



IATA Fuel Conservation Programme

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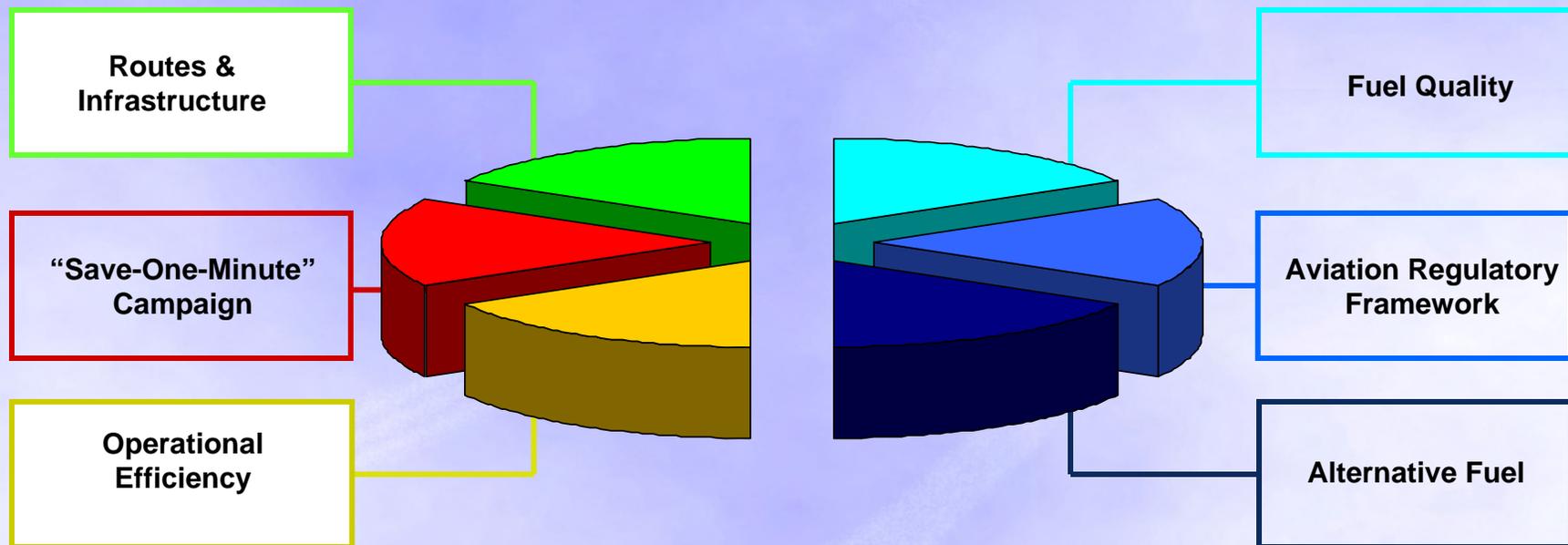


Campaign Objective and Achievements

- Annual Objective :
Secure fuel savings of USD 1.5 billion for airline members through improvements of
 - routes and infrastructure
 - air traffic management ("Save one Minute")
 - operational efficiency



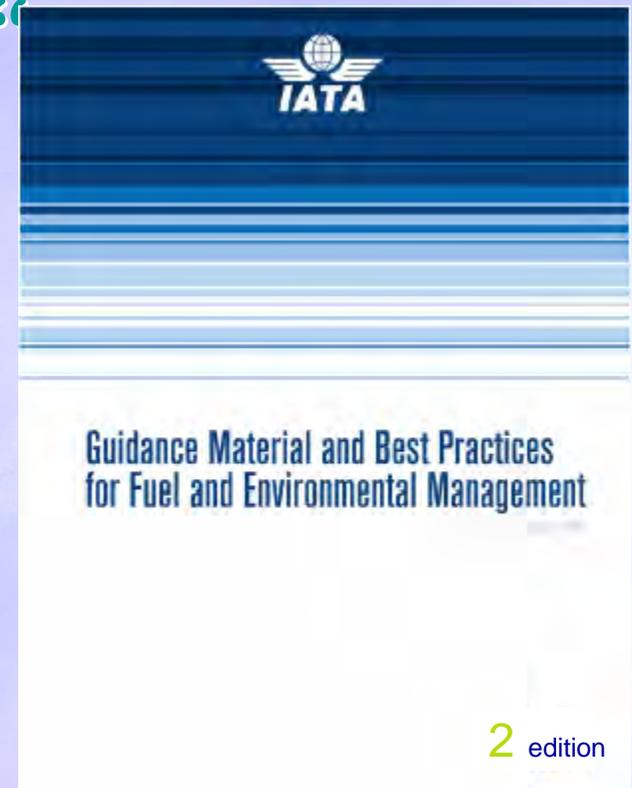
Extended Campaign – Elements





Operational Efficiency – The IATA “Fuel Book”

