

International Aviation Models

Aviation Policy and Plans

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Federal Aviation
Administration

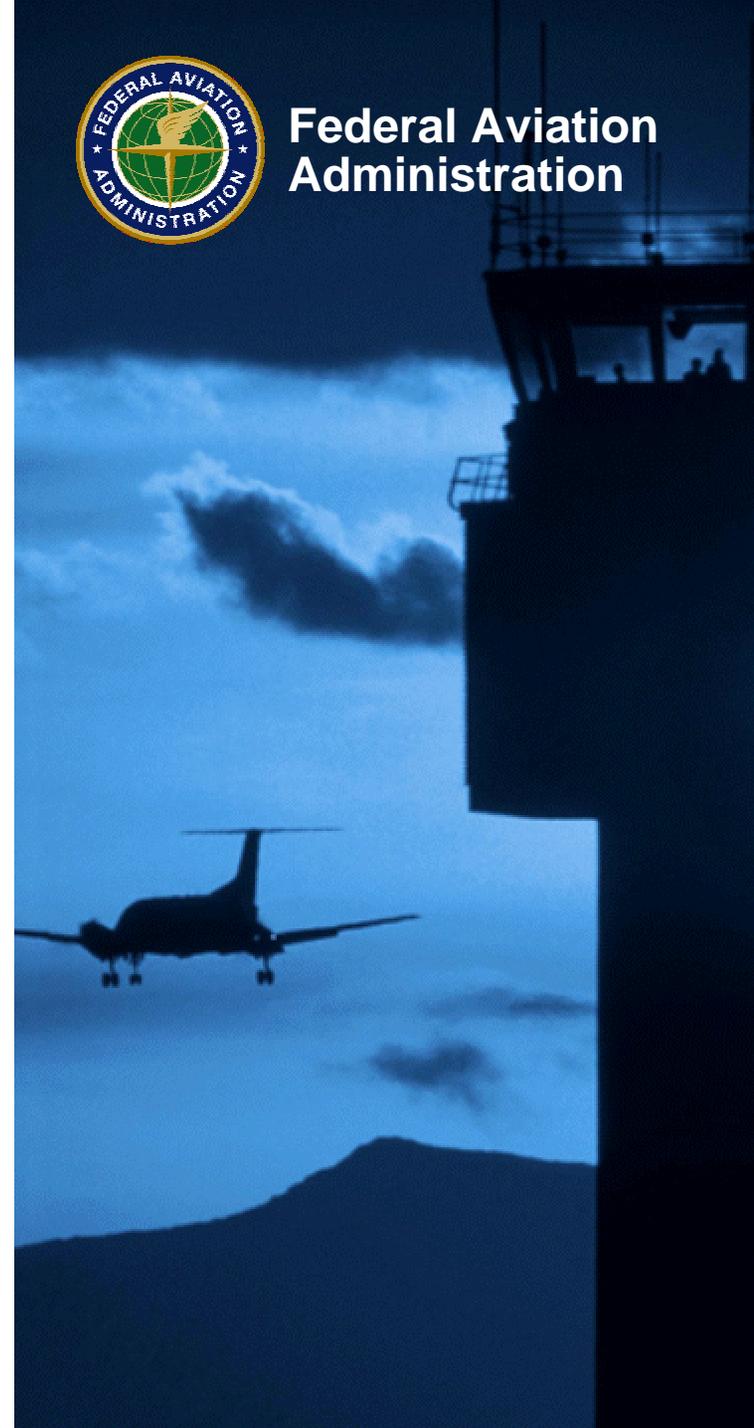


Table of Contents

	<u>Page</u>
• Introduction	3
• Market Statistics	4
• Organizational Structures	5
• Governance	6
• Fee Structures	7
• Transition Issues	10



Introduction

The purpose of this executive briefing is to provide an overview of countries that have privatized or corporatized their air navigation services organizations. These countries include France, Canada, Australia, Germany and the United Kingdom. The air navigation service providers in these countries are either state-owned corporations, public-private partnerships or private organizations. Also profiled are the regulatory and airport organizations in these countries. This briefing also includes information on governance and user fees.



