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# ICAO Environmental Activities

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Environment  
ICAO EUR/NAT Office

EURNAT-DGCA/2019

Paris, 19-20 March 2019

ENVIRONMENTAL  
PROTECTION





## ICAO Policy



**Chicago Convention**  
**ICAO Assembly Resolutions A39-1, A39-2 and A39-3:**  
Consolidated statement of continuing ICAO policies and practices related to environmental protection

## ICAO Standards and Recommended Practices (SARPs)



**Annex 16 - Environmental Protection:**  
**Volume I**, Aircraft Noise  
**Volume II**, Aircraft Engine Emissions  
**Volume III**, Aeroplane CO<sub>2</sub> Emissions  
**Volume IV**, CORSIA **NEW**

## ICAO Guidance



**Various guidance on noise, LAQ and climate change, e.g.:**  
Environmental Assessment of Proposed ATM Operational Changes (Doc 10031)  
**Environmental Technical Manual Volume IV (Doc 9501) NEW**



- In June 2018, the Council adopted the First Edition of Annex 16, Volume IV - Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
  - The First Edition of Annex 16, Volume IV became effective 22 October 2018, for application from 1 January 2019
- First Edition of the ICAO Environmental Technical Manual (ETM), Volume IV – Procedures for Demonstrating Compliance with the CORSIA (Doc 9501), was published in July 2018
- The Council approved the 2018 version of the ICAO CORSIA CO<sub>2</sub> Estimation and Reporting Tool (CERT) and its technical methodologies in June 2018
- The Council approved the functional requirements of the CORSIA Central Registry (CCR) in June 2018



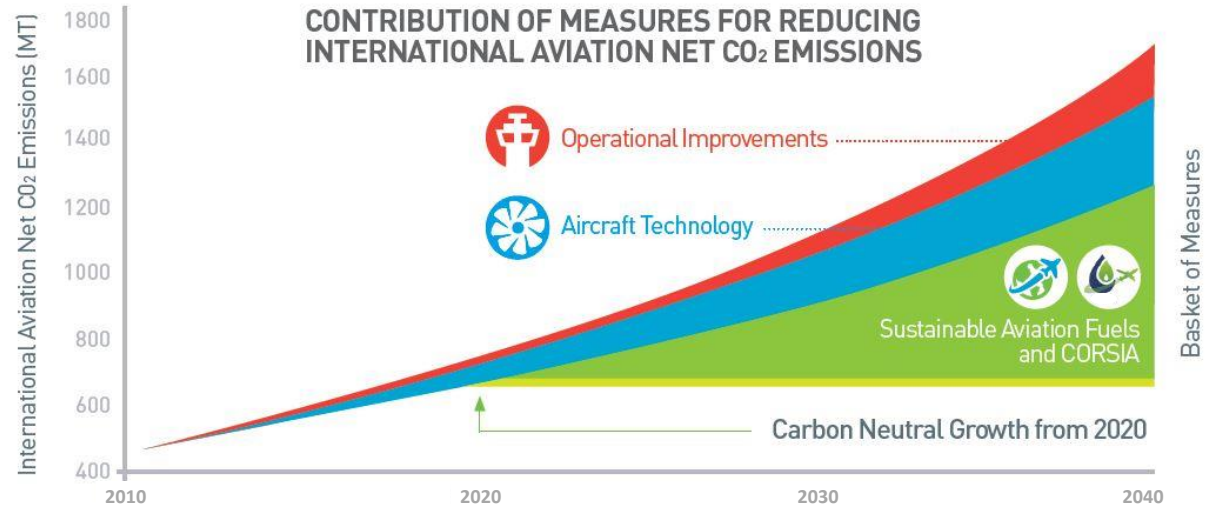
# CORSIA

Adopted through Assembly Resolution 39-3

The **first global MBM scheme** for any industry sector

To achieve ICAO's global aspirational goal of carbon neutral growth from 2020 (CNG 2020), CORSIA is **one complementary element in the basket of measures to:**

