forward.

Panama has achieved many milestones since then, starting with an internal assessment of the air transport data including all international and domestic flights with a typical flight plan information, to identify where improvement opportunities could arise. This analysis led to actions that allowed an adjustment in aspects concerning data flow, validation, and access. These steps involved a multi division initiative within the Civil Aviation Authority of Panama that resulted in the creation of an improved statistical platform. This new platform

gathers segregated data sources and presents robust and reliable air transport data, that not only serves the Environmental Protection Unit, but the Finance, Statistics and Information Technology Offices. This was an important accomplishment that allowed Panama to validate airline operator data and enabled it to prepare a five-year baseline from 2013 to 2017 for its State Action Plan. It was a demanding process, because even though Panama is a small country, it accounts for significant percentage of international travel in Central America. This process required not only computing skills, but people skills – meetings, workshops, and teamwork helped the process along immensely.

In November 2018, Panama submitted its first edition of a State Action Plan to ICAO, making it one of the 111 States that have voluntarily submitted this report to ICAO and the international community. Of the thirteen countries included in the South American (SAM) Region, nine countries, (69%), have presented at least one version of their State Action Plan. This process is a clear example of how an organization can obtain common benefits associated with the State Action Plan process, where key actors were able to come together and work towards a common goal, which showcases how a higher sense of cooperation can permeate in different operational areas.

Now that the SAP has been completed, Panama's Environmental Protection Unit is able to use the new statistics platform as a reliable data validation tool to achieve a number of things including: validating individual operator reports, updating current and upcoming State Action Plans, and performing order of magnitude



validations of the CORSIA reports submitted by airline operators about their Emissions Monitoring Plans (EMP).

It is worth mentioning the timely and unwavering support that was given by ICAO throughout this SAP development process; particularly the positive impacts that were achieved in the areas of capacity-building and the establishment of partnerships. The ICAO Environment team carried out an important consistent and reliable support function that was instrumental to Panama developing a successful State Action Plan.

THE BUDDY PROGRAMME

Under the ICAO State Action Plan Buddy Programme, ICAO served as the liaison that fostered a partnership between Panama and the Dominican Institute of Civil Aviation, (IDAC, by its acronym in Spanish), to assist with the development of the SAP. A template “Buddy Agreement” was created by ICAO to help facilitate the establishment of collaboration between States to assist each other in readiness to submit their State Action Plan. The Dominican Republic’s support to the Civil Aviation Authority of Panama resulted in a high degree of interest, cooperation, and engagement of both States involved in the initiative. Panama ultimately benefited from the Dominican Republic’s experience with regards

FIGURE 2: Signing of the Buddy Programme Agreement between Panama and the Dominican Republic



to their understanding of the process for drafting and implementing their State Action Plan. This cooperation started in March 2018 and was developed further throughout 2018.

The Buddy Programme Agreement between Panama and the Dominican Republic was signed in May 2018. The scope of the agreement covered a number of activities designed to improve Panama’s capabilities, including: training, site visits, technology transfer, information exchange, technical meetings, and collaboration workshops. So far, the exchanges have been mainly centered around technical support and the sharing of experiences, as well as on-site visits to witness Dominican Republic’s advances, especially with regard to its use of renewable energies and the different initiatives it has implemented in this area. In addition, the Buddy Programme has allowed Panama to better understand and assess its development and use of sustainable aviation fuels. These and many other benefits have been achieved during this helpful process. In short, the Buddy Programme has been a positive experience all around and other countries are encouraged to find a partner to aid in the process of developing their own State Action Plan.

PANAMA’S BASKET OF MEASURES

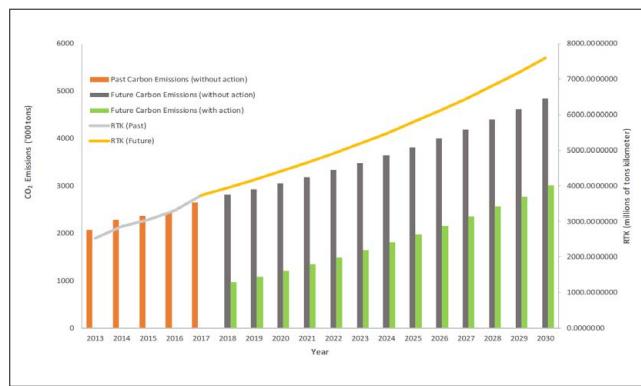
The 39th Session of the ICAO Assembly was the opportunity for ICAO Member States to hold a series of vivid discussions, leading up to the adoption of Resolution A39-2 on climate change and Resolution A39-3 on a Global Market-Based Measure (MBM) scheme, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

Panama understands that CORSIA complements a broad set of initiatives under the framework of the ICAO basket of measures that include operational, technological, and sustainable aviation fuels. These measures limit or reduce the use of conventional aviation fuels and therefore decrease the corresponding carbon emissions due to fuel burn. The identification of these measures in a State Action Plan could represent significant impacts in the reduction of carbon emissions produced by international civil aviation. When selecting from the basket of measures, Panama considered the feasibility and their possible

implications when implemented, from identifying the required resources to the correct selection of each task manager responsible for carrying out the initiative.

To achieve the significant collaboration and synergies that were required among the various aviation stakeholders, Panama created an Action Plan Working Group (GPTA - the acronym in Spanish). These important areas of cooperation included: funding opportunities for renewable energy projects in airports, air navigation analysis opportunities for Continuous Climb Operations (CCO), and Continuous Descent Operations (CDO) flight profiles.

FIGURE 3: Actual and estimated aviation-related carbon emissions - 2013-2030



The GPTA also served as a forum for consultation and discussion which resulted in the identification of key measures for Panama's State Action Plan. The estimated emissions reduction has been quantified to represent up to 1,837.68 million tons of CO₂/year based on a forecast scenario of aviation activity (RTKs) through to 2030. (See Figure 3).

IMPACTS BEYOND AVIATION

Presenting the State Action Plan to different groups like the National Climate Change Committee of Panama (CONACCP – the acronym in Spanish), has served as an opportunity to showcase the coordinated efforts of the aviation sector to reduce emissions in the international arena. It also serves as a point of reference for Panama's national approach to reducing domestic emissions.

The Action Plan Process has also prepared Panama to be ready for the implementation of CORSIA. The process has enhanced collaboration with airline operators during data collection, and communication channels have been established that will assist with the development of future State Action Plan reports and annual reports included in the Emissions Monitoring Plan (EMP). Although the process of developing a State Action Plan has been challenging for Panama, it has also yielded many rewards along the way. It is hoped that this initiative will result in ongoing positive impacts on both aviation and the environment.

CHAPTER TEN

Cooperation

