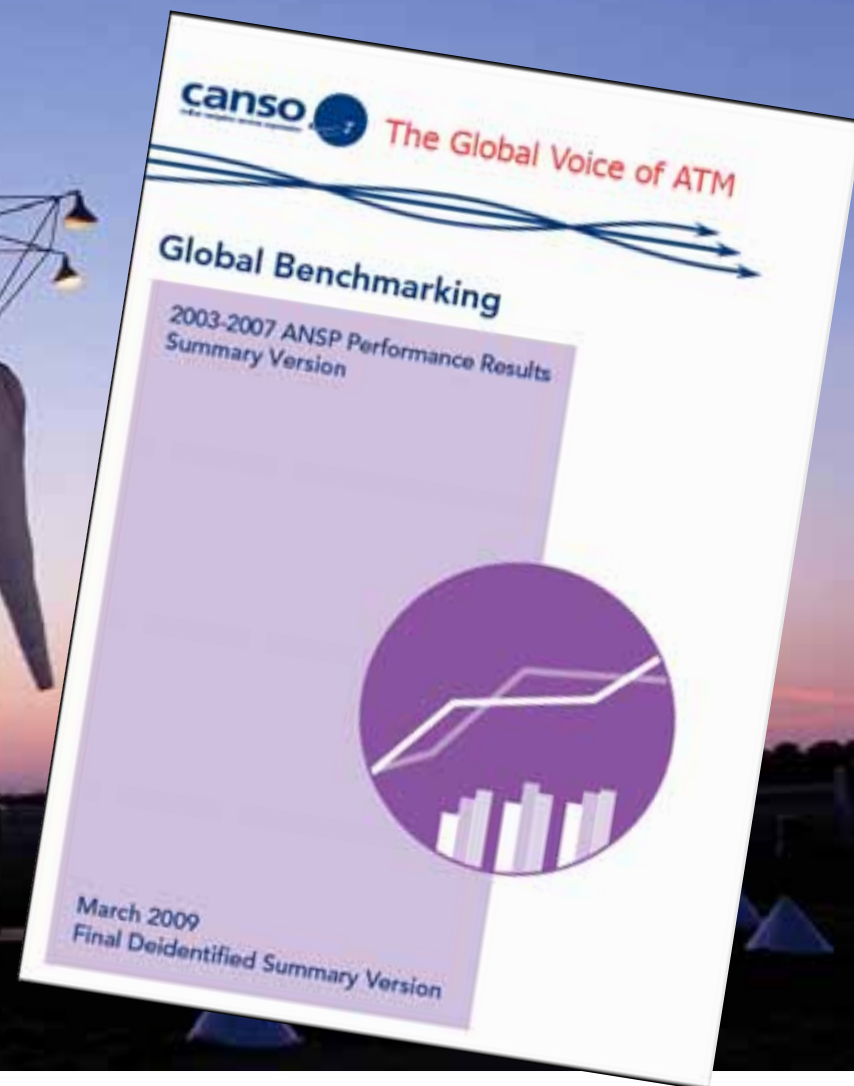


Air Navigation Services Performance

CANSO Global Benchmarking Workgroup



Background

- Improving Global ANS performance is one of CANSO's key strategic goals
- Performance measurement and benchmarking supports this objective
- A performance framework is essential to understanding and improving performance
- CANSO's Global Benchmarking Reports provide reasoned comparisons between ANSPs and identification of best practice

Global Benchmarking Workgroup

Mandate

- Develop appropriate global measures for ANSPs performance
- Capture information that support best practice comparisons
- Influence the development of KPIs by third parties, thereby reducing the risk that inappropriate/harmful comparisons are made for CANSO members

Global Benchmarking Workgroup

Organisational Arrangements

- Participation in the CANSO Global Benchmarking Work Group is open to all Member ANSPs
- Participation by external agencies, including customers, in the work program or at the annual seminar is by invitation only
- GBWG is supported by an Analytical Sub-Group
- Work program is submitted annually to the Annual General Meeting for approval