Market Statistics

Of the five profiled countries, Canada leads in terms of number of movements, terminal facilities, en route centers and airports.

AIR NAVIGATION SERVICES ORGANIZATIONS						
Country	Organization	Ownership	Movements	Registered Aircraft	Terminal Facilities	En Route Centers
Australia	Airservices Australia	State-owned	2.7 m	12,416	28	2
Canada	NAV Canada	Private	6.0 m	15,035	44	7
France	Direction des Services de la Navigation Aérienne (DSNA)	State-owned	2.6 m	12,100	11	5
Germany	Deutsche Flugsicherung GmbH (DFS)	State-owned	2.7 m	20,611	17	5*
UK	National Air Traffic Services, Ltd. (NATS)	PPP	2.0 m	17,012	11	5

* 4 at end of 2006

AIRPORT COMPANIES AND ASSOCIATIONS		
Country	Organization	Airports
Australia	Regional Aviation Association of Australia	444
Canada	Local Airport Authority	13,719
France	Union des Chambres de Commerce et Établissements Gestionnaires d'Aéroport	190
Germany	German Airports Association	59
UK	British Airport Authority	63

Organizational Structures

With the exception of France, each country's air navigation services organization has been privatized or corporatized; Germany and the UK lead the field in terms of public-private partnerships.

	AIR NAVIGATION SERVICES	AIR REGULATORY	AIRPORT COMPANIES/ ASSOCIATIONS
AUSTRALIA	<i>Airservices Australia</i> Corporatized 1988, government-owned company, 2,900 employees, 2004 revenue: US\$441 m	<i>Civil Aviation Safety Authority (CASA)</i> Government-owned agency, three technical divisions, 734 employees, 290 safety inspectors	<i>Regional Aviation Association of Australia (RAAA)</i> Private sector corporations lease airports from government and operate on for-profit basis model
CANADA	<i>NAV Canada</i> Privatized 1996, privately owned company, 5,500 employees, 2004 revenue: US\$789 m	<i>Transport Canada – Civil Aviation Directorate</i> Government-owned agency, 4,700 employees, 800 safety inspectors	<i>Local Airport Authority (LAA)</i> Private sector, non-share capital corporations lease airports from government and manage on not-for-profit basis model
FRANCE	<i>Direction de Services de la Navigation Aérienne (DSNA)</i> Established 2005, government-owned agency, 7,618 employees, 2004 revenue: US\$1.40 b EUROCONTROL manages en route services	<i>Direction Générale de l'Aviation Civile</i> Government-owned agency, 11,736 employees	<i>Union des Chambres de Commerce et Établissements Gestionnaires d'Aéroport</i> Most French airports have been privatized and are no longer part of the state
GERMANY	<i>Deutsche Flugsicherung GmbH (DFS)</i> Government-owned company, privatization law passed (PPP 2006), 5,400 employees, 2004 revenue: US\$1.14 b EUROCONTROL manages en route services	<i>Federal Office of Aviation (LBA)</i> Government-owned agency, 409 employees, 2,592 safety inspectors	<i>German Airports Association (ADV)</i> Replicated UK privatization model in creating Fraport AG, a joint stock company
UK	<i>National Air Traffic Services, Ltd. (NATS)</i> PPP established 2001, 3,758 employees (NATS En Route plc (NERL) staff, 2004 revenue: US\$1.08 b (NATS Holdings Ltd.) EUROCONTROL manages en route services	<i>Civil Aviation Authority (CAA)</i> Government-owned agency, 1,000+ employees	<i>British Airport Authority (BAA)</i> Privatization and PPP are primary structures used for aviation finance

Note: Revenue conversions assume September 30, 2004 exchange rates



Governance

Governance structures tend to embrace a cross-section of business, government and aviation industry leaders and also represent the interests of employees and unions.