- 2nd edition available
- Reflecting experience from Go -Team visits
- Integrated with IATA fuel conservation training
- Additional chapter on environmental impact





Operational Efficiency – GO Teams

- 52 assessments completed, 35 additional visits scheduled
- Survey conducted on visited or scheduled airlines
- Five GO Teams in place, including experts in
 - Flight Operations,
 - Flight Dispatch
 - Engineering & Maintenance



Fuel Efficiency Gap Analysis (FEGA)

- Individual on-site assessments by Go Teams
 - Detailed joint analyses of airline procedures and practices
 - Comprehensive recommendation report including potential calculation for each action

FUEL EFFICIENCY CALCULATOR						
Price of fuel		US\$/Gal	US\$/kg			
	FUEL PRICE	1.820	0.699			
APU Usage Reduction per cycle	kg/hr	APU/hr	Target Dep	Target Arr	Cycles/yr	APU Thr
E767-300	150.0	2600	15	5	1,200	330,000
APU Optimization (use park only)	kg/hr	Dep/Inls	Arr/Inls	Cycles/yr	Savings/kg	Savings
E767-300	35.0	15	5	1,200	14,000	\$11.35
APU Usage 30 minute reduction cycle	kg/hr	Reduct/Min	Cycles/yr	Savings/kg	frequency	
E767-300	150.0	10	1,200	30000	\$17,972	100%
APU Optimization (use park)	kg/hr	hrs/yr	Savings/kg	Savings/\$	frequency	
E767-300	35.0	2600	91,000	\$54,516	100%	\$54.6
APU ON Stand off on ground	kg/hr					



FEGA Go Team Results

- Completed 52 airline visits since August 2005
- 35 scheduled for 2007
- Airlines located in all global regions
- From regional airlines to major carriers
- Fleet size varies from 6 to 150 aircraft
- Aircraft ages vary from < 5 to > 20 years
- Individual reports indicate further saving potentials between 3 and 15 % of airline fuel budget
- Total saving potential already exceeds USD 1.2 Billion



FEGA Conclusions – Flight Operations

- Aircraft weight higher than necessary (water , kits)
- Reserve fuel calculations too conservative
- Lack of training and awareness at line pilots
- Extensive use of Auxiliary Power instead of Ground Power
- Lack of implementation management and monitoring



FEGA Conclusions – Flight Dispatch

- Lack of sophisticated Flight Planning
- Missing procedures and policies for Flight Preparation
- Clear risk management strategy
- Significant individual variations on fuel consumption calculations
- Lack of training and awareness at Flight Dispatchers
- Lack of implementation management and monitoring



FEGA Conclusions – E & M

- Lack of structured communication between Flight Operations and E&M – often only in case of significant performance loss
- Limited knowledge about cost – benefit relation between additional maintenance efforts and fuel savings
- Missing overall operational performance monitoring and analysis
- Lack of training and awareness at maintenance staff



Fuel Quality

Actual Status

- IATA Fuel Quality Pool – IFQP
- 51 Airlines Members - 85 Approved IFQP inspectors
- 838 Inspected Airports - Audit interval 2 years

Our Target

- One global fuel quality standard





Regulatory Framework

- Fuel policies and operational interpretation differ widely (source: FEGA visits)
- ICAO Annex 6 offers limited guidance
- Environmental and cost reasons require update
- IATA proposes WP to amend ICAO Annex 6



Alternative Fuel

- Completed IATA Alternative Fuel Report 2006

Topics 2007

- Environmental impact – overall lifecycle
- Projection of production capacities and capabilities
- Airline procurement strategies



