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PROJECT APPRAISAL DOCUMENT

ON A PROPOSED CREDIT

IN THE AMOUNT OF SDR 30.9 MILLION
(US\$ 46.65 MILLION EQUIVALENT)

TO THE FEDERAL REPUBLIC OF NIGERIA

IN SUPPORT OF THE SECOND PHASE OF

WEST AND CENTRAL AFRICA AIR TRANSPORT SAFETY AND SECURITY APL
PROGRAM

September 5, 2007

Transport
Africa Regional Integration

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CURRENCY EQUIVALENTS

(Exchange Rate Effective 05/09/2007)

Currency Unit = US\$ 1
Naira = 127

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
AFTN	Aeronautical Fixed Telecommunication Network
AMHS	Aeronautical Message Handling System
APL	Adaptable Program Lending
ASECNA	Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar
ATM	Air Traffic Management
ATN	Air Telecommunications Network
AVSEC	Aviation Security
BMPIU	Budget Monitoring and Price Intelligence Unit
CAA	Civil Aviation Authority
CFAA	Country Financial Accountability Assessment
CEMAC	Economic and Monetary Community of Central Africa
CEO	Chief Executive Officer
CMU	Country Management Unit
COSCAP	Cooperative Development of Operational Safety and Continued Airworthiness
CPS	Country Partnership Strategy
DA	Designated Account
DGAC	Direction Générale de l'Aviation Civile – France
DL	Disbursement Letter
ECOWAS	Economic Community of Western African States
EIA	Environmental Impact Assessment
EMCAP	Economic Management Capacity Building Project
EOI	Expression of Interests
ERGP	Economic Reform and Governance Project
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
EU	European Union
FAA	Federal Aviation Administration (United States)
FAAN	Federal Airports Authority of Nigeria
FM	Financial Management
FMOF	Federal Ministry of Finance
FMOT	Federal Ministry of Transportation
FMR	Financial Management Report

FPM	Financial Procedures Manual
GDP	Gross Domestic Product
GPN	Global Procurement Notice
IASA	International Aviation Safety Assessment (done by the FAA)
IATA	International Air Transport Association
IAU	Internal Audit Unit
ICAO	International Civil Aviation Organization
ICB	International Competitive Bidding
IDA	International Development Association
IDF	International Development Fund
IFFAS	International Financial Facility for Aviation Safety
IFR	Interim Financial Report
ILS	Instrument Landing System
IPR	Interim Performance Review
IPSAS	International Public Sector Accounting Standards
ISA	International standards on Auditing
ISR	Implementation Status Report
IT	Information Technology
LAN	Local Area Network
LIB	Limited International Competitive Bidding
MDA	Ministries, Departments and Agencies
NAMA	Nigerian Airspace Management Agency
NCAA	Nigerian Civil Aviation Authority
NCAT	Nigerian College of Aviation Technology
NCB	National Competitive Bidding
NDT	Non Destructive Testing
NEPAD	New Partnership for Africa's Development
NIMET	Nigerian Meteorological Agency
OP/BP	Operational Policy/Bank Procedures
PCU	Project Coordination Unit
PEMFAR	Public Expenditure Management and Financial Accountability Review
PET	Project Execution Team – For the ERGP
PFM	Public Financial Management
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PPF	Project Preparation Facility
PPR	Personal Performance Review
PSC	Project Steering Committee
REC	Regional Economic Community
RIAS	Regional Integration Assistance Strategy
SARP	ICAO's Standards And Recommended Practices
SATCOM	Satellite Communication System
SBD	Standard Bidding Documents
SDR	Special Drawing Rights
SOE	Statement of Expenses
SSA	Sub Saharan Africa

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TCB	Technical Cooperation Bureau
TOR	Terms of Reference
TSA	Transportation Security Administration (United States)
TTL	Task Team Leader
US\$	United States Dollar
UEMOA	Union Economique et Monétaire Ouest Africaine
UNCITRAL	United Nations Commission on International Trade Law
UNDP	United Nations Development Program
VOR	VHF Omni directional Range navigation system
WCA	West and Central Africa (Region)
WTO	World Tourism Organization
WTTC	World Travel and Tourism Council
YD	Yamoussoukro Decision

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AFRICA
Nigeria Project – Second Phase of the West and Central Africa
Air Transport Safety & Security Program

CONTENTS

	Page
A. STRATEGIC CONTEXT AND RATIONALE.....	1
1. Countries and sector issues.....	1
2. Rationale for Bank involvement.....	2
3. Higher level objectives to which the project contributes	4
B. PROJECT DESCRIPTION.....	5
1. Lending instrument.....	5
2. Program objectives and phases.....	5
3. Project development objective and key indicators	5
4. Project components.....	6
5. Lessons learned and reflected in the project design	9
6. Alternatives considered and reasons for rejection.....	10
C. IMPLEMENTATION.....	10
1. Partnership arrangements	10
2. Institutional and implementation arrangements	10
3. Monitoring and evaluation of outcomes/results	11
4. Sustainability	12
5. Critical risks and possible controversial aspects	12
6. Loan/Credit/Grant conditions and covenants	14
D. APPRAISAL SUMMARY.....	15
1. Economic and financial analyses.....	15
2. Technical	16
3. Fiduciary	18
4. Social	18
5. Environment	18
6. Safeguard policies.....	19
7. Policy Exceptions and Readiness	19