	AIR NAVIGATION SERVICES	AIR REGULATORY	AIRPORT COMPANIES/ ASSOCIATIONS
AUSTRALIA	<i>Airservices Australia</i> Appointed by Minister for Transport & Regional Services, Board governs strategy and policy of Airservices Australia	<i>Civil Aviation Safety Authority (CASA)</i> Governed by Board consisting of four to seven members including Chairman and Deputy Chairman	<i>Regional Aviation Association of Australia (RAAA)</i> Australian Competition and Consumer Commission monitors and evaluates quality of airport services and facilities
CANADA	<i>NAV Canada</i> Board of Directors comprises airlines, government, unions, business, aviation, independent stakeholders, President & CEO	<i>Transport Canada – Civil Aviation Directorate</i> Transport Canada and the TSB report to the Minister of Transport	<i>Local Airport Authority (LAA)</i> Governed by Board of Directors including representation from local business and community interests
FRANCE	<i>Direction de Services de la Navigation Aérienne (DSNA)</i> Operates under Ministry of Transport; focuses on air navigation services; strategic and technical affairs department covers regulations	<i>Direction Générale de l'Aviation</i> Operates under Ministry of Transport, assisted by cabinet, manages Air Transport Police, Communications, Flight Inspection departments	<i>Union des Chambres de Commerce et Établissements Gestionnaires d'Aéroport</i> Role to council, negotiate for and represent 190 member airports
GERMANY	<i>Deutsche Flugsicherung GmbH (DFS)</i> Supervisory Board representing employee interests oversees Board of Managing Directors consisting of three executives	<i>Federal Office of Aviation (LBA)</i> High-level task involves German finance minister's oversight of national budget	<i>German Airports Association (ADV)</i> Structures defining the relationship between airport, company, regulator, airport users protect interests of airport companies and users
UK	<i>National Air Traffic Services, Ltd. (NATS)</i> Board of Directors includes representatives from PPP ownership (government, NATS staff, airline, airport authority)	<i>Civil Aviation Authority (CAA)</i> Governed by chairman with Board of Directors and officers containing members that are internal and external to entity	<i>British Airport Authority (BAA)</i> Four airports subject to detailed price control; BAA governed by chairperson and Board of Directors, accountable to CAA and shareholders



Fee Structures

All countries have structures in place across various organizations to collect a broad range of fees.

	AIR NAVIGATION SERVICES	AIR REGULATORY	AIRPORT COMPANIES/ ASSOCIATIONS
AUSTRALIA	<i>Airservices Australia</i> Proposal in 2004 to increase fees for towered airfields and terminal navigation charges; en route and oceanic charges also levied	<i>Civil Aviation Safety Authority (CASA)</i> Fees have not increased since CASA was formed in 1995; fees include pilot licensing fees, AME, student flight engineer license	<i>Regional Aviation Association of Australia (RAAA)</i> Structure in place to collect runway charges based on MTOW, terminal facility charges, time-based aircraft apron parking charges, passenger security screening charges
CANADA	<i>NAV Canada</i> Funded through air navigation fees levied on aircraft operators; charges based on metric units and have base and variable rate components	<i>Transport Canada – Civil Aviation Directorate</i> Fee structure in place to collect licensing fees for pilots, fuel tax, airport rent revenue, international air traffic facility use tax	<i>Local Airport Authority (LAA)</i> Airport Authorities collect fees including airport improvement fees, land and space rentals, aircraft parking charges, utility and capital cost recoveries
FRANCE	<i>Direction de Services de la Navigation Aérienne (DSNA)</i> Route and terminal charges levied; French unit rate below EUROCONTROL average and most EU country rates, terminal service charges have increased	<i>Direction Générale de l'Aviation</i> Charges licensing fees for pilots and other airmen, as well as fees for medical certificates, inspection representatives and aircraft registration	<i>Union des Chambres de Commerce et Établissements Gestionnaires d'Aéroport</i> Fees based on size and location of airport, number of passengers, size and weight of aircraft
GERMANY	<i>Deutsche Flugsicherung GmbH (DFS)</i> Funded through user fees from aircraft operators and revenue from aeronautical information services and consulting services	<i>Federal Office of Aviation (LBA)</i> Wide range of fees collected for pilot licenses, permits, examinations, operation of airports and airfields	<i>German Airports Association (ADV)</i> Collects fees from ordinary members (airports) and extraordinary members (Bundesländer, chambers of commerce, municipalities)
UK	<i>National Air Traffic Services, Ltd. (NATS)</i> Fees calculated based on Chargeable Service Units (CSU derived from weight and distance formula); in 2005, NATS charged £45.04 per CSU	<i>Civil Aviation Authority (CAA)</i> Fees calculated based on Chargeable Service Units; in 2005, CAA charged £3.43 per CSU	<i>British Airport Authority (BAA)</i> Fees include passenger charges, aircraft parking charges, minimum departure charge

