

GROUP ON INTERNATIONAL AVIATION AND CLIMATE CHANGE - GIACC



COOPERATION WITH UN BODIES

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ICAO and other UN Bodies

A36-22 (J): Aviation impact on global climate Cooperation with UN and other bodies

- Ensure that ICAO exercise continuous leadership on environmental issues relating to international civil aviation, including GHG emissions
- Continue to study policy options to limit or reduce the impact of aircraft engine emissions and to develop concrete proposals and provide advice as soon as possible to the Conference of the Parties of the UNFCCC
- Continue to cooperate with organizations involved in policy-making in this field, notably UNFCCC and SBSTA

Setting the scene

'WE HAVE MOVED CLIMATE CHANGE UP TO TOP OF THE AGENDA, WHERE IT BELONGS; WE CANNOT NOW LET THOSE WHO DEPEND ON US DOWN'

Secretary-General Ban Ki-moon to the General Assembly High-Level Thematic Debate: "Addressing Climate Change: the United Nations and the world at work", in New York, 11 February 2008

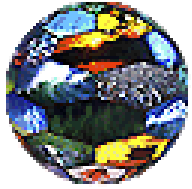
Setting the scene

- IPCC report generated unprecedented momentum in 2007: Climate change is happening and accelerating and the costs of inaction will far exceed the costs of action
- UNDP's Human Development Report: majority of climate change effects on the poorest and most vulnerable
- Bali Conference launched negotiations on a new international climate change agreement by the end of 2009
- Developed countries need to take a clear lead, but success is possible only if all countries act
- UN overview report aims to develop a coordination structure with key clusters of activity and specific lead agencies - Climate Change requires all to join forces

ICAO and other UN Bodies

- UNFCCC* – main policy/all areas
- IEA - quantification
- IPCC – assessment/reporting
- WMO* - assessment/adaptation
- UNEP – mitigation/adaptation
- UNCSD – millennium goals
- WHO – health effects
- IMO - policy/mitigation
- UNWTO - policy/mitigation

* Observers to CAEP



Intergovernmental
Panel on
Climate Change

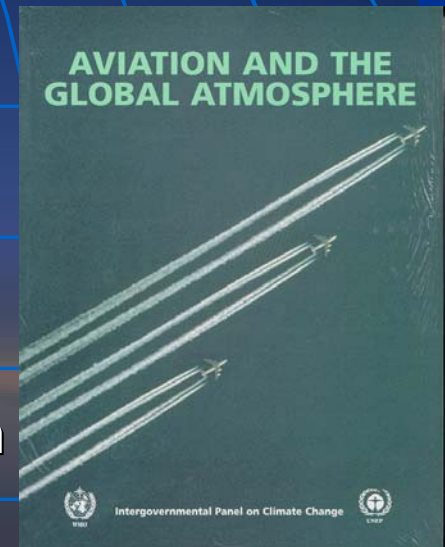
QUANTIFICATION / METHODOLOGICAL ISSUES

Special Report on *Aviation and the Global Atmosphere*

- Prepared at ICAO's request
- Completed April 1999
- Covered both climate change and ozone depletion

IPCC to update information on
aviation in 4th Assessment Report
(AR4)