Annex 1: Country and sector background	20
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies	27
Annex 3: Results Framework and Monitoring	31
Annex 4: Detailed Project Description	34
Annex 5: Project Costs	41
Annex 6: Implementation Arrangements.....	41
Annex 7: Financial Management and Disbursement Arrangements	48
Annex 8: Procurement Arrangements.....	63
Annex 9: Economic and Financial Analysis	76
Annex 10: Safeguard Policy Issues.....	83
Annex 11: Project Preparation and Supervision	85
Annex 12: Documents in the Project File	86
Annex 13: Statement of Loans and Credits.....	87
Annex 14: Countries at a Glance.....	89
Annex 15: Current safety oversight and accident situation of air transport in WCA.....	90
Annex 16: Country selection process	91
Annex 17: Maps – WCAATSSP – Phase II.....	95

AFRICA
AFTTR

Date: July 25, 2007	Team Leader: Pierre Pozzo di Borgo
Regional Integration Director: Mark D. Tomlinson	Sector: Regional integration (P);Infrastructure services for private sector development (S);Regulation and competition policy (S);Trade facilitation and market access (S)
Sector Manager/Director: C. Sanjivi Rajasingham	Environmental screening category: B Partial Assessment
Project ID: P100785	Safeguard screening category: S2
Lending Instrument: Adaptable Program Loan	

APL 2 – Nigeria – Project Financing Data							
APL	Indicative Financing Plan				Estimated Implementation Period (Bank FY)		Recipient/Borrower
	IDA US\$m	%	Others US\$m	Total US\$m	Commitment Date	Closing Date	
APL 1	33.57	96	1.50	35.07	09/30/2006	12/31/2009	Burkina Faso, Cameroon, Guinea, Mali
APL 2	70.00	96	3.11	73.11			
APL 2 - Nigeria	46.65	94	3.11	49.76	11/21/2007	06/30/2011	Nigeria
Other	23.35	100	0.00	23.35			
APL 3	47.93	100	0.00	47.93			
TOTAL	151.50	97	4.61	156.11			

Financing Plan (US\$ m)			
Source	Local	Foreign	Total
INTERNATIONAL DEVELOPMENT ASSOCIATION		46.65	46.65
Government of Nigeria	3.11		3.11
Total	3.11	46.65	49.76

Estimated disbursements for APL 2 (Bank FY/US\$m)									
FY	2008	2009	2010	2011	2012	2013	2014	2015	2016
Annual	5.00	15.00	15.00	11.65	0.00	0.00	0.00	0.00	0.00
Cumulative	5.00	20.00	35.00	46.65	0.00	0.00	0.00	0.00	0.00

Project implementation period: 2008-2011
 Expected effectiveness date: November 21, 2007
 Expected closing date: June 30, 2011

Does the project depart from the CASs in content or other significant respects? [] Yes [X] No
Ref. PAD A.3

Does the project require any exceptions from Bank policies?

Ref. PAD D.7	[] Yes [X] No
Have these been approved by Bank management?	[] Yes [X] No
Is approval for any policy exception sought from the Board?	[] Yes [X] No
Does the project include any critical risks rated “substantial” or “high”?	[X] Yes [] No
Ref. PAD C.5	
Does the project meet the Regional criteria for readiness for implementation?	[X] Yes [] No
Ref. PAD D.7	
Project development objectives Ref. PAD B.2, Technical Annex 3	
The project development objectives are as follows: a) Improve Civil Aviation Authorities’ (CAAs) compliance with International Civil Aviation Organization (ICAO) safety standards, b) Increase CAAs’ compliance with ICAO’s security standards, and c) Enhance main international airports’ compliance with ICAO’s security standards.	
Project description Ref. PAD B.3, B.4 and Technical Annex 4	
The project includes the following components:	
<ul style="list-style-type: none"> • <u>Aviation safety improvements</u> <ul style="list-style-type: none"> For NCAA: <ul style="list-style-type: none"> ➤ Acquisition of basic communications and inspections equipments (e.g., VHF radios, IT network at headquarters, etc.); ➤ Purchase of technical library equipment (e.g., relevant ICAO’s manuals, directives, online library, training materials, etc.); ➤ Training of civil aviation staff in the area of civil aviation safety oversight; and ➤ Establishment of an in-house personnel training center. For FAAN: <ul style="list-style-type: none"> ➤ Acquisition of fire fighting equipment; and ➤ Training of airport safety personnel. For NAMA: <ul style="list-style-type: none"> ➤ Replacement of the satellite communication system and extension of VHF coverage pending the results of a prior exploratory study of satellite communication system needs; ➤ Acquisition of resource software and information and document management system as identified by the institutional study financed under Nigeria’s ERGP; ➤ Installation of a local area network at tower controls of Lagos, Abuja, Port Harcourt and Kano airports; and ➤ Training for air traffic control personnel based on a prior needs’ assessment study. For NCAT: <ul style="list-style-type: none"> ➤ Acquisition of two basic flight simulators; ➤ Purchase and Installation of runway lights, Instrument Landing System (ILS) and VHF Omnidirectional Range navigation System (VOR) for the School’s airport to enable night flight operations training; ➤ Construction/Expansion of a non-destructive testing, a cartography and a ATN/AFTN/AHMS laboratories within NCAT’s premises; ➤ Purchase and Installation of Fire Fighting training equipment based on a prior needs’ assessment study and a Memorandum of Understanding with the involved agencies; and ➤ Personnel training based on a prior needs’ assessment study. • <u>Aviation security Improvements</u> <ul style="list-style-type: none"> For NCAA: <ul style="list-style-type: none"> ➤ Installation of a security system and an access control system at headquarters; and 	

- Training of civil aviation staff in the area of civil aviation security.

