



International Civil Aviation Organization

**THIRTEENTH MEETING OF THE
ASIA/PACIFIC AIR NAVIGATION PLANNING AND
IMPLEMENTATION REGIONAL GROUP (APANPIRG/13)
Bangkok, Thailand, 9 to 13 September 2002**

Agenda Item 3: CNS/ATM Implementation and Related Activities

Environmental Issues Related to Implementation of CNS/ATM System

(Presented by Australia)

SUMMARY

On June 5, World Environment Day, the CEO of Airservices Australia, Mr Bernie Smith addressed staff, ATM stakeholders and the media. In 2002, the address covered a range of issues, but focussed mainly on the links between environmental performance and improved business performance. The address traditionally lists the environmental achievements over the past year.

1. INTRODUCTION

Airservices Australia's environment policy commits management and staff to work towards the achievement of world's best environment practice. The Australian Government has introduced strong environmental laws which commit Airservices Australia to environmentally assessing all airspace management proposals back up this policy. Some of Airservices Australia's environment management achievements over the past year are outlined.

2. AIR TRAFFIC MANAGEMENT

In the Air Traffic Management area, controllers are applying initiatives that all benefit the environment through reduced fuel usage and lower carbon emissions:

- Reduced Vertical Separation Minima (RVSM);
- User Preferred Routes;
- Area Navigation Routes;
- The use of Global Navigation Satellite System (GNSS) navigation;
- Central Traffic Management System (CTMS); and
- The MAESTRO tactical flow management system, which is being expanded to other locations.

RVSM alone has been assessed as achieving a significant reduction in fuel costs per year, and an annual reduction in carbon dioxide emissions of around 250,000 tonnes. Intergovernmental Panel on Climate Change (IPCC) scientists studying climate change, have estimated fuel savings of between six and twelve percent can be achieved from air traffic management efficiencies. At just six percent, this represents fuel cost savings for the aviation

industry in Australia of around \$80 million per year, and approximately 750,000 tonnes of carbon dioxide emissions saved every year.

Apart from the IPCC calculations, these estimates are also based on fuel usage rates which are calculated annually by the Australian Department of Transport, Airservices Australia's estimates of track mile and air time cuts. The aviation industry has a more accurate, but commercially protected assessments of fuel savings from ATM efficiencies. While these are not available, informal advice from industry representatives suggests that savings in the Australian environment are approaching 1,000,000 tonnes per annum or an 8% saving.

3. **AIRCRAFT NOISE**

Aircraft noise is an issue for communities around the major airports. A Noise and Flight Path Monitoring System has now become operational for the Canberra region.

Airservices Australia has operated Noise and Flight Path Monitoring Systems at most major airports for many years. The Canberra system will provide accurate information on aircraft flight paths in the Canberra airport region, as well as accurate information on aircraft noise through a network of noise monitoring stations.

4. **ENVIRONMENT MANAGEMENT SYSTEM**

Airservices Australia has implemented an environment management system to facilitate the management of our business activities that may impact on the environment. This system helps management to identify environmental risks to which Airservices Australia may be exposed, develop strategies to manage these identified risks, and establish effective environmental management priorities. Through the environment management system, over 550 environment risks have been identified and are being managed, including for example, our fuel storage sites and risks to endangered species on our sites. Also, in the past 12 months, 86 proposals for changes in air traffic practices have been through our environment assessment process.

5. **OTHER HIGHLIGHTS**

Firstly, Airservices Australia have used the environment management system database as the basis for a new product known as the Advanced Risk Management System, which they are now marketing commercially.

Secondly, Airservices Australia has won this year's Tasmania Environment Award for excellence for its work in preserving the habitat of a colony of frogs, the Green and Gold Frog, on one of Airservices Australia's sites.

Canberra Tower is in the process of being accredited by an external auditor as compliant with the international standards for environment management systems, known as ISO 14001.

6. **THE FUTURE**

For the next twelve months the environmental projects and initiatives that Airservices Australia will focus on will include:

- Continued air traffic management efficiencies to achieve even less fuel burn for industry, with the associated reduction in fuel costs and carbon dioxide emissions.
- Monitoring for operations by jet aircraft that do not meet the noise standards of ICAO Annex 16. (known as Chapter 2 aircraft)
- Improving internal energy, waste management and resource usage efficiency.
- Completion of certification of Canberra Tower to ISO 14001 standard.

- Looking for ways to integrate financial performance and social responsibility with environmental management, now one of six key Corporate Performance Indicators in the business plans for all groups - and -
- Continuing to work with all elements of the aviation industry and the community in developing improved noise abatement procedures.

7. ACTION BY THE MEETING

The meeting is invited to note the actions of Airservices Australia in promoting and protecting the environment.

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