- Published 2007





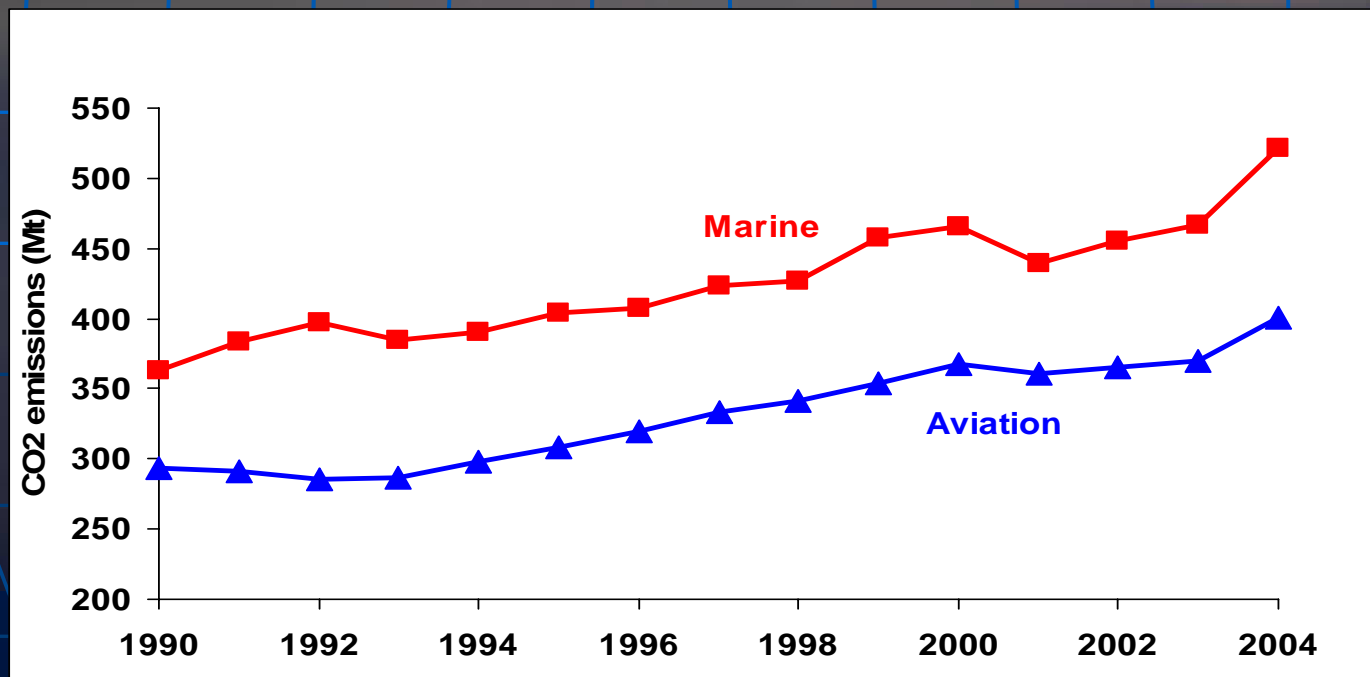
Intergovernmental
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QUANTIFICATION / METHODOLOGICAL ISSUES

- ICAO cooperated with the revision of the 1996 IPCC Guidelines which includes an update of the aviation emissions factors and other parameters
- Guidelines approved by IPCC in 2006 and new requests for the updates of the emissions factors database received
- Follow-up of the activities of the IPCC Emissions Scenarios Group

IEA – International Energy Agency

- Provide statistics on fuel consumption, including total fuel sold for aviation
- Many Countries use their statistics in their reporting activities to the UNFCCC



(Source IEA)



