



***Joint ICAO/AFCAC Regional Symposium for African States
on Airport and Air Navigation Services Infrastructure
Financing***

Financing of Air Transport Projects

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- ➔ World Bank Air Transport Portfolio
- ➔ Challenges for Financing Infrastructure
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The World Bank Group (WBG)



IBRD

1945



IDA



IFC

1956



MIGA

1988



ICSID

1966



The World Bank Portfolio

| Fiscal Year 2009 (in millions USD) | IBRD | IDA | IFC | Total |
|---|---------------|---------------|---------------|----------------|
| Active Loan/Credits | 75,752 | 56,442 | 34,346 | 166,540 |
| Transport Sector | 18,226 | 8,834 | 1,680 | 28,741 |
| Air Transport | 406.8 | 283.2 | 649.7 | 1,339.7 |
| Percent of Transport | 2.2% | 3.2% | 38.7% | 4.7% |





The World Bank Portfolio

- 30 projects or project components in all six regions of the IBRD/IDA, as well as 26 active IFC investments and several advisory mandate.
- IBRD and IDA loans or grants grew by 30.1% to US\$ 690 million, up from US\$ 530.4 million in FY08.
- IFC's air transport investment portfolio slightly decreased to US\$ 649.7 million from FY08's US\$ 717.2 million.



The Opportunities in Air Transport Investments

High Economic Rates of Return from Aviation Investment in Developing Countries

| | Kenya | Cambodia | Jordan | El Salvador | Jamaica |
|---|-------|----------|--------|-------------|---------|
| Investment (US\$ million) | 351 | 538 | 360 | 488 | 168 |
| Increase in national connectivity / GDP | 59% | 46% | 55% | 35% | 28% |
| Impact on GDP (%) | 0.42% | 0.32% | 0.39% | 0.25% | 0.20% |
| Impact on GDP (US\$ million) | 209 | 100 | 100 | 85 | 26 |
| Annual Economic Rate of Return (%) | 59% | 19% | 28% | 16% | 16% |



The Challenges – Safety

❖ Lesser developed countries (LDC) must meet international standards:

- No tolerance for poor safety or security (e.g. blacklists, country assessments)
- Operators are reluctant if infrastructure is deficient (cost for safety, security)
- Growth constrained if standards are considered poor (limitation of access)
- Income limited (e.g. ATC services)



The Challenges - Finance

- ❖ LDC are faced with necessary hard currency investments:
 - ➔ Basic infrastructure require large investments (e.g. runways, radar)
 - ➔ Air Transport Infrastructure seen as a low priority, competing with more important sectors (e.g. health, education, energy)
 - ➔ Difficulties to raise private funds



The Challenges - Governance

- ❖ LDC have difficulties to recover or retain operational income of the sector:
 - ➔ Competing sectors -> funds allocated to the central treasury (e.g. Afghanistan)
 - ➔ Air transport only source of hard currency income (e.g. Mongolia's ATC \$40 million)
 - ➔ Bad governance (disappearance of funds, corruption, non transparent procurement)



Three Financing Alternatives

1. Low cost solution: meet minimum standards (SARP)
2. Traditional Financing: Government funds and external financing (MDB)
3. New emerging markets trend: Private sector participation (PPI)



Low cost solution

❖ Meet Standards and Recommended Practices (SARP):

- Minimum standards do allow low cost solutions (e.g. ATC, Safety & Security)
- Positive safety and security ratings attract traffic and investments
- Lack of safety & security compliance is mostly a problem of “lack of discipline” and poor governance not a lack of funding



Low cost solution

Example Air Traffic Control

- ➔ Procedural ATC can be sufficient (but has low or limited capacity)
- ➔ New technology offer lower cost solutions (e.g. ADS-B, GNSS)
- ➔ Industry may contribute or invest (e.g. IATA GNSS procedures)



Low cost solution

Good Example: Air Traffic Control

Mongolia

- 40,000 over-flights per year
- Procedural ATC
- US\$ 40 million





Low cost solution

Bad Example: Airport Safety & Security



The Caribbean



West Africa



Traditional Financing

❖ Three main sources

- Government funds from operational income and allocated general funds
- Financing by bilateral partners
- Financing by Multilateral Development Banks (MDB)

Traditional Financing

❖ Bilateral partners

➔ Financing of airport or air traffic management infrastructure

➔ Dar-Es-Salaam airport in Tanzania

➔ € 53 million grant / loan by the Dutch Government





Traditional Financing

- ❖ Financing by Multilateral Development Banks (MDB)
 - Regional Development Banks (e.g. Inter-American Development Bank)
 - Global Development Institutions (EBRD, The World Bank Group)



IBRD Financing – Example Egypt

❖ Airports Development Projects

- ➔ IBRD Financing US\$ 335 million
 - ➔ New Terminal 3 at Cairo International and at Sharm El Sheikh Airports
- ➔ IBRD Financing US\$ 280 million
 - ➔ Renovation of Terminal 2 in Cairo
 - ➔ Several technical assistance components





