ICAO Side Event:
Briefing on Aviation contributions to Sustainable Development And Climate Change

Tetsuya Tanaka
Chief Climate Change
ICAO Secretariat
PROGRAME

MODERATOR: Tetsuya Tanaka – Chief Climate Change, ICAO Secretariat

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   Recent developments and future actions by the ICAO and its Member States in addressing emissions from international aviation.

2. Anne Bondiou-Clergerie, Director R&D Affairs, Space and Environment, French Aerospace Industries Association
   Present and future aircraft technologies to reduce CO₂ emission.

3. Mavis Chung Yi Fang, Alternate Representative, Permanent Mission of Singapore to the International Civil Aviation Organization
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4. Christoph Wolff, Head of Mobility Industries and System Initiative, Member of the Executive Committee, World Economic Forum
   Sustainable aviation fuels and renewable energy sources.

5. Gilles Bourgeois, Chief Environmental Protection and Standards, Transport Canada
   CORSIA implementation and contributions to ICAO Assistance, Capacity Building and Training on CORSIA (ACT-CORSIA) initiative.

6. Larissa Pamela Dianga Nzengue, Head of the Environmental Protection Department, Gabon National Civil Aviation Agency
   The key role of ICAO capacity building and pilot projects for aviation.
Established by the “Chicago Convention” in 1944
UN specialized agency
193 Contracting States
Standards, policies & guidance on environmental protection since 1960’s

Minimize the adverse effect of global civil aviation on the environment:

- limit or reduce the number of people affected by significant aircraft noise;
- limit or reduce the impact of aviation emissions on local air quality; and
- limit or reduce the impact of aviation greenhouse gas emissions on the global climate.

ICAO's environmental work contributes to 14 out of the 17 United Nations SDGs
Chicago Convention
ICAO Assembly Resolutions A39-1, A39-2 and A39-3:
Consolidated statement of continuing ICAO policies and practices related to environmental protection

Annex 16 - Environmental Protection:
Volume I, Aircraft Noise
Volume II, Aircraft Engine Emissions
Volume III, Aeroplane CO₂ Emissions
Volume IV, CORSIA NEW

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
- 2% annual fuel efficiency improvement
- Carbon Neutral Growth from 2020 onwards (CNG2020)

**CONTRIBUTION OF MEASURES FOR REDUCING INTERNATIONAL AVIATION NET CO2 EMISSIONS**

- Operational Improvements
- Aircraft Technology
- Sustainable Aviation Fuels and CORSIA

**Basket of Measures**

- Carbon Neutral Growth from 2020
<table>
<thead>
<tr>
<th>Aircraft technology</th>
<th><strong>First-ever global CO₂ certification Standard for new types and in-production aeroplanes</strong></th>
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<tbody>
<tr>
<td>Operational improvements</td>
<td><strong>CO₂ benefits from air traffic management; air navigation; green airports; etc.</strong></td>
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<td>Sustainable aviation fuels</td>
<td><strong>&gt;180,000 commercial flights with drop-in aviation fuels; 6 conversion processes; 7 airports distributing drop-in aviation fuels</strong></td>
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<td>Global market-based measure</td>
<td><strong>Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)</strong></td>
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ICAO facilitates the development and deployment of SAF

- Sharing information and best practices, through ICAO Global Framework for Aviation Alternative Fuels (GFAAF)
- Development of sustainability criteria and quantification of life-cycle environmental benefits
• ICAO Conference on Aviation Alternative Fuels in Mexico City (CAAF/2) (11 to 13 October 2017) - https://www.icao.int/Meetings/CAAF2/

• Endorsement of the 2050 ICAO Vision for Sustainable Aviation Fuels, which called for a significant proportion of SAF use by 2050

• A quantified 2050 ICAO Vision to be defined at CAAF/3 (by 2025), and ICAO Stocktaking process will support the quantification of this vision
To achieve carbon neutral growth from 2020 (CNG 2020), CORSIA is one complementary element in the basket of measures.

CORSIA addresses the remaining “emissions gap” to achieve CNG2020.

Adopted through Assembly Resolution 39-3 and is the first global MBM scheme for any industry sector.
Adoption of Annex 16, Volume IV, and Environment Technical Manual, Volume IV

Progress on CORSIA Implementation Elements

- ICAO CORSIA CO$_2$ Estimation and Reporting Tool (CERT)
- CORSIA Central Registry (CCR)
- CORSIA Eligible Fuels
- CORSIA Eligible Emissions Units

CORSIA Outreach and Capacity Building

- ICAO Regional/HQ Seminars
- Outreach Materials (Videos, Brochure/Leaflets, FAQs...)
- ACT-CORSIA Buddy Partnerships
Donor States provides assistance to recipient States to build their national capacity to implement CORSIA

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

Involving 15 donor States and 98 recipient States (as of June 2019)
Communication Tool between ICAO and States

- **114 States** with more than 93% of international aviation activity voluntarily submitted action plans
- Assembly encouraged States to submit complete and robust data in their action plans
- Guidance and assistance for States to develop and update their action plans (such as guidance material, tools, regional seminars, capacity building projects).
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 Biofuels, Renewable Energy, Governance, and Financing of Clean Energy projects
- Implementation of a pilot project on renewable energy (solar-at-gate) at two international airports in Jamaica.
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ICAO plans to launch Global Coalition For Sustainable Aviation (GC4SA) at 2019 UN Climate Summit to advance environmental innovation for the aviation sector.