



# Air Transport

## Annual Report 2010



**The World Bank Group**  
**IBRD, IDA, IFC & MIGA**

# Abbreviations

ACIP	AFI Cooperative Implementation Plan (ICAO program)
ADS-B /-C	Automatic Dependent Surveillance – Broadcast /– Contract
AFI	Africa and Indian Ocean Region (ICAO definition)
AFTTR	Transport Unit of the Africa Region (WBG)
ATC	Air Traffic Control
ATM	Air Traffic Management
CAA	Civil Aviation Authority
CASDR	IFC Advisory Services Department (WBG)
CES	Charles E. Schlumberger, Principal Air Transport Specialist (WBG)
CINTS	IFC Infrastructure Department, Transport Division (WBG)
CNS	Communication Navigation Surveillance Services/Systems
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
DPL	Development Policy Loan
EASA	European Aviation Safety Agency (agency of the European Union)
ESW	Economic Sector Work
TWTR	Transport Unit of the Energy Transport Water Department (WBG)
FAA	Federal Aviation Administration of the United States of America
IATA	International Air Transport Association
IASA	International Aviation Safety Assessment (FAA)
IBRD	International Bank for Reconstruction and Development (WBG)
ICAO	International Civil Aviation Organization (UN Agency)
ICR	Implementation and Completion Report (WBG)
IDA	International Development Association (WBG)
IFC	International Finance Corporation (WBG)
IOSA	IATA Operational Safety Audit
LCSTR	Transport Unit of the Latin America Region (WBG)
MIGA	Multilateral Investment Guarantee Agency (WBG)
MSSR	Monopulse Secondary Surveillance Radar
NTSB	National Transportation Safety Board (USA)
PPIAF	Public Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
RWY	Runway
SAR	Search and Rescue (defined by ICAO)
SASDT	Transport Unit of the South Asia Region (WBG)
T/A	Technical Assistance
TBD	To Be Determined
TCB	Technical Cooperation Bureau (ICAO)
TTL	Task Team Leader
USOAP	Universal Safety and Security Oversight Audits Program (ICAO)
VOR	VHF Omni-directional Radio Range
WBG	World Bank Group

*Cover Page: Air transportation was the key link in the global response following the devastating earthquake on 12 January 2010 in Port-au-Prince, Haiti. The World Bank immediately announced support of US\$100 million.* OFV11APR11

## Latin America & the Caribbean Region (LAC)

### Haiti - Infrastructure and Institutions Emergency Recovery (P120895)

As one of the poorest countries in the Western Hemisphere, Haiti has demonstrated high vulnerability to a significant number of economic and social crises, as well as to several exogenous shocks over the past decades. The country's situation changed dramatically on 12 January 2010, when Haiti was struck by a catastrophic earthquake. The epicenter was located 25 km west the capital and over 52 aftershocks followed. Over 200,000 lives have been lost, and about three million people directly affected. Over 250,000 buildings collapsed or were severely damaged, crippling the country's fragile, but slowing emerging economy, as well as severely damaging most of its key infrastructure.

Immediate relief efforts following the earthquake were mounted by the international community. The World Bank announced support of US\$100 million on 13 January 2010, and sent two missions to Haiti in the following weeks. In April 2010, TWITR (CES) participated in an identification missions to review Haiti's air transport sector. The country's air transport sector has proven to be a key element for conducting the humanitarian relief efforts. The capital's airport, Port-au-Prince (PAP), was the only operational entry point to deploy relief personnel, equipment and materials. While the runway and apron were not affected during the quake, preexisting cracks and damages of the pavement represent a danger to aircraft. Major structural damage occurred to the terminal building, which needs reconstruction, and to the control tower, which needs to be replaced. In addition, the lighting systems and power supply are insufficient for night operations, and navigational aids (ILS/VOR) do not have a backup system. Nevertheless, airline operations were able to resume on 19 February 2010, and passengers are handled in a temporary arrival and departure hall, both of which need to be replaced with a more serviceable facility.



*The major part of the country's main airport terminal was damaged beyond repair. Only a small area can be used for passenger handling.*

ICAO and the Haitian authorities estimated the overall cost to rehabilitate the country's air transport infrastructure at US\$255 million, which includes US\$25 million of air navigation services, and US\$ 230 million for the airport reconstruction. The airport component is composed of a new terminal building (estimated at US\$80 million), land acquisition (estimated at US\$50 million), and airport infrastructure, such as runway resurfacing, power, fencing, lighting system, crash and rescue equipment, and operational maintenance equipment (estimated at about US\$100 million).

The Bank's board approved the Haiti Infrastructure and Institutions Emergency Recovery Project on 09 March 2010, consisting of a US\$65 million grant. The project's objective is to support Haiti in its early recovery efforts, through selected interventions aiming at helping to rebuild key institutions and infrastructure. The project will finance the rehabilitation of key aviation infrastructure by an initial grant of US\$3 million, which includes (i) reconstruction of ground - air communications tower, (ii) repair and/or replacement of two VOR (PAP, OBN), and verification of ILS (IMG), (iii) repair of runway lights at PAP, (iv) financing of associated cost for air traffic controllers training, and (v) construction of a runway end safety area on RWY10 at PAP.