- aircraft technology
- operational improvements
- sustainable aviation fuels

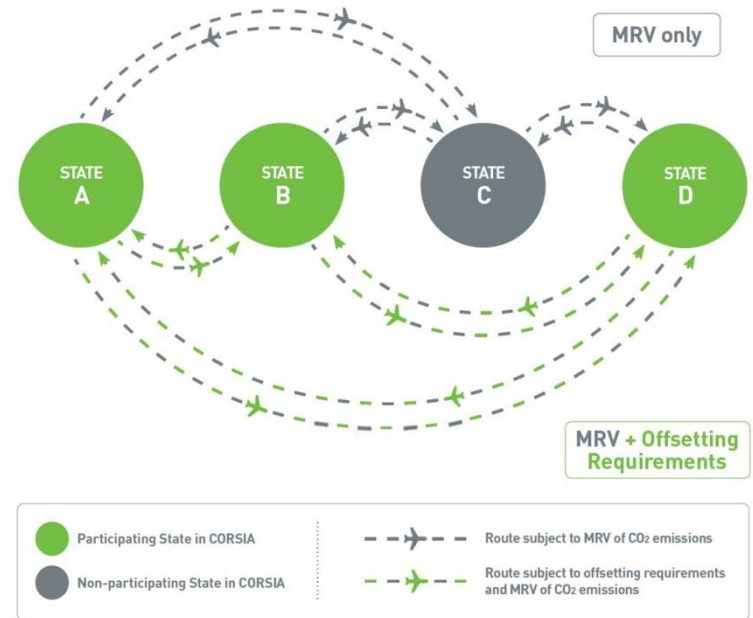




- **Monitoring, Reporting and Verification (MRV) is the backbone for the successful implementation of CORSIA, which requires:**
  - Reliable information on CO<sub>2</sub> emissions, and on compliance with offsetting requirements

**ALL ICAO MEMBER STATES with aeroplane operators conducting international flights are required to monitor, report and verify CO<sub>2</sub> emissions from these flights every year from 2019, independent of their participation in CORSIA.**

**ICAO MEMBER STATES PARTICIPATING IN CORSIA need to ensure that their aeroplane operators comply with the CORSIA offsetting requirements every three years (starting in 2021), in addition to annual CO<sub>2</sub> MRV.**







## ICAO ACT-CORSIA

- The ICAO Council endorsed a plan to provide direct and tailored assistance on CORSIA implementation to States around the world
- **ICAO Assistance, Capacity-building and Training on CORSIA (ACT-CORSIA)** programme – Launched in July 2018 !





# ACT-CORSIA: Assistance to States - Focus Areas

Council emphasized the importance of a **coordinated approach under ICAO** to harmonize and bring together all relevant actions and promote coherence to capacity building efforts for CORSIA implementation

- Different cooperation modalities/agreements to be undertaken amongst Member States under the umbrella of ICAO – enabling transparency and monitoring of global progress of such coordinated efforts

## Current focus:

- 1) **Development and approval of Emissions Monitoring Plans**
- 2) **Establishment of national/regional regulatory frameworks**