ICAO Data Activities

ICAO Fuel consumption estimates

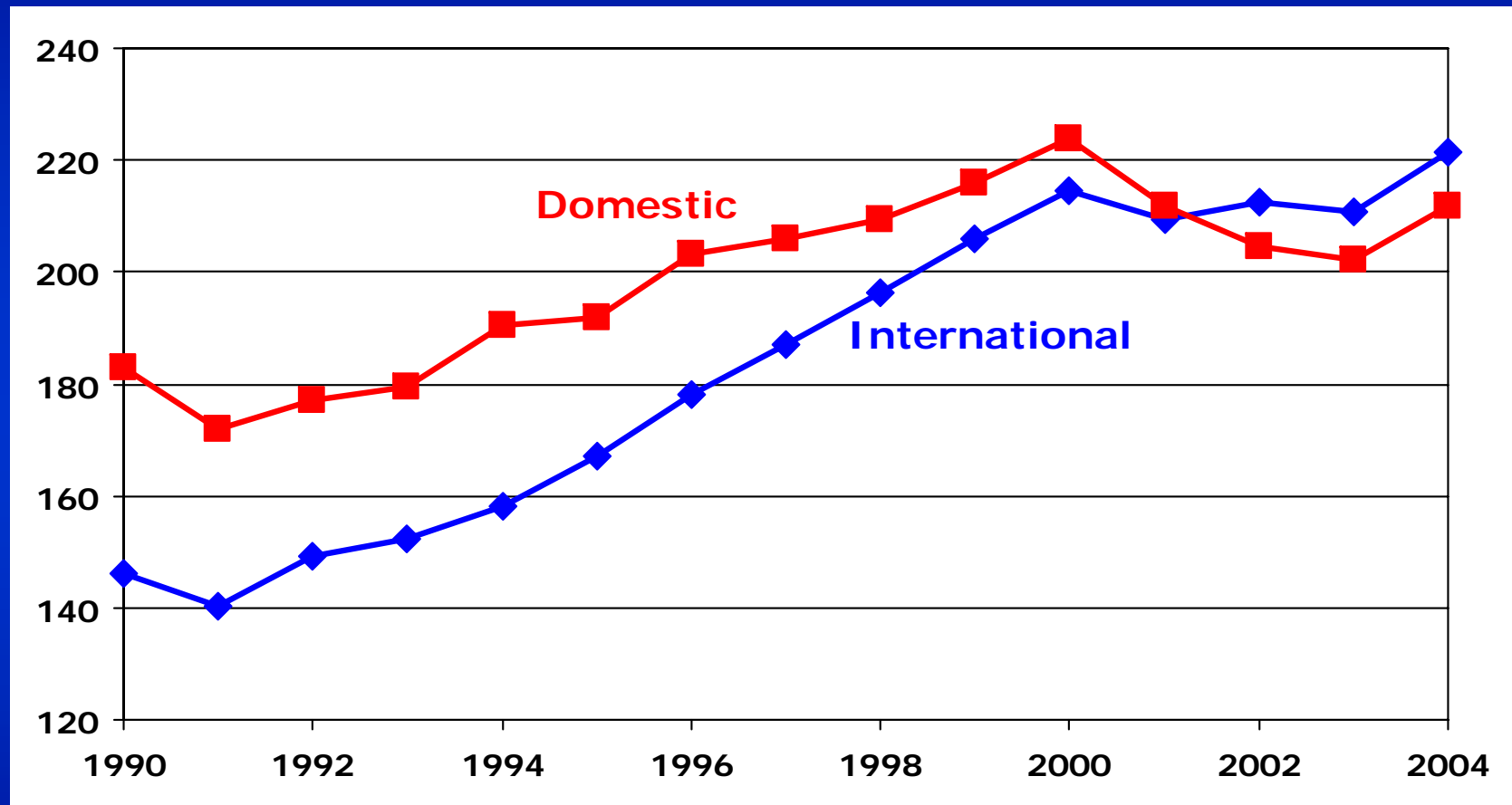
- **ICAO develops fuel consumption estimates by:**
 - City-pair
 - Traffic flow
 - Country of departure, arrival
 - Country of airline registration
 - International / domestic (definition)
- **Estimates based on airline schedules:**
 - Non-scheduled (charter) flights are not accounted for
 - Flight cancellations are not accounted for
 - Flights additions are not accounted for



UNFCCC – POLICY ON CLIMATE CHANGE

- ALL parties have to report to the Convention on their emissions, including aviation emissions
- For Annex I - Domestic aviation emissions included in national totals
- International aviation emissions *reported*

International and domestic aviation CO2 emissions (Mt) for all Annex I Parties*



* Excl. Russian Federation



UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE





UNFCCC – SBSTA

METHODOLOGICAL ISSUES

- ICAO cooperates with SBSTA on methodological issues related to aviation bunker fuels
- ICAO provided informal briefings and prepared a side event on the quality of aviation emissions and provided to SBSTA/22 (2005) a comparison study on aviation emissions inventory data with ICAO modeled data. No further progress was achieved in SBSTA on this item
- SBSTA 28 will be held in June 2008

Emissions - Kyoto Protocol

- Adopted in 1997/into force Feb. 2005 - Covers 2008 to 2012 - New Road Map post 2012
- Commits Annex I Parties (developed Countries) to individual, legally-binding targets to limit or reduce greenhouse gas emissions
- Reductions of at least 5% between 2008-2012 compared to 1990 levels
- Pursue limitation or reduction of emissions of greenhouse gases from aviation bunker fuels, *working through ICAO* (art.2.2)
- 3 Flexible mechanisms: CDM; JI; and Emissions Trading – project activities resulting from reduced emissions of bunker fuels are not eligible under the CDM

ICAO's mandate



- A36-22 - requests Council to vigorously develop policy options to limit or reduce the environmental impact of aircraft engine emissions by developing concrete proposals and provide advice to UNFCCC encompassing technical solutions and market-based measures, while taking into account potential implications of such measures for developing as well as developed countries

RECENT DEVELOPMENTS

- The Bali Conference, delivered important progress on adaptation, technology and deforestation; and launched negotiations on a new international climate change agreement by the end of 2009
- The agreement will have to map out emission limitation commitments; agree on essential action to adapt to the impacts of climate change; and mobilize the necessary financing and technological innovation. The Plan will ultimately lead to a post-2012 international agreement on climate change financing and technological innovation
- Article 1 b4: enhanced national/international action on mitigation, including consideration of sectoral approaches and sector-specific action to enhance implementation of Article 4.1(c) of UNFCCC
- Process shall be conducted by the Ad hoc group on long term cooperative action under the Convention and shall present its work to the COP/15

TIMETABLE OF MEETINGS OF THE AD HOC GROUP ON LONG-TERM COOPERATIVE ACTION UNDER THE CONVENTION (AWG-LCA 1)

■ Session 1 - Bangkok Climate Change Talks 2008 - AWG-LCA 1 and AWG-KP 5

The first session of the AWG-LCA 1 and the first part of the fifth session of the Ad hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP 5) will be held from 31 March to 4 April 2008 in Bangkok, Thailand.