Private Participation

- ❖ New emerging markets trend
 - ➔ Private participation in infrastructure (PPI) have several modes
 - ➔ Modern instruments of financing can facilitate foreign funding (e.g. securitization of ATC income)
 - ➔ Good governance is essential to attract private investors

Private Participation PPI

| | Complete Government Control | | | Complete Private Sector Control |
|------------------------------------|------------------------------------|--|---|---|
| Ownership | Government | Government | Government | Private Sector |
| Investment | Government | Government | Private Sector | Private Sector |
| Management/ Operations | Government | Private Sector | Private Sector | Private Sector |
| PPI Options (commonly used) | | <ul style="list-style-type: none"> ■ Service Concessions ■ Contracting-Out ■ Management Contracts ■ Multiple Concessions | <ul style="list-style-type: none"> ■ BOT scheme (BOOT, BTO, etc.) ■ Long Term Leases (LDO, etc.) ■ Master Concession | <ul style="list-style-type: none"> ■ Wraparound Additions ■ BOO ■ Strategic Buyout (e.g., MEBO, etc.) ■ Capital Markets |

BOT=Build-Operate-Transfer; BOOT=Build-Own-Operate-Transfer; LDO=Lease-Develop-Operate
 BTO=Build-Transfer-Operate; BOO=Build-Own-Operate; MEBO=Management-Employee Buyout

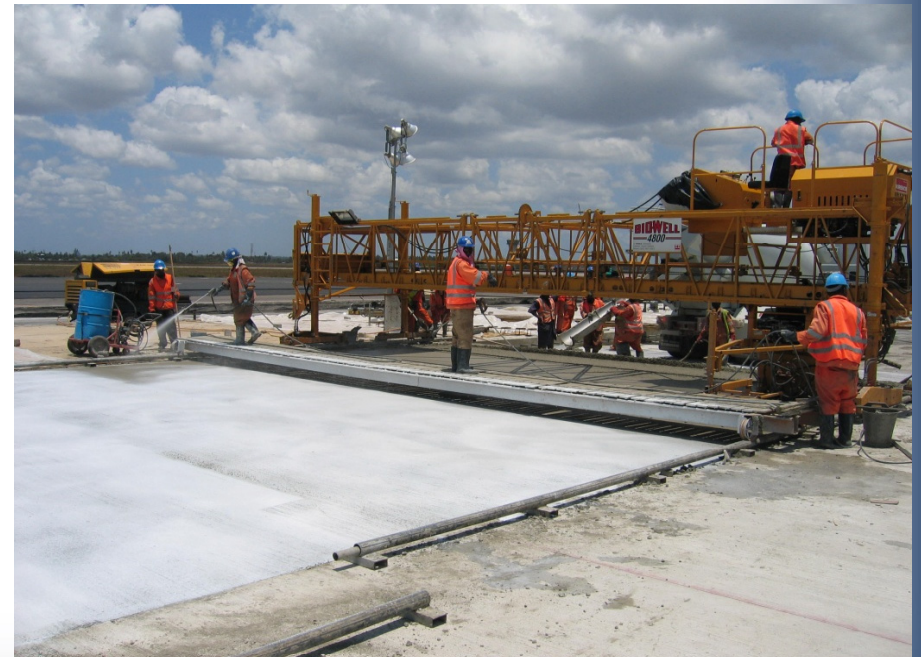


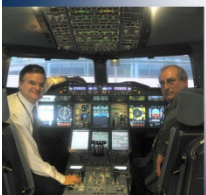


WBG Air Transport Projects

Airport Infrastructure Projects

- ✓ Runways, apron
- ✓ Lighting & navigation systems
- ✓ Power & water System
- ✓ Terminal improvements (for security & safety)
- Tools: Public-Private Partnerships





WBG Air Transport Projects

Safety Infrastructure Projects

- ✓ Navigation aids (ILS,GNSS)
- ✓ Communication & surveillance (ADS-B)
- ✓ Fire & crash equipment
- ✓ CAA technical library
- ✓ Local capacity building
- Tool: Meet SARP & self-sustainable CAA





WBG Air Transport Projects

Security Infrastructure Projects

- ✓ Passenger & cargo screening equipment
- ✓ Communication & CCTV
- ✓ Fencing & terminal improvements
- ✓ Local capacity building
- Objective: Meet SARP & self-sustainable (fees)



WBG Air Transport Projects

Air Carrier Restructuring

- Privatization of State-owned airline
- Unbundling of entity (carrier, ATC, airport)
- Financing of privately owned airline by IFC



Conclusions

- The WBG finances air transport projects to foster economic development in lesser developed countries (LDC)
- Primary condition for financing is sustainability and meeting international minimum standards (SARP)
- Meeting minimum standards is mostly not a financial challenge, but a mostly a problem of political will and good governance
- Governments of LDC need to recognize the importance to adequately fund their aviation sector
- Funding is available from bilateral or multilateral partners or development institutions
- Private sector participation in infrastructure is the ultimate objective for LDC