For FAAN:

- Acquisition of basic communications and inspections equipments for airport personnel (e.g., VHF radios, IT network at headquarters, etc.);
 - Strengthening of airport security (design of airport emergency plans and installation of airport personnel identification equipment, security cameras and, communications systems);
 - Construction, within each airports' operational perimeters of a single aircraft remote parking zone in the event of a crisis;
 - Rehabilitation and/or construction within existing airport buildings of crisis centers, including acquisition of necessary communication and surveillance tools to equip these centers;
 - Improvement of airport security through the acquisition of passengers and cargo X-ray machines as well as an explosive material tracer; and
 - Training of airport security personnel.
- **Management and governance oversight of the project:** This activity is meant to encompass the financing of project operating costs covering the Project Coordination Unit and Project Implementation Units salaries, office rentals and expenses; as well as inter alia annual fiduciary audits and day-to-day management.

Which safeguard policies are triggered, if any? *Ref. PAD D.6, Technical Annex 10*
Environmental Assessment (OP/BP/GP 4.01)

Significant, non-standard conditions, **if any**, for:

Ref. PAD C.6

Board presentation: None

Credit effectiveness: *Ref. PAD C.6.3*

- The Recipient¹ has adopted an Administrative, Financial and Accounting Manual and a Project Implementation Manual, both in form and substance, satisfactory to the Association; and
- The Recipient has established a Project Steering Committee satisfactory to the Association, comprising at least the representatives of the federal ministries of finance and transport, NCAA, NCAT, FAAN, NAMA and the PCU.

Covenants applicable to project implementation: *Ref. PAD C.6.4*

- An external auditor to the PCU with qualifications, experience and terms of reference satisfactory to the Association has been appointed by the Recipient in accordance with the provisions of Section III of Schedule 2 to the Financing Agreement before December 31st, 2007.
- Project Coordination Unit and Project Implementation Units maintain staff satisfactory to the Association during the project duration;
- Financial reports on the activities of NCAA, NCAT, NAMA and FAAN have been provided to the Association no later than six months after the end of each fiscal year. To this end, the reports shall include statements of revenues collected, including those linked to the Ticket Sales Charges, and the detail of the expenses relating to security and safety activities;
- Midterm and end of project security audits carried out by ICAO's certified consultants are provided to the Association for analysis;

¹ The term Recipient is used in this document in substitution to the term Borrower.

- NCAA's reports describing results of the crisis simulation exercises in Lagos, Abuja, Port Harcourt and Kano airports, including comments on the report from ICAO's certified consultants who observed the exercises, are submitted to the Bank within three months of each annual crisis exercise. First crisis exercise is to be carried out by no later than March 31st, 2008 in any of the four airports targeted by the Project with fourth airport first crisis exercise to be completed by no later than September 30th, 2008;
- No later than three months after each annual airport crisis-exercise, the PCU shall submit to the Association a report describing the results of each exercise as well as ICAO-certified expert's comments on the said report;
- No later than December 31st, 2007, NCAT and NAMA and NCAT and FAAN shall sign a Memorandum of Understanding (MOU) satisfactory to the Association relating to the long term training contracts between these agencies; and
- Quarterly reports containing information pertaining to rate of illegal objects, as defined by the ICAO, seized from passengers by airlines security in Lagos, Abuja, Port Harcourt and Kano airports are submitted quarterly to the Bank starting on May 15th, 2008.

A. STRATEGIC CONTEXT AND RATIONALE

1. Countries and sector issues

1. Today, air transport accounts for up to 40% of world trade by value. It plays a significant role in the economic development of countries. In Africa, where poor road, port and railway infrastructure often constrains the rapid and efficient movements of high value goods earmarked for export, air transport holds both a potential for growth and a role for the economic development of the continent. For now, however, reality has not met expectations and air services in Africa, and especially in West and Central Africa (WCA), continue to be inefficient, expensive and unreliable.

2. In order to address these shortcomings, African Ministers responsible for civil aviation adopted on November 14th, 1999 the Yamoussoukro Decision (YD) on the liberalization of access to air transport markets in Africa. It is enforceable continent-wide since it was endorsed by the African Union Heads of State under the African Union treaty framework in 2000. The Decision's primary aim is to liberalize intra-African air transport. In order to achieve this goal without compromising safety and security standards, the region Civil Aviations and Airport Authorities (CAAs) must be capable to collectively reach International Civil Aviation Organization's (ICAO) standards in these areas. ICAO's Standards and Recommended Practices (SARP) are complemented by Annexes 1, 6, and 8 of the Chicago Convention on International Civil Aviation in the case of aviation safety, and Annex 16 in the case of aviation security.