Navigation Fees

SELECTED NAVIGATION USER FEES FROM PROFILED COUNTRIES

User Fee	Australia	Canada	France	Germany	UK
	Airservices Australia	NAV Canada	Directions Des Services de la Navigation Aerienne (DSNA)	Deutsche Flugsicherung GmbH (DFS)	National Air Traffic Services, Ltd. (NATS)
Terminal Charge	<p>1. For aircraft with MTOW less than 5.7 tonnes: Charge ranges from A\$4.03 to A\$11.43 per tonne varying by airport.</p> <p>2. For aircraft with MTOW equal to or exceeding 5.7 tonnes: Charge ranges from A\$2.89 to A\$12.21 per tonne varying by airport.</p>	<p>For aircraft over three metric tonnes: Charge = $R \times W$ R = unit rate composed of base rate of C\$16.38 plus adjustment of C\$0.28 W = weight = $MTOW^{0.9}$</p>	<p>DSNA bills and collects terminal charges for services and facilities for aircraft during take-off and landing at French airports. Charge (R) = unit rate (t) \times no. of service units (N) N = $1.247 \times MTOW^{0.9}$ R = $t \times 1.247 \times MTOW^{0.9}$ t = €4.48 t (overseas) = €11.44</p>	<p>DFS bills and collects terminal charges for services and facilities for aircraft during take-off and landing at German airports. Charge = $(MTOW/50)^{0.5} \times$ unit rate Unit rates published in relevant regulations.</p>	<p>Per-tonne basis charge varies by airport and is wrapped into en route charge</p>
En Route Charge	<p>1. For aircraft with MTOW less than 20 tonnes: Charge = $Rate \times Distance (km)/100 \times MTOW$</p> <p>2. For aircraft with MTOW greater than or equal to 20 tonnes: Charge = $Rate \times Distance (km)/100 \times MTOW^{0.5}$ Rate for MTOW less than 20 tonnes = A\$0.98 Rate for MTOW greater than or equal to 20 tonnes = A\$4.37</p>	<p>For aircraft over three metric tonnes: Charge = $R \times W \times D$ R = unit rate composed of base rate of C\$0.03589 plus adjustment of C\$0.00065 W = weight = $MTOW^{0.5}$ D = distance in km</p>	<p>EUROCONTROL collects en-route charges on behalf of contracting states for en-route air navigation services and facilities which are used by aircraft in the airspace of the flight information regions of France. En-route unit rates increased 53% from 2001-2003 and decreased 3.2% in 2004. Charge (ri) = $ti \times Ni$ i = Contracting State ti = unit rate Ni = no. of service units Ni = $di \times p$ di = distance factor p = weight factor = $(MTOW/50)^{0.5}$ ti = €60.58</p>	<p>EUROCONTROL collects en-route charges on behalf of contracting states for en-route air navigation services and facilities which are used by aircraft in the airspace of the flight information regions of Germany. En-route unit rates increased 53% from 2001-2003 and decreased 3.2% in 2004. Charge = $(MTOW/50)^{0.5} \times$ (distance in km/100) \times unit rate</p>	<p>EUROCONTROL collects en-route charges on behalf of contracting states for en-route air navigation services and facilities which are used by aircraft in the airspace of the flight information regions of the UK. En-route unit rates increased 53% from 2001-2003 and decreased 3.2% in 2004. CAA regulates charge increases using RPI - x RPI = retail price index percentage x = efficiency gain percentage set by CAA</p>
Oceanic Charge	Included in En Route Charge	<p>1. North Atlantic En Route: C\$97.12 per flight plus C\$3.35 adjustment</p> <p>2. Intl. Communications (one of two levied): A. C\$52.33 using voice B. C\$26.44 using data link</p>	Collected by EUROCONTROL	Collected by EUROCONTROL	£56.44 collected by EUROCONTROL

Notes: * MTOW = maximum take-off weight. For the UK, the CAA sets caps on prices that NATS (En Route) plc (NERL) charges for en route business (both Eurocontrol and Oceanic).
* Current caps run until 31 December 2005 and 1 April 2006 respectively. The CAA is currently working on setting new price caps.
* 1 US\$ = A\$1.40, C\$1.27, €0.81, £0.56 (September 30, 2004)

Certification Fees

SELECTED CERTIFICATION USER FEES FROM PROFILED COUNTRIES					
User Fee	Australia	Canada	France	Germany	UK
	Civil Aviation Safety Authority (CASA)	Transport Canada – Civil Aviation Directorate	Direction Générale de l'Aviation Civile (DGAC)	Federal Office of Aviation (LBA)	Civil Aviation Authority (CAA)
Air Operators Certificate	A\$130/h per issuance, renewal, or variation	C\$30,000 for commercial operator	Formula in place by January 2006; will be one-time fee; no renewals	€205 - €5,113	Grant: £5,480 - £18,196 for first aircraft type included in certificate; £1,096 - £5,480 for additional types Variation: £3,070 - £10,085 by weight Renewal: £834 - £4,793 by weight
Flight Crew License	Commercial License A\$55 - A\$100 one-time fee	Commercial License C\$80	One-time fees / no renewals: Commercial (CPL) €263 Practical Exam €56 Theoretical Exam Airline (ATPL) €753 Practical Exam €610 Theoretical Exam	Commercial License €140 Practical Exam; €440 Theoretical Exam	Commercial License valid for 10 years: £323 Five-year renewal: £110 Ten-year renewal: £215
Licensing for Airmen Other Than Pilots	Flight Engineer A\$55 one-time fee	Flight Engineer C\$80 Air Traffic Controller C\$75	Cabin Crew Member (€75 for exam); will be one-time issuance fee in January 2006	Flight Engineer €100 Practical Exam €350 Theoretical Exam	Air Traffic Controller £312 for initial certification or renewal
Airmen Medical Certificate	Physician specific	C\$40 per issuance C\$50 per extension	Physician specific	€50 per issuance	£83 - £422 for application, £83 - £101 for renewal
Designee Programs (airworthiness, manufacturing inspection reps.)	Aircraft Maintenance Engineer A\$45 per issuance, A\$75 per renewal	Aircraft Maintenance Engineer C\$115 per issuance, C\$40 per renewal	None	Aircraft Certification Staff €60 - €120	Aircraft Maintenance Engineer £180 per application, £84 for extension
Type Certificate	A\$130/h per issuance, renewal, or variation	C\$40/h capped at C\$504,680 per issuance C\$40/h capped at C\$307,945 for amendment	Levied by European Aviation Safety Agency* Initial application: Fixed fee of €21,000 times a fixed fee coefficient varying by aircraft size, plus €99/h Annual renewal fee for large airplanes ranges from €8,333 - €120,000 by MTOW		
Airworthiness Certificate	A\$130/h per issuance or renewal	C\$180 per issuance non-commercial C\$1,260 per issuance commercial	€135.04 minimum per inspection for issuance and renewal every three years, after which fee varies by engine horsepower	€30.86 - €1,227.10 by weight per issuance	£70 for each 500 kg not exceeding 2,730 kg for each year of certificate's validity, £109 for renewal
Aircraft Registration	None	C\$45 - C\$140 per issuance	€91 per issuance	€60 - €2,400 by weight per issuance	£50 for aircraft not exceeding 15 tonnes; £100 if exceeding 15 tonnes

Notes: * As of 1 July 2005 the European Aviation Safety Agency has issued type certificates for all European countries using a single pricing structure.

* 1 US\$ = A\$1.40, C\$1.27, €0.81, £0.56 (September 30, 2004)

Transition Issues By Country

Key transition issues across the profiled countries vary and yield no significant trends.