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ACT  <b>CORSIA</b> <small>Phase I</small> Assistance, Capacity-building and Training on CORSIA	
<b>AUSTRALIA</b>	<b>JAPAN</b>
1. BRUNEI DARUSSALAM 2. INDONESIA 3. MALAYSIA 4. NAURU 5. PAPUA NEW GUINEA 6. SRI LANKA 7. THAILAND	1. AFGHANISTAN 2. BANGLADESH 3. BHUTAN 4. CAMBODIA 5. MYANMAR
<b>CANADA / FRANCE</b>	<b>KENYA</b>
1. BURKINA FASO 2. CAMEROON 3. CHAD 4. COMOROS 5. CONGO 6. COTE D'IVOIRE 7. D. R. OF CONGO 8. DJIBOUTI 9. GABON 10. HAITI 11. MADAGASCAR 12. MALI 13. MAURITANIA 14. MAURITIUS 15. NIGER 16. SENEGAL 17. TOGO	1. RWANDA 2. SEYHELLES 3. SOUTH SUDAN 4. UGANDA
<b>CANADA / FRANCE / SPAIN</b>	<b>MEXICO / SPAIN / USA</b>
1. ALGERIA 2. EGYPT 3. IRAQ 4. JORDAN 5. MOROCCO 6. SAUDI ARABIA 7. TUNISIA	1. BELIZE 2. COSTA RICA 3. EL SALVADOR 4. GUATEMALA 5. HONDURAS 6. NICARAGUA
<b>GERMANY</b>	<b>NEW ZEALAND</b>
1. JAMAICA 2. TAJIKISTAN 3. TRINIDAD & TOBAGO	1. FIJI 2. SAMOA 3. SOLOMON ISLANDS 4. VANUATU
<b>GERMANY/ ECAC</b>	<b>NIGERIA</b>
1. ALBANIA 2. ARMENIA 3. AZERBAIJAN 4. REPUBLIC OF MOLDOVA 5. SERBIA 6. NORTH MACEDONIA 7. TURKEY	1. GAMBIA 2. GHANA 3. LIBERIA 4. SIERRA LEONE 5. SUDAN
<b>ITALY</b>	<b>REPUBLIC OF KOREA</b>
1. ANTIGUA AND BARBUDA 2. BAHAMAS 3. ERITREA 4. ETHIOPIA 5. SOMALIA 6. UNITED REPUBLIC OF TANZANIA	1. LAO PEOPLE'S D. R. 2. MONGOLIA 3. PAKISTAN 4. PHILIPPINES 5. VIETNAM
<b>ITALY &amp; BRAZIL</b>	<b>SOUTH AFRICA</b>
1. ANGOLA 2. CABO VERDE 3. COLOMBIA 4. MOZAMBIQUE 5. PARAGUAY 6. SAO TOME AND PRINCIPE	1. BOTSWANA 2. LESOTHO 3. MALAWI 4. NAMIBIA 5. ZAMBIA 6. ZIMBABWE
	<b>SPAIN</b>
	1. BOLIVIA 2. CUBA 3. PERU 4. URUGUAY
	<b>USA</b>
	1. ARGENTINA 2. DOMINICAN REPUBLIC 3. ECUADOR 4. PANAMA
	
	<b>15 DONOR STATES</b> <b>96 RECIPIENT STATES</b>

## ACT-CORSIA Buddy Partnerships

Assistance is in the form of a **donor State offering expert(s) on CORSIA** to provide individual training to and undertake the necessary follow-up with, the **CORSIA focal points of the recipient States**, in close coordination with the **ICAO Secretariat**