Situation 2007

ATM Improvements – up to 12 (15 ?) %

Identified in IATA Campaign < 1%

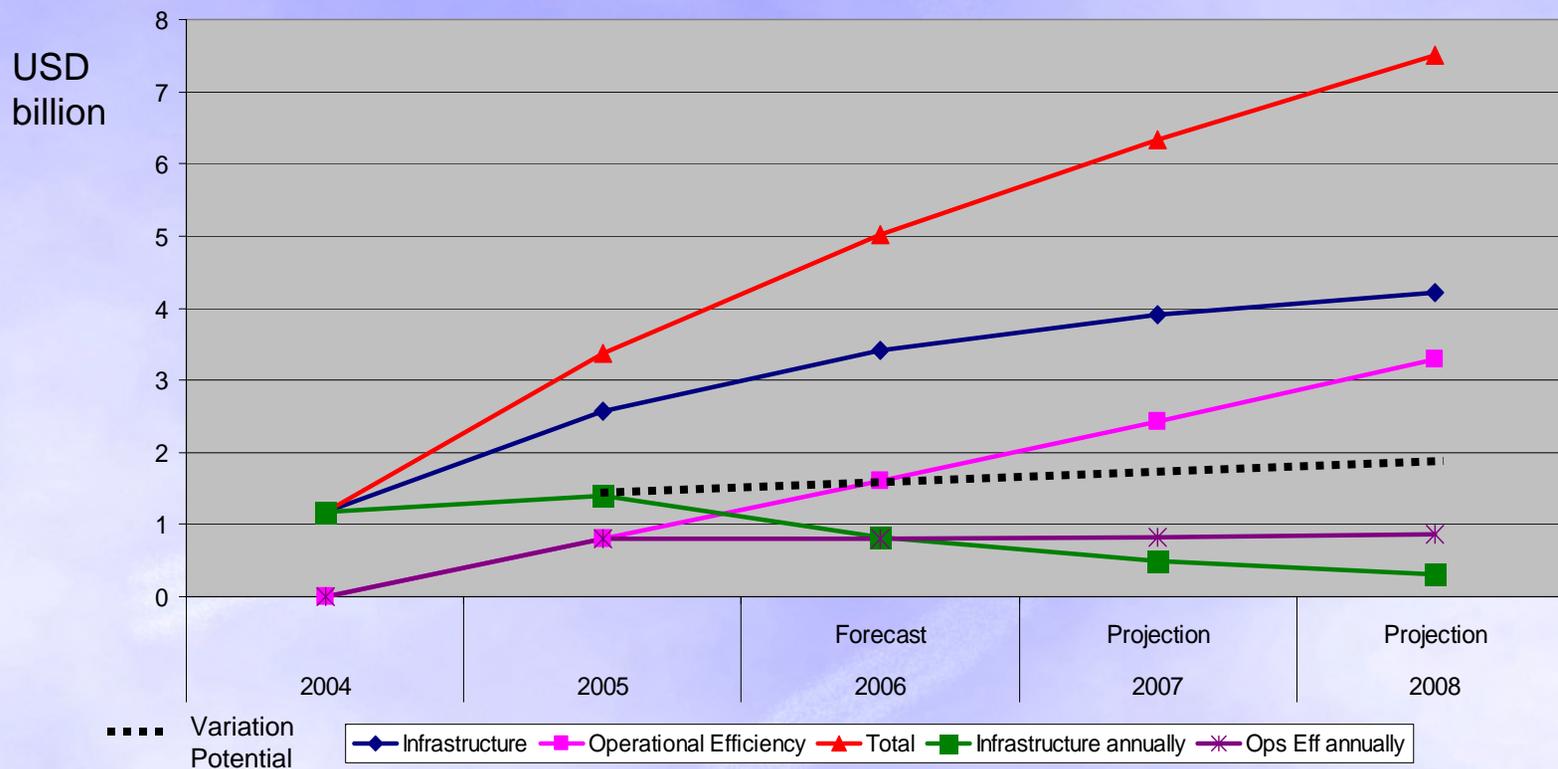
Operational Efficiency Improvements – up to 6%

Identified in IATA Campaign – 1.5%

**120billion USD
Fuelbill annually**



IATA Fuel Efficiency Campaign Accumulated and Projected Savings 2004 - 2008





Conclusions

- Airlines increasingly support the Operational Efficiency initiative
- “Low hanging fruits” implemented on Route and TMA Improvements
- Collaboration with Air Navigation Service providers and states needs further momentum



Thank you for your attention!