Global Benchmarking Reports

- Global KPIs in productivity, cost-effectiveness, pricing, revenue and profitability
- Quality of service KPIs are being developed
- Other CANSO workgroups are developing safety, environment and HR performance metrics

Participating ANSPs

AENA (Spain)	EANS (Estonia)	MATS (Malta)
AEROTHAI (Thailand)	FAA ATO (USA)	NATS (UK)
Airservices Australia	Georgian Air Navigation Ltd.	NAV CANADA
Airways New Zealand	Hungarocontrol (Hungary)	NAV Portugal
ANS Czech Republic	IAA (Ireland)	NAVIAIR (Denmark)
ATNS (South Africa)	LFV (Sweden)	PANSA (Poland)
CAAS (Singapore)	LGS (Latvia)	ROMATSA (Romania)
DSNA (France)	LVNL (The Netherlands)	Sloveniacontrol (Slovenia)

Comparability Factors

- Type of ownership
- Range of service provided
- Traffic levels and patterns
- Airspace dimensions and complexity
- Exchange rates and cost of living differences
- Institutional framework
- Legislative and regulatory requirements
- Socio-economic factors

Analytical Framework

4th Report

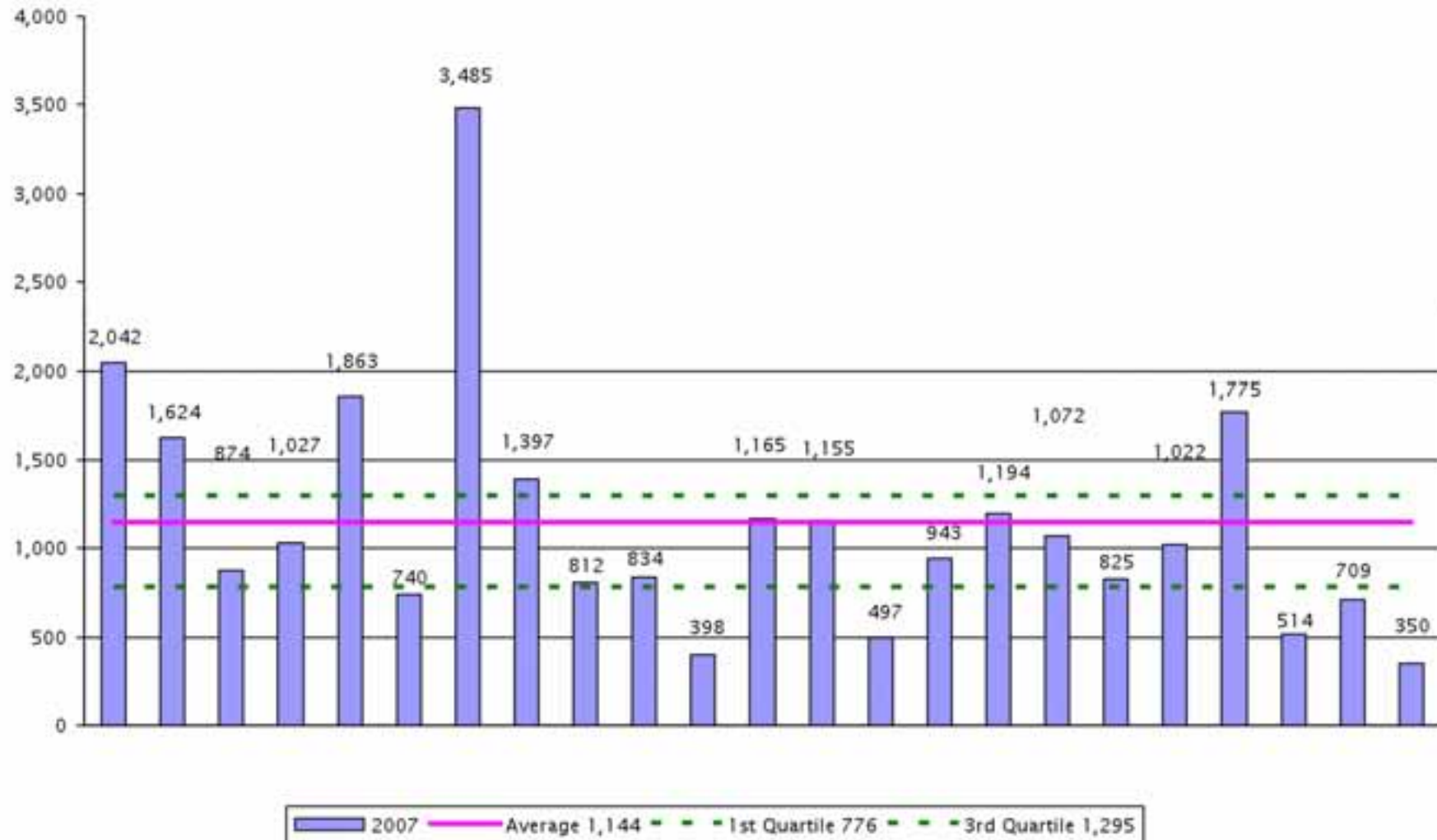
Continental KPIs	Oceanic KPIs	Continental and Oceanic KPIs	Key Performance Areas (KPAs)
IFR Flight Hours per ATCO in Operations	IFR Flight Hours per ATCO in Operations	Average Annual Working Hours for ATCOs in Operations	Productivity
Cost per IFR Flight Hour	Cost per IFR Flight Hour		Cost Effectiveness
Employment Cost for ATCOs in Operations per IFR Flight Hour	Employment Cost for ATCOs in Operations per IFR Hour		
Employment Cost for ATCOs in Operations per ATCO in Operations	Employment Cost for ATCOs in Operations per ATCO in Operations	Total Employment Cost of ATCOs in Operations as a % of Total Operating Cost	
Employment Cost for ATCOs in Operations per ATCO in Operations Hour	Employment Cost for ATCOs in Operations per ATCO in Operations Hour	Total Employment Cost of ATCOs in Operations as a % of Total Cost	