Contact person is Charles E. Schlumberger at [cschlumberger@Worldbank.org](mailto:cschlumberger@Worldbank.org)

# External Relations

## International Civil Aviation Organization (ICAO)

The International Civil Aviation Organization is the specialized air transport agency of the United Nations. The WBG and ICAO enjoy a long and strong cooperative relationship on various air transport issues. ICAO has provided safety and security audits and supervision services for the Bank's projects in West and Central Africa. In addition, ICAO assisted the Bank in identifying needs and priorities of air transport projects in various countries.

The relationship has continued to flourish during FY 2010. On environment and climate change issues, the Bank participated in the ICAO High-level Meeting on International Aviation and Climate Change October 6-8, 2009, as well as the Third ICAO Environmental Colloquium during May 11-14, 2010 in Montreal, Canada. With the aviation industry seeking effective ways to cut GHG emissions to address climate change challenges, ICAO is preparing guidelines on how states report on aviation fuel consumption including the share of biofuels. A key financing issue is the need to identify resources to scale up development, deployment, production and use of biofuels in a sustainable manner. Bank staff including Holly Krambeck, Carbon Finance Specialist, Ari Huhtala, Senior Environmental Specialist, and Charles E. Schlumberger made presentations describing the financing needed to support proposed market-based measures. They also outlined the Bank Group's strategic framework to deal with climate change, and the Bank's position on alternative fuels. The Clean Technology Fund, the Strategic Climate Fund, and World Bank Green Bonds, as well as indirect taxes on aviation fuels were also outlined and discussed. The Bank later provided input for ICAO's Environmental Report 2010 for the mentioned above topics.

On safety issues, the Bank continued to participate in the ICAO High-level Safety Conference and in the Africa Comprehensive Implementation Programme (ACIP) Steering Committee meetings during FY 2010. As several of the Bank's client countries (in Africa, Eastern Europe and South America) still fall short on safety oversight resulting in high accident rates, international pressure to improve their oversight capacity continues to increase. Examples include the EU Blacklist and ICAO Safety Audits, which result in certain countries' carriers facing increased resistance as they try to develop their networks. The Bank remains the most important donor institution to finance improvement in air transport safety. However, given poor governance, combined with an absence of political will to enforce adequate safety oversight, the Bank must remain selective and demanding when financing safety-related projects. The meetings at ICAO also aimed at fostering regional cooperation in oversight and capacity building. The main challenge identified concerned the sustainability of an adequate financing mechanism.

In addition, the Bank maintained regular contact and meetings with ICAO officials including Secretary General during FY 2010. The meeting with the Secretary General recognized the ICAO WB collaboration in safety and security projects, and expected the Bank research on air transport and energy to include the environmental department of ICAO for their work on alternative fuels. The Bank also had discussions with the acting Director of the Technical Cooperation Bureau (TCB) about possible increased cooperation. The involvement of TCB as Project Implementation Unit in Bank projects was recognized as the most promising model. However, this requires that the client suggests the involvement of TCB during project preparation. Finally, numerous meetings were held with ICAO's Air Transport Bureau for the preparation of the 2010 Global Aviation Strategy Summit in Vancouver.

Contact person is Charles Schlumberger at [cschlumberger@worldbank.org](mailto:cschlumberger@worldbank.org)

## ICAO- World Bank- Routes Global Strategy Summit

On 14 and 15 September 2009, the World Bank co-organized the annual ICAO, World Bank, and ROUTES Global Strategy Summit (GSS) in Beijing. The Summit was the fifth annual air transport event, which the Bank held jointly with ICAO and the industry. It was hosted by Beijing Capital International Airport, and took place at New China International Exhibition Centre. The event was moderated by the BBC's Aaron Heslehurst and JLS's John Strickland. The Bank was represented by Jamal Saghir, Director of Energy Transport and Water Department (ETW), who delivered the opening keynote speech, and Charles E. Schlumberger, who presented as part of the *Safety and Security Challenges* panel, and *Air Transport and Tourism - Catalyst for the World's Economic Development* panel.

The objective of the GSS was to provide vibrant and stimulating interchanges among industry leaders, which should lead to some guiding conclusions. The aim was not to dwell



*Jamal Saghir, Director ETW addressing the participants of the 2009 GSS during the opening session of the event, which was attended by over 350 representatives from the industry, the public sector, and academia.*

on the past but to try and explore the way forward in eight given topics, which included (i) Civil Aviation Today, (ii) Can Global Air Transport Resume Growth?, (iii) Technology to Transform the Industry, (iv) The Safety and Security Challenges, (v) Environmental Challenges for the Civil Aviation Industry, (vi) The Airline and Airport Partnership: Future Trends - Towards a Common Goal, (vii) Air Transport and Tourism - Catalyst for the World's Economic Development, and (viii) The Developing Markets of the Future.

All the summit sessions featured lively discussions, and the conclusions of the sessions are helpful for all 352 participants. ICAO and the World Bank were pleased with the strengthened

partnership implied by co-hosting this event, with the Routes Development Group (RDG) representing the air transport industry. However, Airport Council International (ACI) may join as a partner in future events, as they represent a core part of the industry. Another potential partner is CANSO, the global air traffic control organization.

The Bank, ICAO and RDG agreed to hold the next joint GSS during the 16th World Route Development Forum, which took place in Vancouver, Canada, from 19 to 21 September 2010. During FY10, the Bank's TWITR staff was active in the preparation of the Vancouver event.

Contact person is Charles E. Schlumberger at [cschlumberger@worldbank.org](mailto:cschlumberger@worldbank.org)