States’ strategy to deal with international aviation emissions: ICAO State Action Plans

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Outline

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• ICAO Environmental Policies, Standards and Recommended Practices
• ICAO State Action Plan Initiative
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Background on ICAO
UN specialized agency

Created in 1944

Established by Chicago Convention

192 Contracting States

Standards, policies & guidance for environmental protection since 1960's

Forum for cooperation in all fields of civil aviation

ICAO's current Strategic Objectives contribute to 15 out of the 17 United Nations Sustainable Development Goals (UN SDGs), and …

… the Environmental work programme alone contributes to 14 of them

NO COUNTRY LEFT BEHIND

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<th>Vision</th>
<th>Mission</th>
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<td>Achieve the sustainable growth of the global civil aviation system.</td>
<td>To serve as the global forum of States for international civil aviation. ICAO develops policies and Standards, undertakes compliance audits, performs studies and analyses, provides assistance and builds aviation capacity through many other activities and the cooperation of its Member States and stakeholders.</td>
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**ICAO Strategic Objectives:**

ICAO Environmental Policies, Standards and Recommended Practices
ICAO Environmental policies are defined in the ICAO Assembly Resolutions

**A39-1:** Consolidated statement of continuing ICAO policies and practices related to environmental protection — *General provisions, noise and local air quality*

**A39-2:** Consolidated statement of continuing ICAO policies and practices related to environmental protection — *Climate change*

**A39-3:** Consolidated statement of continuing ICAO policies and practices related to environmental protection – *Global Market-based Measure (MBM) scheme*

[https://www.icao.int/Meetings/a39/Documents/Resolutions/10075_en.pdf](https://www.icao.int/Meetings/a39/Documents/Resolutions/10075_en.pdf)
ICAO Strategic Objective on Environmental Protection:

Minimize the adverse effect of global civil aviation on the environment

ICAO Environmental Goals

- Limit or reduce the impact of aviation GHG emissions on global climate
- Limit or reduce the number of people affected by significant aircraft noise
- Limit or reduce the impact of aviation emissions on local air quality
ICAO State Action Plan Initiative
History

• Initiative established in 2010 with the adoption of Assembly Resolution A37-19:
  
  9. Encourages States to submit their action plans outlining their respective policies and actions, and annual reporting on international aviation CO₂ emissions to ICAO;

• Reaffirmed support in 2013 with ICAO Assembly Resolution A38-18:
  – Para 11: “action plans should include information on the basket of measures considered by States, reflecting their respective national capacities and circumstances, and information on any specific assistance needs”

• And reaffirmed support in 2016 with ICAO Assembly Resolution A39-2:
  – Para 11: “Invites those States that choose to prepare or update action plans to submit them to ICAO” and include “quantified information on the expected environmental benefits from the implementation of the measures chosen from the basket”
  – Para 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”
Purpose

For States
- Opportunity to identify measures that will improve fuel efficiency and reduce emissions

For ICAO
- Assess future progress toward the achievement of ICAO global aspirational goals
Minimum Content

1. Contact information

2. Baseline (without action) fuel consumption CO₂ emissions and traffic (2010 or earlier to 2050)

3. List of selected mitigation measures

4. Expected results (fuel consumption, CO₂ emissions and traffic with the actions in #3 being taken 2017 to 2050)

5. Assistance needs

- ICAO assesses all submitted State Action Plans against the same criteria.
ICAO’s Facilitating Role

ICAO has facilitated the States’ Action Plans initiative since 2010 by:

– developing guidance material and tools
– organizing workshops and training seminars
– enabling capacity-building and assistance projects
  • ICAO / European Union Joint Assistance Project
  • ICAO / UNDP Joint Assistance Project financed by the Global Environment Facility (GEF)
– partnering States through the Buddy Programme
Guidance: ICAO Doc 9988

- State Action Plan Focal Points have dedicated access to Doc 9988 through the ICAO Secure Portal Action Plan for Emissions Reduction (APER) webpage
- It describes the required elements of a State Action Plan and provides a step-by-step guide on how to develop it
  - Overview and introduction
  - Baseline calculation
  - Mitigation measures and expected results
  - Implementation and assistance
  - Appendix with examples and detailed information
Supporting guidance