Analytical Framework

4th Report

Continental KPIs	Oceanic KPIs	Continental and Oceanic KPIs	Key Performance Areas (KPAs)
Example Consolidated Price per 1000 KM Flight for B747-400	IFR Flight Hours per ATCO in Operations	Average Annual Working Hours for ATCOs in Operations	Price, Revenue & Profitability
Example Consolidated Price per 1000 KM Flight for A320			
Total ANS Revenue per IFR Flight Hour	Total ANS Revenue per IFR Flight Hour	Total ANS Revenue per IFR Flight Hour	
		ROA	
		ROE	
% Delayed Flights/ Total Flights			Quality
Average Delay/ Delayed Flights			
% Airport Delay/ En-route Delay			

Continental IFR Flight Hours per Continental ATCO in Operations by ANSP 2007

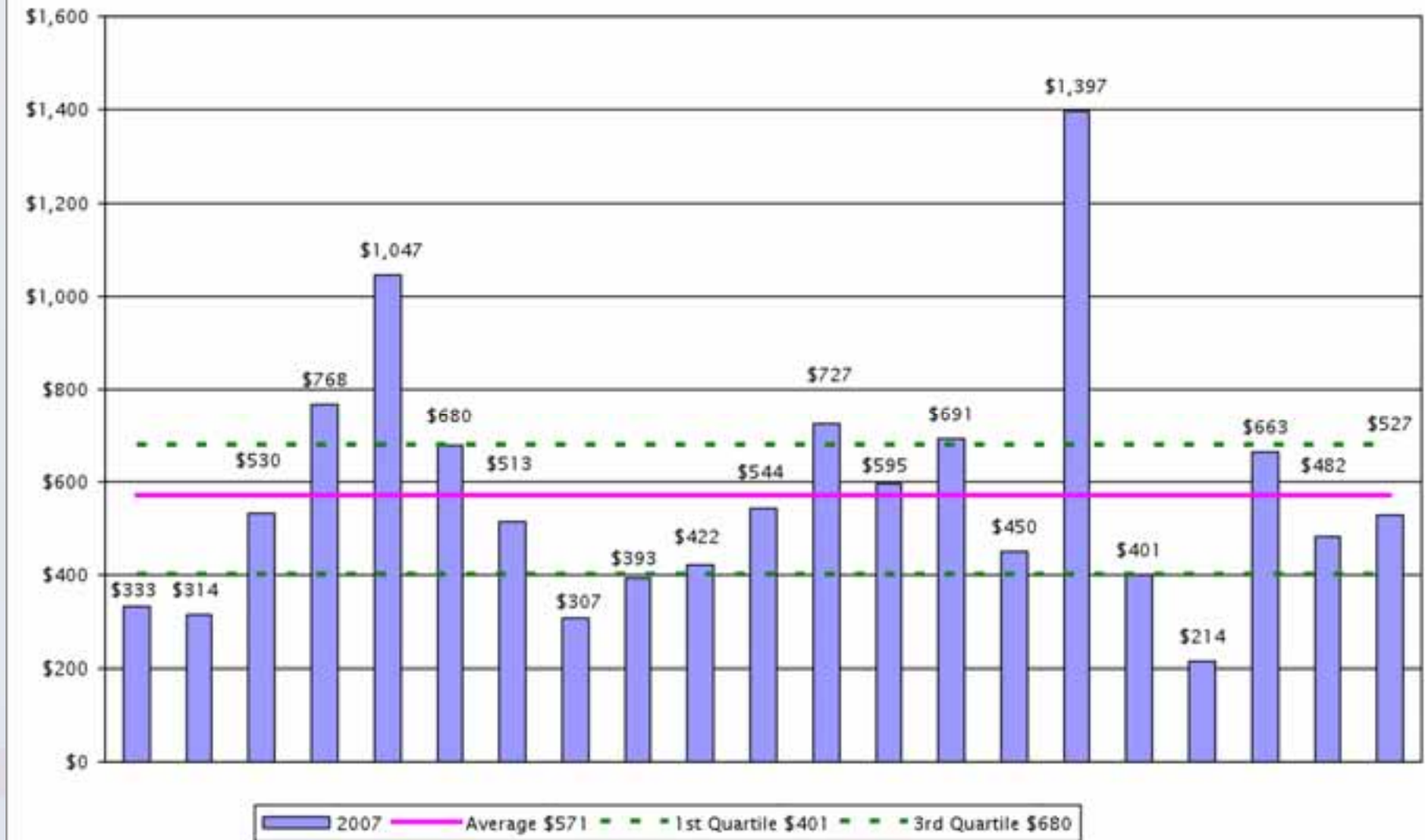


Productivity

The global voice of ATM



Continental Cost (USD) per Continental IFR Flight Hour by ANSP 2007

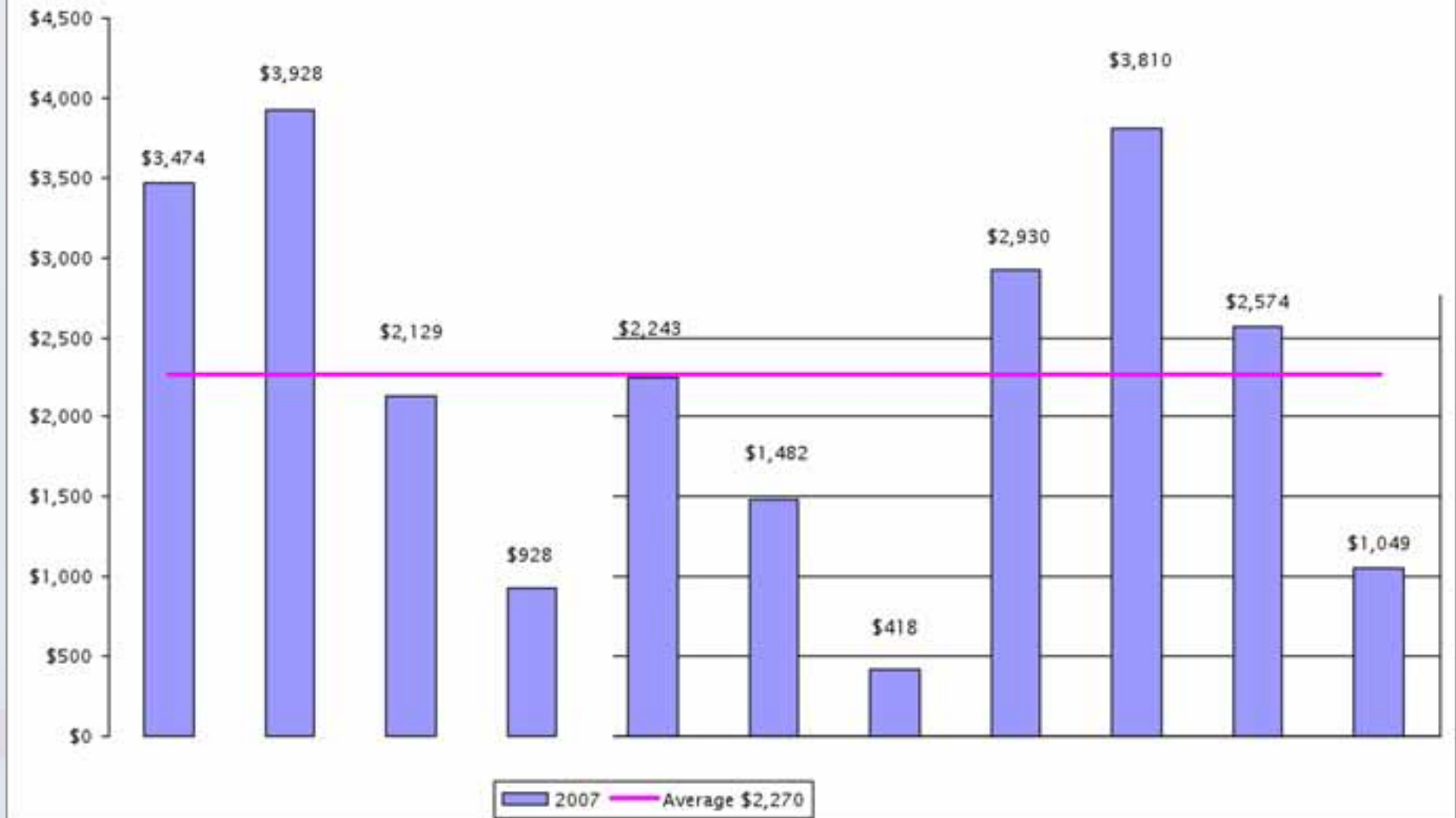


Cost-effectiveness

The global voice of ATM



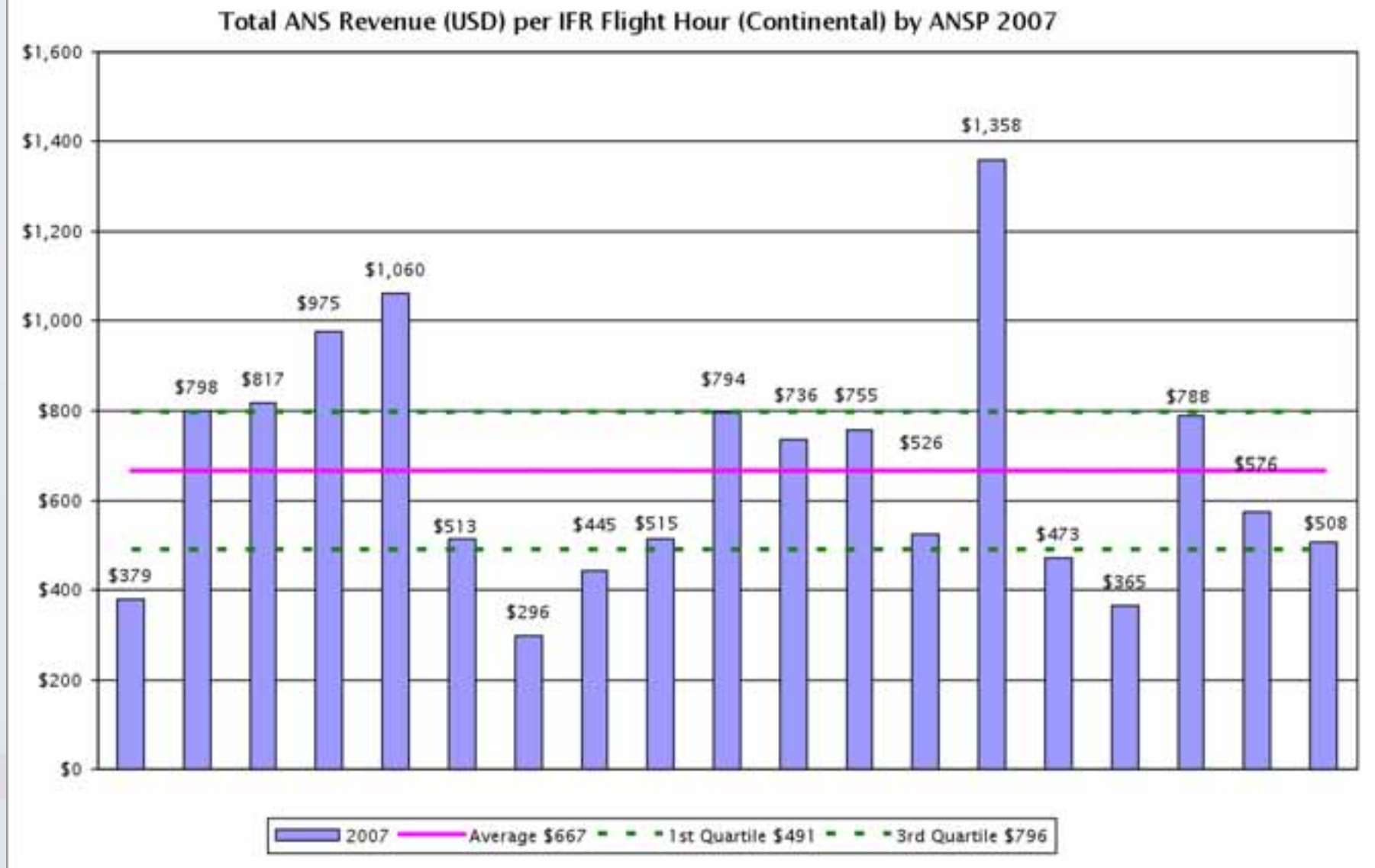
Example consolidated price (USD) per 1000 km flight for B747-400
by ANSP 2007