# ACT-CORSIA: CORSIA Web

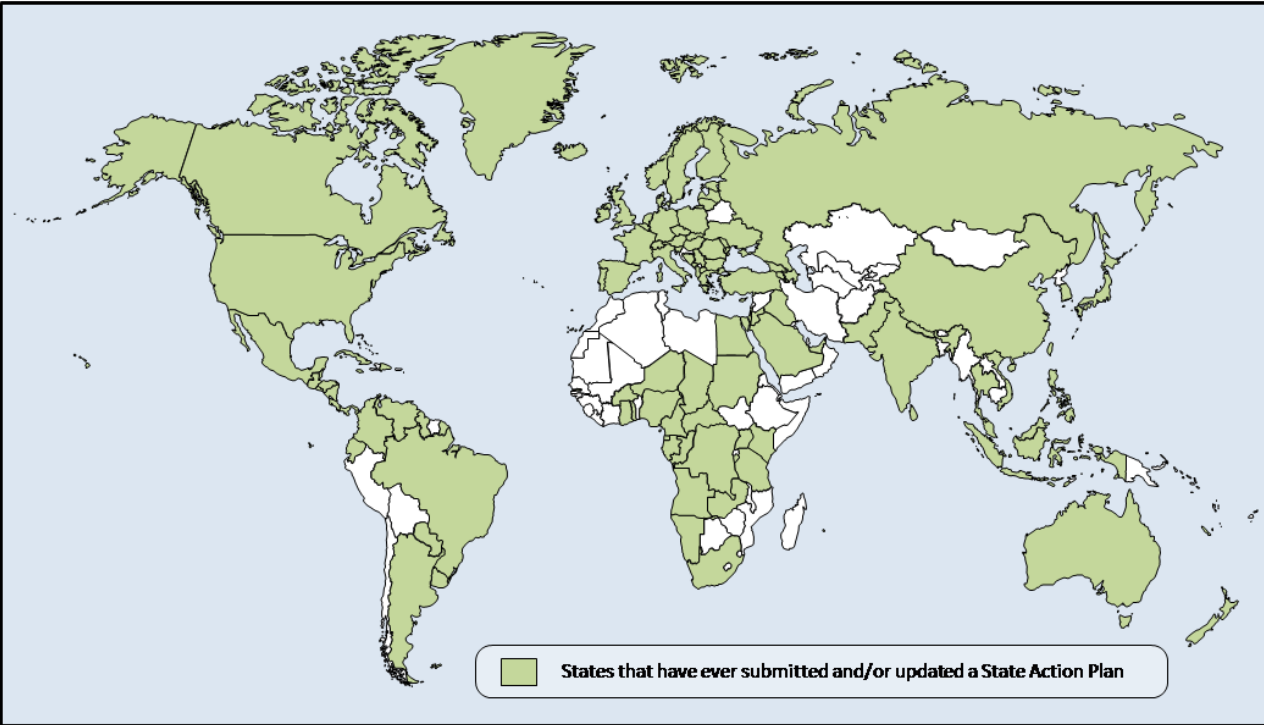


The screenshot shows the ICAO website header with the ICAO logo and 'ENVIRONMENT' text. Below is a navigation menu with 'About ICAO', 'Global Priorities', 'Meetings and Events', 'Information Resources', 'Careers', and 'Subscribe'. The main content area is titled 'Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)'. A sidebar on the left contains a menu with 'ENV Homepage', 'CORSIA Homepage', 'CORSIA IMPLEMENTATION', and 'ACT CORSIA'. The main content features a news item dated '19-23 Nov 2018' about the availability of the 2018 CORSIA CO<sub>2</sub> Estimation Models (CEMs). Below the news item are two columns: 'CORSIA >>> IMPLEMENTATION' and 'ACT >>> CORSIA'. The 'IMPLEMENTATION' column lists 'Assembly Resolution A39-3' and 'SARPs- Annex 16 Volume IV' with language selection icons (EN, FR, SP, RU, AR, ZH). It also lists 'Environmental Technical Manual - Volume IV' with sub-items for Templates, ICAO CORSIA Implementation Elements, and CORSIA States for Chapter 3 State Pairs. The 'ACT >>> CORSIA' column lists 'CORSIA Buddy Partnerships', 'Model Regulations', 'Frequently Asked Questions', 'Brochure and Leaflets', 'Videos', 'Seminars', 'Online Tutorials', and 'Background Information'. At the bottom left is the 'CORSIA' logo, and at the bottom right is the 'ACT >>> CORSIA' logo with the tagline 'Assistance, Capacity-building and Training'.

- ICAO CORSIA public website ([www.icao.int/corsia](http://www.icao.int/corsia)) was reformed to facilitate better access to all information
- Two main menu items:
  - 1) **CORSIA IMPLEMENTATION;** and
  - 2) **ACT-CORSIA**
- ICAO Policies, SARPs and Guidance for CORSIA
- Volunteering States (*CORSIA States for Chapter 3 State Pairs*)
- ICAO CORSIA CO<sub>2</sub> Estimation and Reporting Tool (CERT)
- Updated FAQs on CORSIA, including those related to Annex 16, Volume IV
- Outreach materials, including brochures, leaflets, videos, online tutorials