ICAO Doc 10031
Assessment of environmental effects from operations changes
Available on ICAO public website

ICAO Doc 10013
Airport operations, maintenance, weight reduction, air traffic management etc.
Available on APER website
ICAO Environmental Tools Suite

Public ICAO Environmental Tools:

- **ICAO Carbon Emissions Calculator**
  Allows passengers/cargo to estimate CO₂ emissions from air travel

- **ICAO Fuel Savings Estimation Tool (IFSET)**
  Assists States in estimating fuel savings from operational improvements

- **ICAO Green Meetings Calculator**
  Supports decision making in minimizing CO₂ emissions from air travel to attend meetings

Additional to facilitate the preparation of State's Action Plans:

- **ICAO Environmental Benefit Tool**
  Helps States to develop their Action Plan (Baseline, Mitigation Measures, Expected Results)

- **ICAO Aviation Environmental System (AES)**
  Allows CAAs to monitor CO₂ emissions from international aviation at State level
State Action Plans – History of ICAO Work

2010
- Coordination with CAEP experts
- APER website designed and launched, tools developed

2011
- Development of Doc 9988 and planning of 6 workshops

2012
- Support, review of action plans, exploring partnerships for Assistance to States

2013
- Release of Environmental Benefits Tool (EBT)
- Aviation Environmental Assessment (AES) installed in four European Pilot countries
- Submission of robust State Action Plans from 12 African States and 2 Caribbean States through ICAO-EU Assistance Project

2014
- 5 SAP Seminars
- ICAO and the European Union (EU) sign Assistance Project agreement
- ICAO and UNDP sign Assistance Project agreement, financed by GEF

2015
- ICAO Action Plan Buddy Programme implemented
- New version of ICAO Fuel Saving Estimation Tool (IFSET) released
- Doc 9988 updated and enhanced version of the ICAO Carbon Emission Calculator available
- By May 2016, all 14 States in the ICAO-European Union Joint Assistance Project had the AES installed

2016
- 5 SAP Regional Seminars
- 2 AFCAC/ICAO Seminars
- 2 Sustainable Aviation Fuels Feasibility Studies completed through EU Project

2017
- Renewable Energy for Aviation four-part Package developed through the ICAO-UNDP/GEF Project

2018
- 5 SAP Regional Seminars
- 2 AFCAC/ICAO Seminars
- 2 Sustainable Aviation Fuels Feasibility Studies completed through EU Project
Current Status

106 States representing >90% of global RTK have submitted an action plan to ICAO

1171 experts trained from 132 States

5 ICAO Buddy Partnerships

2 capacity-building and assistance projects
ICAO capacity building, assistance, and partnerships

- Facilitate financing for development and implementation of States’ Action Plans
  - ICAO-EU project: Capacity Building for CO₂ Mitigation from International Aviation
  - ICAO-UNDP project: Transforming the Global Aviation Sector: Emission Reduction from International Aviation

- Support States for the implementation of CORSIA
  - ICAO-Germany Small-Scale Implementation Project of the CORSIA MRV system

- Various projects supporting the basket of measures for international aviation
  - United Nations Framework Convention on Climate Change (UNFCCC)
  - United Nations Institute for Training and Research (UNITAR)
  - Accreditation with the Green Climate Fund (GCF)
ICAO capacity building, assistance, and partnerships, continued

- ICAO-EU project *Capacity Building for CO₂ Mitigation from International Aviation*

- ICAO-UNDP project *Transforming the Global Aviation Sector: Emission Reduction from International Aviation*
  - Development of guidance documents on Sustainable Aviation Fuels, Renewable Energy, Governance, and Financing of Clean Energy projects
  - Implementation of a pilot project on renewable energy at two international airports in Jamaica
In Summary

• ICAO encourages all Member States to develop a State Action Plan and keep it up-to-date

• State Action Plans provide States an opportunity to identify measures that will improve fuel efficiency and reduce emissions

• Robust and quantified State Action Plans allow ICAO to assess future progress toward the achievement of ICAO’s global aspirational goals

• The ICAO-UNDP-GEF Project has allowed ICAO to assist Member States in implementing emissions mitigation measures

For more information on this project, please visit ICAO’s website: https://www.icao.int/environmental-protection/Pages/ICAO_UNDP.aspx