Pricing and Revenue

The global voice of ATM



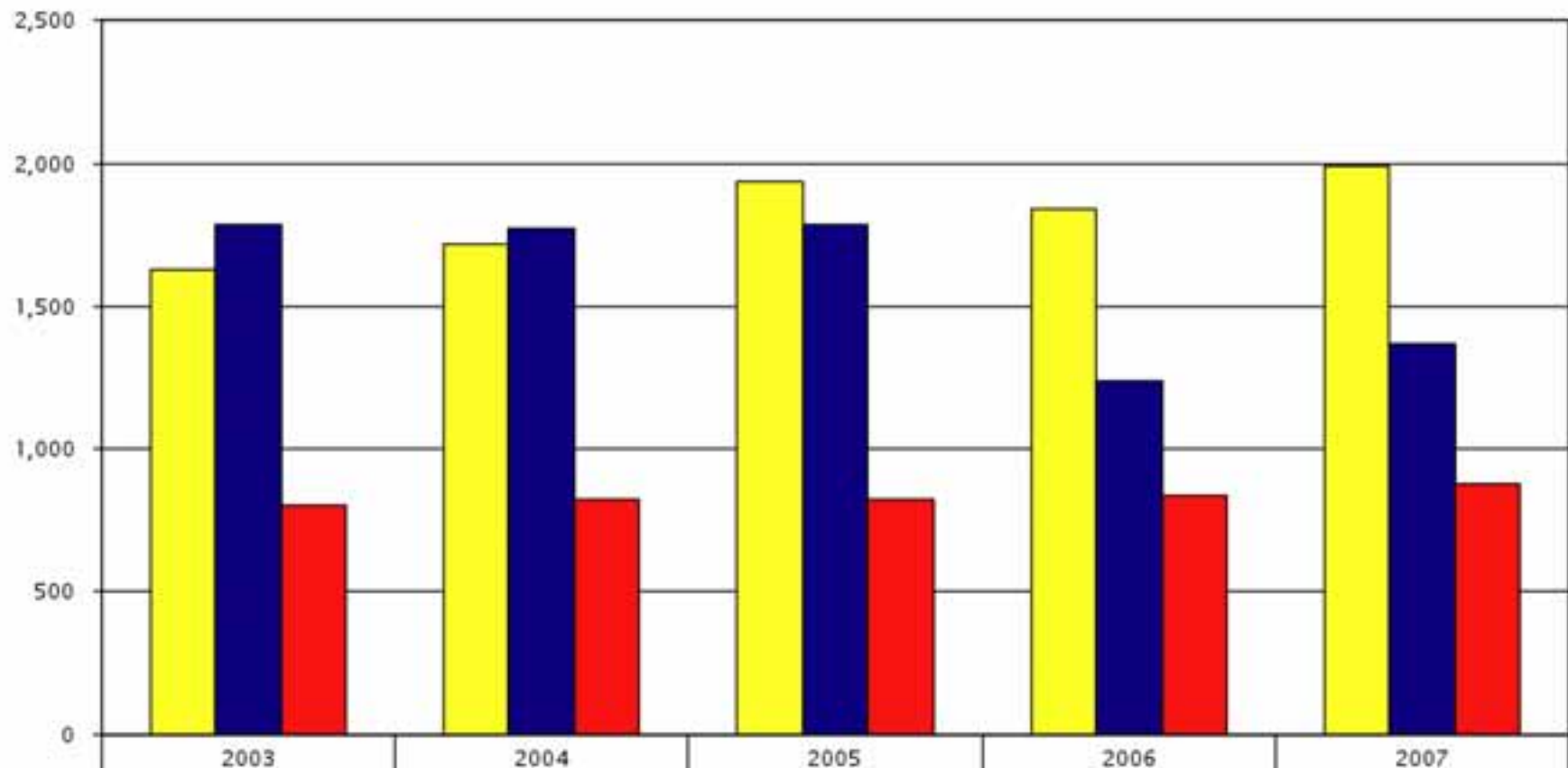


Pricing and Revenue

The global voice of ATM



Continental IFR Flight Hours per Continental ATCO in Operations
by Region



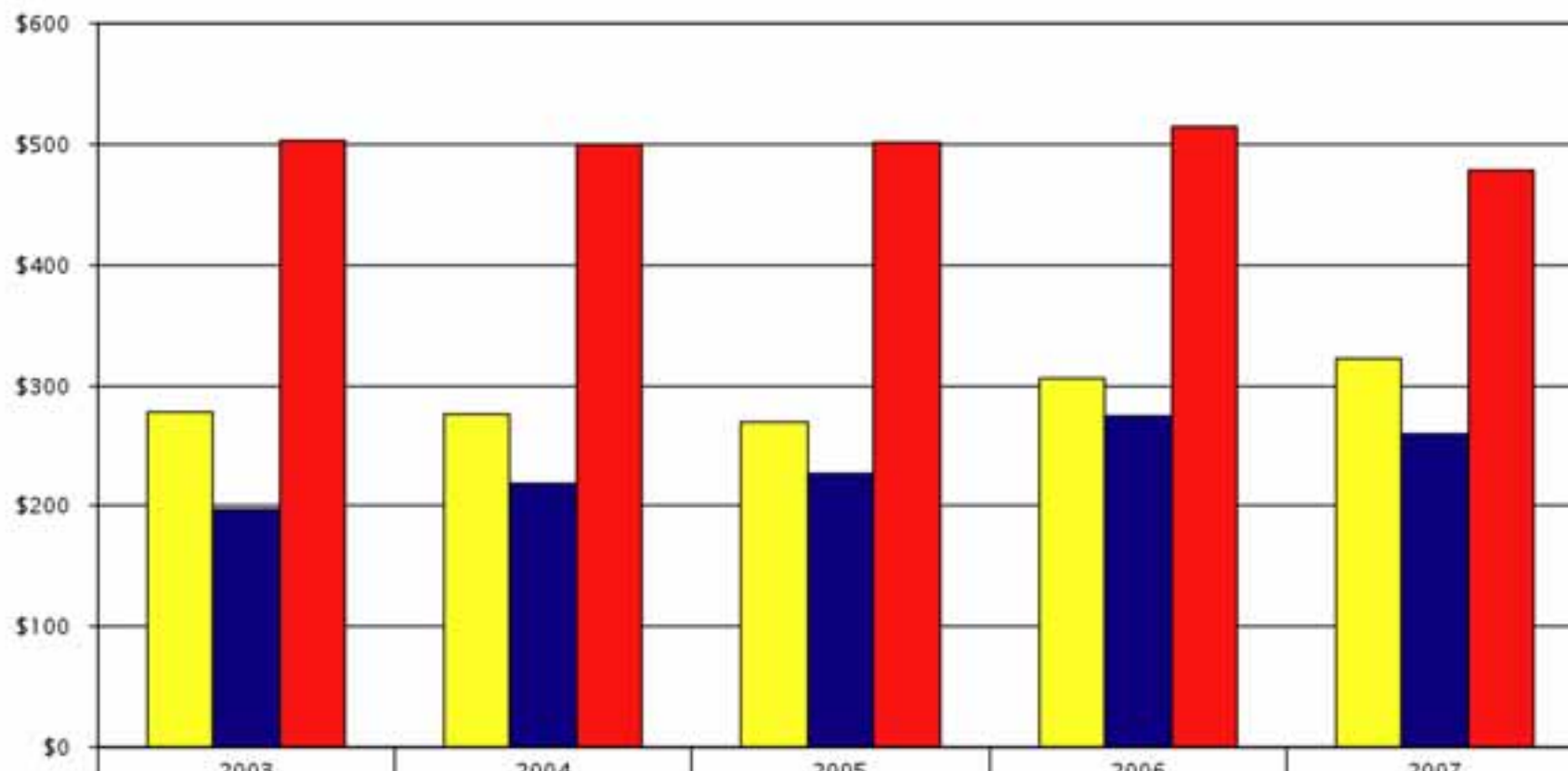
	2003	2004	2005	2006	2007
Americas	1,630	1,716	1,940	1,846	1,994
Asia Pacific	1,786	1,773	1,788	1,239	1,367
Europe	798	824	821	838	879

Productivity

The global voice of ATM



Continental Cost (USD) per Continental IFR Flight Hour
by Region



	2003	2004	2005	2006	2007
Americas	\$277	\$277	\$270	\$305	\$323
Asia Pacific	\$198	\$218	\$227	\$275	\$259
Europe	\$503	\$499	\$501	\$514	\$478

Cost-effectiveness

The global voice of ATM



Key Goals 2009-10

- Finalising vision and strategic plan for GBWG - changing focus to performance and forward-looking indicators
- Developing a balanced framework of performance metrics for ATM
- CANSO Public Global Performance Reports - agreeing content and process to achieve this
- Benchmarking Report is a 'work in progress' - Safety, Environment and HR metrics to be included in 5th Report
- 5th Global Benchmarking Report will be produced in December 2009



The Global Voice of ATM

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Questions & Answers