- **2019 ICAO Regional Seminars on CORSIA**
  - Five seminars covering all ICAO Regions during March and April 2019
  - **26 to 27 March 2019, Helsinki, Finland – EUR/NAT Region**
  - Focus on reporting and verification of emissions for CORSIA
- **Continued ICAO ACT-CORSIA trainings through Buddy Partnerships**
  - *Phase 2 (2019 and 2020)* on emissions reporting and verification
  - *Phase 3 (from 2021)* on eligible fuels and eligible emissions units
- **ICAO CORSIA Training on Verification**
  - ICAO is working to offer a CORSIA training programme for national accreditation bodies and verification bodies



**111** States representing **>90%** of global RTK (revenue tonne kilometre) have submitted an action plan to ICAO

**1171** experts trained from **132** States

**7** ICAO Buddy Partnerships

**2** capacity-building and assistance projects



**56 States in the EUR/NAT Regions**

**43 States submitted an action plan to ICAO since 2012**

**17 States updated their action plan in 2017/ 2018**

**13 States never submitted a plan to ICAO**

States with an Action Plan with a common section are invited to include as well **national section** showcasing their national activities as per ICAO Doc 9988

States that have developed and submitted a plan are invited to update their plan **every 3 years prior to the ICAO Assembly** so ICAO can assess the collective progress towards the global aspirational goals of 2 per cent annual fuel efficiency improvement and carbon neutral growth from 2020.



# ICAO EUR/NAT Capacity Building Activities

Last Assembly required **ICAO to play a pivotal role in providing assistance to States** through the dissemination of the latest information on best practices and provision of guidance and other technical assistance in order to enhance capacity building and the transfer of technology.

To further support its Member States, ICAO EUR/NAT Office has organized the first meeting of the **Environment Task Force**

**Provide direct support** to States in the Regions

**Developed Technical Assistance** activities related to **Environment** ( seminars, workshops, etc. )





## ICAO EUR/NAT Planned Activities 2019

- **Continue with the ENV Task Force activities** - 1 meeting in 2019
  - sharing information on the latest developments at ICAO on environment including on States Action Plan and CORSIA
  - support and develop environment capacity building activities for the States in the Regions with the main focus on the States outside the EU area
- **Continue the direct support to the States in the Region**
- **Continue to support ACT CORSIA Programme**
- **Work in Partnerships with other Organizations** to further support States in the Regions
- **Continue the outreach activities**
- **Organize additional technical support activities for the States**



## ICAO EUR/NAT draft operating plan 2020-2022

**Assist development and implementation of States' action plans on CO2 emissions reduction activities in the region, as well as the implementation of CORSIA**

**Assist States in the region to implement Annex 16 and relevant guidance, as well as on the assessment of environmental benefits which are associated to the implementation of operational improvements**

**Cooperate with regional organizations and represent ICAO in meetings relating to environmental protection**



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## Conclusion



### **Draft EURNAT-DGCA Decision 2019 – Environmental Capacity Building Programme**

- A) Support the key EUR/NAT activities in the area of Environment in 2020-2022;
- B) Invite States and airspace users to:
  1. commit to include environmental issues in the planning and implementation activities related to the improvement of the civil aviation system;
  2. develop or update their quantified States' Action Plans on CO2 Emissions Reduction Activities in accordance with the provisions in the Guidance on the Development of States' Action Plans (ICAO Doc 9988) and submit them to ICAO;



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## Conclusion



3. use the ICAO environment tools to estimate the emissions reductions from the implementation of the mitigation measures as part of the development of States' action plans;

4. Contact ICAO to benefit from /make use of the-ICAO EUR/NAT technical assistance programme in the preparation and submission of States' action plans, and implementation of the related mitigation measures, if needed;

5. participate in the ICAO States Action Plan Buddy Programme;



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## Conclusion



6. share their best practices and, taking into account the commercially sensitive information, consider making available to the public their submitted action plans;

7. participate in the pilot phase and the first phase of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA); and

8. participate in the ACT CORSIA Capacity Building activities by nominating experts or supporting ACT CORSIA initiative.





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Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

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Southern African  
(ESAF) Office  
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Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU