



# ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office  

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WORKING PAPER

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**Seventh Meeting of the North American, Central American and Caribbean Directors of Civil Aviation  
(NACC/DCA/07)**

Washington, D. C., United States, 19 – 21 September 2017

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**Agenda Item 6: Environmental Protection Matters**

**PREPARATION AND UPDATE OF THE STATES' ACTION PLANS ON CO<sub>2</sub> EMISSIONS REDUCTION  
ACTIVITIES**

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This working paper calls for the preparation and update of States' Action plans on CO <sub>2</sub> emissions reduction activities in accordance with the Consolidated statement of continuing ICAO policies and practices related to environmental protection in accordance with the respective resolutions of the 39 <sup>th</sup> Session of the Assembly.	
<b>Action:</b>	The suggested actions are presented in Section 3
<b>Strategic Objectives:</b>	<ul style="list-style-type: none"><li>• Environmental Protection</li></ul>
<b>References:</b>	<ul style="list-style-type: none"><li>• A39-2: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change</li><li>• A39-3: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market Based Measure (MBM) scheme</li><li>• Doc 9988 — <i>Guidance on the Development of States' Action Plans on CO<sub>2</sub> Emission Reduction</i></li></ul>

**1. Introduction**

1.1 A39-2: Paragraph 11, Invites those States that choose to prepare or update action plans to submit them to ICAO as soon as possible preferably by the end of June 2018 and once every three years thereafter, and request to include quantified information on the expected environmental benefits from the implementation of the measures chosen from the basket (i.e. aircraft technology and Standards, operational improvements, sustainable alternative fuels, and global MBM).

1.2 A39-2 Paragraph 12, Encourages States that have already submitted action plans to share information contained in action plans and build partnerships with other Member States in order to support those States that have not prepared action plans, and to make the submitted action plans available to the public, taking into account the commercial sensitivity of information contained in States' action plans;

1.3 ICAO Doc 9988 includes a step-by-step guide for States to help them prepare or update their action plans, better understand the objectives and expected outcomes of the action plan preparation process; likewise it highlights the need for cooperation and collaboration between and among various stakeholders concerning the preparation of action plans; and assists States in considering the basket of measures from which they might select their actions (i.e. aircraft technologies and standards, operational improvements, sustainable alternative fuels, and global MBM).

## 2. Discussion

2.1 The ICAO web site <https://www.icao.int/NACC/Pages/nacc-responsibilities.aspx> provides the following overview of NACC States that have submitted and/or updated a State Action Plan on CO2 Emissions Reduction Activities for international aviation as of 21 March 2017:

States	Initial submission	Update	Available to the public as
<b>Belize</b>	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
<b>Canada</b>	Jun-12	Jan-16	Canada's action plan to reduce greenhouse gas emissions from aviation
<b>Costa Rica</b>	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
<b>Cuba</b>	Oct-12	Jul-15	Not available
<b>Dominican Republic</b>	Dec-13	Jul-15	Plan de acción para reducción de emisiones de CO2 provenientes de la aviación civil internacional en República Dominicana
<b>El Salvador</b>	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
<b>Guatemala</b>	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
<b>Honduras</b>	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
<b>Jamaica</b>	Dec-12		Not available

States	Initial submission	Update	Available to the public as
Mexico	Jun-12	Nov-15	Not available
Nicaragua	Sep-13		CAAPER: Central American Action Plan for Emissions Reduction from International Civil Aviation
Trinidad and Tobago	Jan-13	Aug-15	Trinidad and Tobago: Action Plan on Emissions Reduction for Trinidad and Tobago (APERTT) and the PIARCO
United States	Jun-12	Jun-15	United States Aviation Greenhouse Gas Emissions Reduction Plan, 2015

2.2 Pursuant to Assembly Resolution A39-2, upon the capacity-building and assistance activities related to voluntary States' Action Plans, as well as the request by Assembly Resolution A39-3 to accommodate capacity building and assistance for the implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), five Regional ICAO Seminars on States' Action Plans and CORSIA were developed during 2017, achieving the following objectives:

- Objective No 1: To provide national action plan focal points and aviation industry stakeholders with practical input on the calculation of the CO<sub>2</sub> emissions baseline and other quantification aspects
  - Under this objective the main subjects covered were: Introduction to States' action plans; the States' action plan process; explanation of the ICAO supporting tools; detailed review of the mitigation measures available in the basket; selection and prioritization of the mitigation measures and benefits to stakeholders
- Objective No 2: To Share information on CORSIA design elements and implementation aspects, including the work being undertaken on the development of SARPs and guidance material for CORSIA implementation

- Under this objective the main subjects covered were: Overview of CORSIA; explanation of Assembly Resolution A39-3; MRV detailed explanation of CORSIA Monitoring, Reporting and Verification System –; emission units and registries and capacity building needs. In addition, the seminars emphasized that CORSIA is one element in the basket of measures to achieve ICAO's global aspirational goal of Carbon Neutral Growth from 2020 (CNG 2020) and is a complementary measure to a broader package in the basket of measures; as agreed in the A39-3, the preference is for non-MBM measures to reduce aviation emissions, being CORSIA other of the measures to be included in States' Action Plans
- Objective No 3: To provide an opportunity for States to share their current readiness to implement CORSIA and conduct an assessment of related assistance needs. State participants were encouraged to answer a questionnaire related to the implementation of CORSIA, responses contribute to a better planning the ICAO's capacity building and assistance to States for the CORSIA implementation

*Note: The documentation including presentations, exercises and reference material are available on the website of the 2017 ICAO Regional Seminars on States' Action Plans and CORSIA ([www.icao.int/Meetings/RS2017/Pages/default.aspx](http://www.icao.int/Meetings/RS2017/Pages/default.aspx)) and the website of the 2017 ICAO Seminar on CORSIA [www.icao.int/Meetings/CORSIAHQ17/Pages/default.aspx](http://www.icao.int/Meetings/CORSIAHQ17/Pages/default.aspx) respectively.*

2.3 The MRV System is a key component of CORSIA implementation, its purpose is to collect data on international aviation CO<sub>2</sub> emissions on an annual basis and compare emissions against the baseline emissions (2019-2020). The components of the system are: Monitoring - of fuel use on each flight and calculation of CO<sub>2</sub> emissions (1 ton fuel burn = 3.16 tonnes CO<sub>2</sub> emissions); Reporting of emissions information between aircraft operators, States and ICAO; Verification of reported emissions data to ensure completeness avoiding misstatements.

2.4 In regards to the implementation of the MRV system, the 39th ICAO Assembly (Paras. 6 and 20) requested:

- a) the Council to develop, with the technical contribution of CAEP, the SARPs and related guidance material for the implementation of the MRV system under the CORSIA, including simplified MRV procedures, for adoption by the Council by 2018
- b) all Member States whose aircraft operators undertake international flights to develop the necessary arrangements, in accordance with the MRV SARPs, for implementation from 1 January 2019

- c) that a methodology should be developed to ensure that an aircraft operator's offsetting requirements under the scheme in a given year can be reduced through the use of sustainable alternative fuels, so that all elements of the basket of measures are reflected

2.5 The presented paragraphs request the development of MRV SARPs and guidance by the Council by 2018, and implementation of the MRV system by States from 1 January 2019.

2.6 As per Assembly Resolution A39-3 paragraph 9, the ICAO Secretariat provides public updated information on the States that volunteer to participate in the Pilot and First phases, and the website <https://www.icao.int/environmental-protection/Pages/market-based-measures.aspx> presents a list of 72 States, representing 87.7% of international aviation activity, as of 23 August 2017; The NACC States included are: Canada, Costa Rica, Dominican Republic, El Salvador, Guatemala, Jamaica, Mexico and United States.

2.7 The synergies between the States' Action Plans initiative and the CORSIA scheme was explained in the aforementioned seminars and the main statements are presented for consideration in the preparation and update of the action plans as follows:

- State Action Plans containing a robust data collection, monitoring and reporting mechanism provide a good basis from which the CORSIA MRV can be derived
- Data collected through an CORSIA-compatible MRV system could be used for the Action Plan
- States can showcase CORSIA voluntary participation in their Action Plans and draw upon the know-how and capabilities acquired from participating in a global scheme for the international aviation industry
- Progress in all elements of a basket of mitigation measures should be reflected in State Action Plans (Resolution A39-3 paragraphs 6 and 7)
- Very important to have compatible tools for use under CORSIA and State Action Plans

2.8 Assembly Resolution A39-3, paragraph 22 requests the Council to take necessary action to expand the provision of capacity building and assistance for the preparation and implementation on Member States' action plans in order to accommodate capacity building and assistance for implementation of the MRV system from January 2019...". In this sense, ICAO is foresees to schedule a series of Regional Seminars in March to April 2018 at five different venues in order to: provide full familiarization with CORSIA SARPs and guidance; assist the development of national regulatory framework and support for the establishment of necessary infrastructure (e.g. IT hardware/software); ICAO is looking for State to sponsor The Americas Regional Seminar.

2.9 Assembly Resolution A39-2 reaffirmed the need for alternative fuels to be developed and deployed in an economically, socially and environmentally acceptable manner, and requested the States to adopt measures to ensure the sustainability of alternative fuels for aviation, building on existing approaches or combination of approaches, monitor, at a national level, the sustainability of the production of alternative fuels for aviation, and work together through ICAO and other relevant international bodies to exchange information and best practices, including harmonization on the sustainability criteria of aviation alternative fuels.

2.10 In this sense, the second ICAO Conference on Aviation and Alternative Fuels (CAAF-2) will take place in Mexico City, Mexico from 11 to 13 October 2017, with the aim of developing an ICAO vision on aviation alternative Fuels. This vision will encourage States to take action at national and international levels to further develop and deploy sustainable alternative fuels for aviation; The Conference will consider recommendations for action on key topics: Developments on research and certification of aviation alternative fuels, financing and assistance programmes for aviation alternative fuels, challenges and policy making, and the Definition of the ICAO vision on aviation alternative fuels and future objectives.

### **3. Action by the Meeting**

3.1 The Meeting is invited to:

- a) take note of the synergies between the States' Action Plans initiative and the CORSIA scheme and consider them as appropriate in the preparation and update of the State action plans;
- b) as mentioned in paragraph 2.2, review and update the assigned Focal Point or designate the appropriate person to: lead the development of the Action Plans, coordinate amongst national stakeholders and liaise with ICAO; the designated will be the only authorized to submit the Action Plan and to access the ICAO APER website. Provide the information to the NACC Regional Office by 31 October 2017;
- c) consider the updating or development of States' Action plans in accordance with the information provided and submit the plans to ICAO as soon as possible, preferably by the end of June 2018 and once every three years thereafter in accordance with A39-2;
- d) seek a State to sponsor The Americas Regional Seminar scheduled for March – April 2018; and
- e) consider participation on CAAF-2.