The AWG-KP 5 Agenda item 3 d) will consider possible approaches targeting sectoral emissions

- Session 2 – June 2008, in conjunction with the 28th SB
- Session 3 – August/September 2008
- Session 4 - December 2008, in conjunction with COP/14

UNEP

- Many thematic areas – Main interest: Climate Change
- Governing Council/Global Ministerial Environment Forum – Discusses all matter related to environment at a Ministerial level
- United Nations Inter-Agency Cooperation -The Environmental Management Group (EMG) is chaired by UNEP - UN Carbon Neutral Initiative
- Scientific Advisory Groups
The Intergovernmental Panel on Climate Change (IPCC)

UNEP's role would be very valuable in providing the perspective of environmental performance and action for road (with IAPT) and rail transportation as ICAO and IMO provide this perspective for aviation and maritime respectively

UNEP Carbon Neutral Initiative

- UN launched the Carbon Neutral Initiative in 2007
- ICAO developed a harmonized and transparent, per-passenger emissions calculation methodology and reference tools
- The methodology is currently under CAEP revision and approval
- The methodology and the calculation tool will be placed on the ICAO public website in May 2008
- **UNEP** - 10th Special Session of the Governing Council / Global Ministerial Environment Forum, 21 February - launched the Climate Neutral Network (CN Net), in cooperation with the UN's EMG

CARBON OFFSET PROGRAMMES

- Carbon offsetting involves calculating the emissions created by one activity (e.g. aviation) and then compensating for the emissions produced with an equivalent amount of carbon dioxide (CO₂) savings from emission-reduction projects.
- Many programmes are available on the web (i. e. Action carbon, The carbon neutral company, Sustainable Travel International, Climate Care, Carbon Fund, Climate Friendly, Zerofootprint, Australian Greenhouse Office (Greenhouse Friendly) , Balance carbon, Terrapass, Origin Energy, My Climate, Easy Jet.....)

Relations with other agencies

- WMO* - assessment/adaptation
- UNCSD - millennium goals
- WHO - health effects
- IMO - policy/mitigation (art.2.2)
- UNWTO - policy/mitigation

ADAPTATION

UNFCCC – UNEP - WMO

- Airports infrastructure may need to adapt to floods, higher sea levels, etc. (many airports are located at sea level)
- Airlines will need to plan and adapt operations to alternative routings etc – may need more equipment

OUTREACH

- One of the main challenges for the aviation sector is to reverse the established perception of the public that aviation is a high pollutant activity and is not acting responsibly.
- Although good information is available, it is not reaching the right fora
- IPCC reports ICAO Environmental Report
- Need for a Media Campaign
- A more tangible, higher objective needs to be defined

TECHNOLOGY TRANSFER/FINANCING

- One of the most difficult debates in Bali related to financing and technology transfer
- LDCs and Developing Countries expressed concerns with progressing toward new commitments while part of the current agreements were not being fulfilled
- ICAO has not addressed the issue of technology transfer and financing in relation to the environment
- Currently aviation projects are not included in usual UNFCCC financing mechanisms as the GEF and the adaptation fund (art. 2.2)

CLOSING REMARKS

- Many UN bodies have roles and mandates in climate change
- ICAO is the leading agency on international aviation emissions
- There remains a few roadblocks for full exercise of this leadership:
 - Data availability
 - Monitoring/accounting
 - Full access to flexible mechanisms & financing
 - A clear plan of action and vision on how the sector will address its impact on climate change and stabilize its future emissions
- Global cooperation and partnerships are paramount

**For more information on ICAO activities
on environmental protection:**

ICAO WEB PAGE

www.ICAO.int/

ICAO ENVIRONMENTAL REPORT 2007

www.ICAO.int/env/

ICAO Workshop

“Aviation and Carbon Markets”

18-19 June 2008 Montréal

Thank you