3. The main safety² issues facing WCA's air transport sector today include the lack of a compliant and enabling legal framework as well as a critical shortage in qualified inspection manpower (see Annex 1 for more details). In WCA, fewer than six (6) countries out of twenty-three (23) are considered to have the required level of Civil Aviation Administration capacities. The current situation results in the presence of "junk companies" whose operations distort the air transport market prevent access to the world market for local African airlines and contribute largely to WCA high accident rates. According to ICAO's statistics, the WCA region air transport accident rate was thirty (30) times higher than of the US during the past years (see Annex 15)³.

4. In terms of security⁴ currently, fewer than five of WCA's numerous international airports are compliant with world standards. Indeed, most WCA international airports lack basic access control to runways and terminals as well as adequate security procedures. This situation endangers WCA's air transport network security, resulting in sky-high insurance costs and high internal security costs for airlines. Moreover, in a post 9/11 environment, it risks isolating WCA even further from main air trade flows.

² ICAO Definition of Air Transport Safety: A condition in which the risk of harm or damage is limited to an acceptable level.

³ In 2005 alone, out of 35 fatal accidents and the 1,269 related deaths worldwide, Sub-Saharan Africa (SSA) accounted for 13 of these accidents and 374 of these deaths or 37% and 29% of the World's total, respectively. These figures compare to SSA's share of the world's total departure of only 4.5%.

⁴ ICAO Definition Air Transport Security: A combination of measures and human and material resources intended to safeguard civil aviation against acts of unlawful interference.

5. Although the YD is a continent wide initiative, its implementation in WCA has resulted in the signing of an implementation memorandum of understanding as well as, in November 2001, in the creation of two Secretariat Units within the Economic Community of West African States (ECOWAS)⁵ and the Communauté Economique et Monétaire de l'Afrique Centrale (CEMAC)⁶. Additionally, in 2003, the Region's ministers of Transport agreed to support the following initiatives: 1) the revision and harmonization of air transport legal and institutional frameworks at each country level, 2) the development of a new mechanism for effective regional technical and safety regulation, 3) the creation of a regional economic regulatory framework to address competition, market access, consumer protection, and 4) the upgrading of security standards for each country as well as WCA's main airports. In order to fund these initiatives, a scale up in donors and government support is required.

2. Rationale for Bank involvement

6. The Bank was instrumental in the adoption of the YD and later supported through successive regional IDF Grants the adoption of common policies in safety and air transport regulations in WCA. However, the Bank along with regional institutions as well as other international lenders had to acknowledge that most WCA States did not and would not, in the foreseeable future, have the financial and human resources to comply with either US or ICAO's safety and security requirements unless external assistance was provided to them. Moreover, even when a State did prove its ability to comply with ICAO's requirements, its capacity to maintain compliance and retain qualified personnel remained questionable as illustrated, unfortunately, by the Ghanaian CAA's loss of its US Federal Aviation Administration (FAA) category I certification in April of 2005. Accordingly, the Bank in coordination with regional institutions and other international lenders adopted a comprehensive approach to globally address these problems by supporting: 1) the establishment of regional mechanisms to oversee safety and security standards in member countries and, 2) the financing of national safety and security support programs to enhance local CAA's ability to comply with ICAO's standards. This approach is in line with the Regional Integration Assistance Strategy (RIAS) for West Africa, adopted in August 2, 2001, and for Central Africa, adopted in February 6, 2003, as well as the Africa Action Plan adopted in September 6, 2005, in as much as it promotes, through regional integration, regional exchanges and economic growth.

- **Establishment of regional mechanisms:** Three Cooperative Development of Operational Safety and Continued Airworthiness (COSCAP) projects were signed in 2003 and 2004 between the ICAO and the West African Economic and Monetary Union (UEMOA⁷) countries, the ICAO and the Banjul Accord countries (i.e., Non-UEMOA countries within ECOWAS) and the ICAO and the CEMAC countries. These COSCAP projects whose implementation was initially delayed due to financing issues are now in the process of being executed following the award of grants from the African Development Bank (ADB) and the French Government. Over the next 3 years,

⁵ The ECOWAS countries are Senegal, Niger, Nigeria, Togo, Benin, Burkina Faso, Guinea, Guinea-Bissau, Ghana, Mali, Cote d'Ivoire, Liberia, Sierra Leone, The Gambia, Cape Verde

⁶ The CEMAC countries are Cameroon, Central African Republic, Chad, Gabon, Equatorial Guinea, The Republic of Congo,

⁷ The UEMOA countries are Benin, Burkina Faso, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, Togo

ECOWAS and CEMAC member countries will therefore benefit, at no cost to them, from technical assistance in the area of aviation safety. This assistance, however, will be restricted mainly to specific training and technical advisory services as COSCAP projects' resources are limited (i.e., each project's budget is less than US\$ 4 million) and their scope currently excludes aviation and airport security. Nevertheless, the COSCAP projects represent an important first stepping stone towards the creation within UEMOA, ECOWAS and CEMAC of regional aviation security and safety agencies whose future sector oversight roles will be paramount to ensuring that each country CAAs achieve and maintain minimal compliance with ICAO's standards.

- **Financing of national safety and security components:** In spite of the long term goal of establishing regional aviation safety and security agencies in WCA, the enforcement of aviation safety and security will remain in the foreseeable future a national endeavor, if only for legal reasons⁸. Accordingly, it is critical that known shortcomings affecting national CAAs aviation safety and security oversight capacity as well as airport security personnel and infrastructure be addressed at a national level because regional aviation safety and security reflects each country's achievements in these areas. This critical linkage between national and regional aviation safety and security is confirmed by a review of passenger traffic flows that shows that in 2006, more than a third of all passengers in Nigeria, by far the region's largest air traffic market, were regionally⁹ and internationally bound (see Table 1 below).

Table 1: Passenger traffic distribution in 2006 at selected Nigerian airports

Airport	International and Regional passenger traffic	Total Passengers
Lagos	2,152,315	5,002,275
Abuja	181,297	1,875,752
Port Harcourt	106,218	697,857
Kano	246,444	392,282

Source: Nigeria Civil Aviation Authority
World Bank, 2007

7. In order to implement the approach described previously, the Bank has been asked to support the regional project's national security and safety components as its local presence, ongoing transport projects and flexible lending instruments make it well suited to tackle the project's financial (i.e., security investment) and institutional issues (i.e., security arrangements, CAA's reforms regional pooling of resources) simultaneously in most WCA countries. Meanwhile, support from other donors (e.g., the European Union (EU), ADB) and sector specific organizations (e.g., ICAO, US FAA) will be directed at ensuring the success of the COSCAP projects as a necessary initial step towards the creation of regional security and safety agencies. The Bank continues to work closely with others donors to

⁸ According to the 1944 Chicago convention, aviation regulation remains a sovereign activity. Until this approach is altered, air safety and security will continue to be managed at national levels.

⁹ Regional traffic in this case covers all traffic within Africa.

finance the project's national activities as it will not be able to answer requests for financing from all WCA countries at once¹⁰.

8. Lastly, the Bank's involvement in this project is also warranted by: 1) the project's economic impact and, 2) the support it lends to further regional integration. In the present case, there is a clear linkage between enhancements in air transport security and safety and lower travel costs (see Annex 9). Indeed, air carriers registered in countries with higher safety and security standards benefit from greater market access that stimulates competition. In WCA, where air service frequency is generally poor, such impact could be especially important on tourism trade, a key sector for the Region's economic development. Additionally, improved safety and security will translate into greater acceptance by the WCA countries of each other's carriers; thus strengthening regional integration. Besides, the countries involved will be adopting and using harmonized aviation codes and regulations, which will enhance the safety and security of the air transportation network. Such a level of harmonization could not be achieved unless the project was done at a regional level.

9. In light of the above, there is ample evidence that the project meets all the Bank's regional eligibility criteria as: 1) it involves more than three countries, 2) its economic and social benefits include enhanced carriers services and lower transport costs that promote national and regional tourism and trade growth, 3) it supports ongoing regional initiatives to enhance aviation security and safety levels within WCA countries (i.e., COSCAP projects) which, in turn, enhance the implementation of the YD (i.e., pan African air transport liberalization), and 4) it funds national activities which have clear externalities as overall WCA countries' air safety and security depend on each country's achievement in these areas and most WCA countries' air traffic is international, with a significant intra regional market share. Accordingly, the project will be financed through the IDA pilot program for regional projects, with country IDA allocations funding one third (1/3) of its cost and regional IDA funding financing two thirds (2/3) of its costs in recognition of the positive externalities of the project.

3. Higher level objectives to which the project contributes

10. The project higher objective is to create a safe and secure environment for air transport in WCA that will allow African airlines to competitively access regional and worldwide market with the expected result to support sustainable economic growth region-wide. This higher objective is consistent with the New Partnership for Africa's Development (NEPAD) Infrastructure Short Term Action Plan, the Yamoussoukro Decision as well as the Bank's Africa Action Plan.

¹⁰ In the case of Nigeria, the Bank has already agreed to finance as part of the Economic Reform and Governance Project (P088150) an aircraft and aircrew recertification exercise in complement with the United Nations Development Program.

B. PROJECT DESCRIPTION

1. Lending instrument

11. Since the readiness and needs of the 23 WCA countries to receive support from the project vary significantly (see Annex 16), it was decided to select a horizontal Adaptable Program Loan (APL) instrument to allow for a phased long-term development program. Countries will join the project under three (3) successive phases using similar eligibility criterion. These criterion are: 1) the creation of an administratively and financially autonomous national civil aviation agency, 2) the use of aviation security and/or safety taxes for the purpose of financing its civil aviation agency and, 3) the attainment of definite percentage of compliance level with ICAO's standards in the areas of aviation security and safety, as well as improved airport security.

2. Program objectives and phases

12. Under Phase I of the program, approved by the Board in April 2006, four countries; namely Burkina Faso, Cameroon, Guinea and Mali, received a total of US\$ 33.57 million in grant and credit financing. It has been decided to initiate Phase II of the program with Nigeria following the request of the Nigerian Government to join the WCAATSSP on November 3, 2006. The Bank expects that Nigeria's participation in the program will help it: 1) address quickly serious lapses in aviation security and safety following the three fatal crashes of passenger airliners between October 2005 and 2006 that have cost more than three hundred lives and, 2) motivate other countries to join the program since Nigeria is, by far, the largest aviation market in WCA¹¹. Indeed, the Bank's Team has already presented the project concept to several other countries that exert considerable influence in WCA's aviation sector such as Senegal, Côte d'Ivoire and Ghana. It hopes that, ultimately, Phase II of the program will likely include Benin, Chad, Gabon, Mauritania, Niger, Nigeria, Ghana, Senegal and The Gambia¹², for an estimated total investment cost of US\$ 70.00 million, while Phase III may encompass Congo, Equatorial Guinea, Guinea Bissau, Liberia, Sierra Leone and Sao Tomé & Príncipe¹³ for an estimated investment cost of US\$ 47.93 million.

13. As indicated in the program document submitted to the Board for Phase I, any country's project will be based on a set of standardized project activities in aviation security and safety and airport security. Nigeria's proposed project components do not depart from this requirement.

3. Project development objective and key indicators

14. The Project Development Objectives (PDOs) which apply to all program's phases, and therefore to Nigeria, are to: 1) Improve CAAs' compliance with ICAO's safety standards, 2) Increase CAA's compliance with ICAO's security standards, and 3) Enhance main international airports' compliance with ICAO's security standards. In order to measure

¹¹ In 2006, Nigeria's airports handled a little over 9.0 million passengers which is, roughly, four and half times more than the second largest aviation market in WCA, Senegal.

¹² Côte d'Ivoire will also be considered for Phase II if it clears its arrears in time.

¹³ Pending on the clearance of arrears for Togo.

attainment of these PDOs, the following key outcome indicators and target values are used for all participating countries, including Nigeria:

- **PDO 1** – Improve CAA’s compliance with ICAO’s safety standards:
 - Compliance rate with ICAO aggregate safety standards based on ICAO’s audits;
 - Percentage of technical personnel in compliance with ICAO’s safety standards; and
 - Total CAA’s budget amount.
- **PDO 2** – Improve CAA’s compliance with ICAO’s security standards:
 - Compliance rate with ICAO’s aggregate security standards based on ICAO’s audit;
 - Percentage of CAA’s ICAO’s certified security inspectors trained during the last three years;
 - Level of CAA’s budget dedicated to security; and
 - National Security Plan compliance with ICAO’s standards.
- **PDO 3** – Enhance main international airports’ compliance with ICAO’s security standards:
 - Percentage of airport security personnel with three or more years of experience;
 - Number of serious problems recorded during annual airport crisis exercises; and
 - Percentage of embarking passengers stopped in possession of illegal objects, as defined by the ICAO, by airlines security personnel.

Additionally, when applicable, the following longer term key outcome indicators are to be used to evaluate the project’s impact:

- CAA is certified category 1 by the US FAA;
- Main international airports are certified for direct flights to the United States by the US Transport Security Administration (TSA);
- No airlines registered in participating countries are listed on the European Union’s airline black list; and
- Overall WCA airline accident rate has decreased.

4. Project components

15. The project supports the ongoing development of a regional Air Transport Program within the context of the YD implementation. As such, it complements the work that will be undertaken by regional institutions (with donors’ support) in the area of Air Transport Economic Regulation harmonization, while primarily focusing on airport and aviation safety and security. The two Secretariat Units located within ECOWAS and CEMAC will have regional and national program management responsibilities in order to promote effective coordination and harmonization at the regional level. However, national projects will effectively be implemented independently by designated entities within each country.

16. Nigeria’s project cost is estimated at US\$ 49.76 million. Detailed activities costs are presented in Table 2 for the four aviation agencies that will benefit from project financing. These are: 1) the Federal Airport Authority of Nigeria (FAAN), 2) Nigerian Airspace Management Agency (NAMA), 3) Nigerian Civil Aviation Authority (NCAA), and 4) Nigerian College of Aviation Technology (NCAT). These activities complement the US\$ 15 million aviation activities included in the ongoing Economic Reform and Governance

Project (ERGP) which are to finance: 1) an institutional study of each aviation agency, 2) NCAA's aircraft and aircrew recertification exercise, 3) Port Harcourt and Abuja airports' operational perimeter fences and patrol routes construction and rehabilitation, and 4) installation of wind shear detection systems for Lagos, Port Harcourt and Kano airports. Selected activities¹⁴ financed under the regional program are tied to the completion of the ERGP's institutional study.

Table 2: Breakdown of financing by beneficiary agency for the Nigeria project of the WCAATSSP (in US\$ million)

	Sector of activity			Total	Financing sources	
	Aviation Safety improvements	Aviation Security improvements	Project Management and oversight		World Bank	National
NCAA	7.90	1.70	1.75	11.35	10.73	0.62
FAAN	4.70	8.36	1.75	14.81	14.19	0.62
NAMA	7.99	0.00	1.75	9.74	9.12	0.62
NCAT	8.70	0.00	1.75	10.45	9.83	0.62
PCU	0.00	0.00	1.76	1.76	1.13	0.63
Un-allocated				1.65	1.65	0.00
Total	29.29	10.06	8.76	49.76	46.65	3.11¹⁵

World Bank, 2007

18. Project activities were elaborated in partnership with NCAA, FAAN, NAMA and NCAT in order to address globally safety and security issues affecting Nigeria's aviation sector.

4.1 Aviation safety improvements (US\$ 29.29 million)

NCAA (US\$ 7.90 million)

- Replacement of basic communications and inspections equipments (e.g., VHF radios, IT network at headquarters, etc.);
- Purchase of technical library equipment (e.g., relevant ICAO's manuals, directives, online library, training materials, etc.);
- Training of civil aviation staff in the area of civil aviation safety oversight; and
- Establishment of an in-house personnel training center.

FAAN (US\$ 4.70 million)

- Acquisition of fire fighting equipment; and
- Training of airport safety personnel.

¹⁴ These activities are: Enterprise resource software (business automation) and Enterprise information and document management system for NAMA; and the provision of Fire fighting equipment, the procurement of ILS, VOR and runway lights for the Flying School and the Construction of a NDT laboratory for NCAT (see Annex 8 for more details).

¹⁵ This number represents in-kind contribution in terms of manpower and office space for the duration of the project. The Project Coordination Unit costs located within the Federal Ministry of Transport were equally distributed among the four agencies.

NAMA (US\$ 7.99 million)

- Replacement of the satellite communication system and extension of VHF coverage pending the results of a prior exploratory study of satellite communication system needs;
- Acquisition of resource software and information and document management system as identified by the institutional study financed under Nigeria's ERGP;
- Installation of a local area network at tower controls of Lagos, Abuja, Port Harcourt and Kano airports; and
- Training for air traffic control personnel based on a prior needs' assessment study.

NCAT (US\$ 8.70 million)

- Acquisition of two basic flight simulators;
- Purchase and Installation of runway lights, Instrument Landing System (ILS) and VHF Omnidirectional Range navigation System (VOR) for the School's airport to enable night flight operations training;
- Construction/Expansion of a non-destructive testing, a cartography and a ATN/AFTN/AHMS laboratories within NCAT's premises;
- Purchase and Installation of Fire Fighting training equipment based on a prior needs' assessment study and a Memorandum of Understanding¹⁶ with the involved agencies; and
- Personnel training based on a prior needs' assessment study.

4.2 Aviation security improvements (US\$ 10.06 million)

NCAA (US\$ 1.70 million)

- Installation of a security system and an access control system at headquarters; and
- Training of civil aviation staff in the area of civil aviation security.

FAAN (US\$ 8.36 million)

- Acquisition of basic communications and inspections equipments for airport personnel (e.g., VHF radios, IT network at headquarters, etc.);
- Strengthening of airport security (design of airport emergency plans and installation of airport personnel identification equipment, security cameras and, communications systems);
- Construction, within each airports' operational perimeters of a single aircraft remote parking zone in the event of a crisis;
- Rehabilitation and/or construction within existing airport buildings of crisis centers, including acquisition of necessary communication and surveillance tools to equip these centers;
- Improvement of airport security through the acquisition of passengers and cargo X-ray machines as well as an explosive material tracer; and
- Training of airport security personnel.

¹⁶ For several years, the Nigerian aviation agencies have been constrained to outsource a significant volume of safety training abroad. The Memorandum of Understanding mentioned above must be therefore agreed upon to ensure the fire fighting training equipment installed at the NCAT will be utilized by the Nigerian agencies.

4.3 Management and Governance oversight of the Project (US\$ 8.76 million)

19. This activity is meant to encompass the financing of project operating costs covering the Project Coordination Unit and the Project Implementation Units salaries, office rentals and expenses; as well as inter alia annual fiduciary audits and day-to-day management.

5. Lessons learned and reflected in the project design

20. Since this was the first regional aviation security and safety program in the Africa region, there were limited precedents that could be used during the project design phase. However, earlier findings from the implementation of the first Phase of the program have been used to better design the Phase II program implementation. The following useful lessons were gleaned from the program's first Phase:

- **Project design must reflect the intent, interest and priorities of its beneficiaries and stakeholders so as to ensure ownership of the project and particularly its reform processes.** Evidence of this ownership is found in the: 1) extensive use that the NCAA has made so far of the resources provided by the Banjul Accord's COSCAP, 2) Nigerian Government's successful request in early 2006 for emergency assistance of US\$ 15 million for its aviation sector under the Bank's Economic Reform and Governance Project (ERGP), 3) Nigerian Government's subsequent request to join Phase II of the WCAATSP, 4) Nigerian Government's January 2007 direct demand for assistance from the United Nations' ICAO's Technical Cooperation Bureau (TCB) to assist the NCAA in carrying out a far reaching airplane and aircrew recertification exercise, 5) Nigerian's government financing of runway rehabilitation works in Port Harcourt (ongoing) and Lagos (completed), 6) Nigerian's government financing through NAMA of the deployment of a total active radar system with nationwide coverage (i.e., TRACON Project - underway)¹⁷, and 7) Nigerian's government contribution of US\$ 3.11 million to the project management costs.
- **Project design must be coordinated with other donors in order to ensure consistency in the goals and expected outcomes of projects within the same sector.** The project was developed in close cooperation with all the donors agencies involved in the aviation sector in WCA, especially USFAA, European Union (EU), ADB, DGAC, UNDP and ICAO.
- **Project design must emphasize capacity building of project agencies.** Experience in WCA countries confirms that sustained project impact depends on well-managed, well-financed executing agencies. The proposed project includes extensive capacity building both at the Federal Ministry of Transportation and the four beneficiary aviation agencies level. It also seeks to ensure long term sustainability of results by ensuring that the newly autonomous NCAA will be financed and staffed adequately in order to successfully oversee Nigeria's aviation sector. Finally, it funds training and equipment linked to a clear reform agenda for each agency.

¹⁷ TRACON project aims at installing primary and secondary surveillance radar coverage in order to improve air traffic control safety in the Nigerian airspace. NAMA is currently financing this US\$ 79.8 million project, of which US\$ 57.1 million remain to be financed through 2009.

6. Alternatives considered and reasons for rejection

21. The only alternative to the regional approach recommended to develop adequate air transport safety and security would have been an individual country by country approach. Similar examples of the former type of approach (e.g., in Central America) have shown that a regional approach is indeed the preferred option as small countries are unable to gather on their own the necessary resources to meet ICAO's security and safety standards. Furthermore, by linking national activities to regional ones, more incentives are given to Governments to carry out necessary sector reforms.

C. IMPLEMENTATION

1. Partnership arrangements

22. The program regional component (i.e., COSCAP projects) is fully financed through grants obtained from other bi or multilateral donors. As shown in Table 3, the grant financing is already secured and Nigeria's NCAA already benefits from the assistance of the Banjul Accord's COSCAP. National projects will also benefit from support of bilateral technical assistance or aid, especially that of the US in the countries which are members of the Safe Skies initiative (i.e., Mali, Cameroon, and Nigeria) and of France when there is an existing cooperation in the area of security (e.g., Senegal, Burkina Faso and Cameroun).

Table 3: COSCAP projects financing sources

	COSCAP characteristics	Banjul Accord	CEMAC	UEMOA + Mauritania
Basic	ICAO agreement	June 2004	Pending	September 2003
	Estimated cost	US\$ 2.8 million	US\$ 4.0 million	US\$ 4.0 million
	Estimated duration	2 years	3 years	2 years
Implementation	Project office location	Abuja	N'Djamena	Ouagadougou
	Planned start-up date	Fall 2005	Late 2006	Fall 2005
	Regional Agency created	Decision taken	Planned	Decision taken
Donors	ADB Grant Amount	US\$ 2.0 million	US\$ 1.8 million	US\$ 1.9 million
	ADB Implementation support	US\$ 520,000	US\$ 520,000	-
	Date of signature of ADB agreement	May 2005	June 2005	May 2005
	France agreed amount	US\$ 1.2 million	US\$ 1.2 million	US\$ 1.2 million
	IFFAS grant	US\$ 123,375	-	US\$ 107,000
	IFFAS loan	US\$ 284,445	-	Declined
	European Commission Agreement	Signed	Signed	Signed
	European Commission Grant	US\$ 500,000	US\$ 500,000	US\$ 500,000
Others	ADB study on regional air safety agencies (US\$ 400,000)			

World Bank, 2007

2. Institutional and implementation arrangements

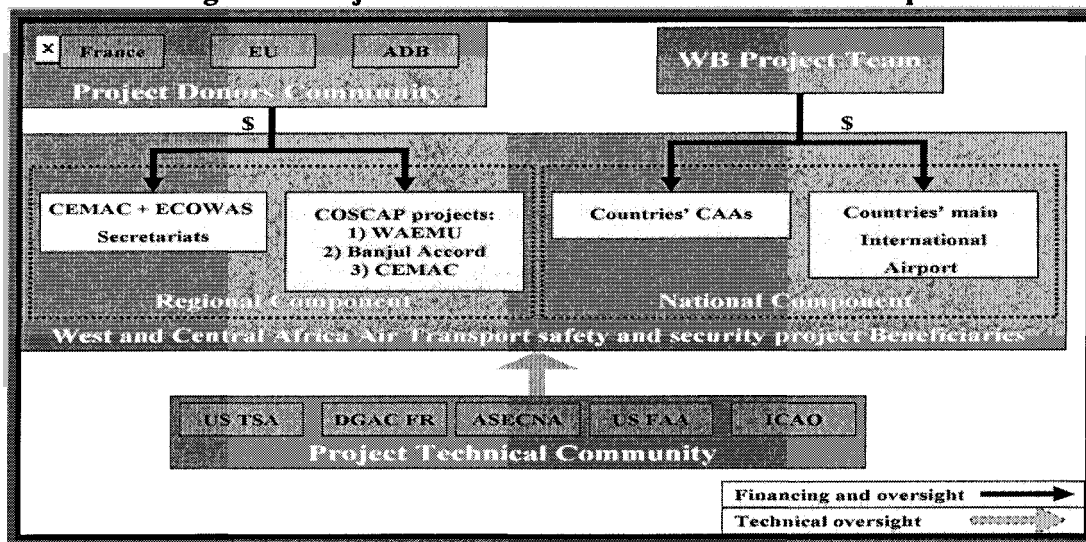
23. The implementation of the program's regional component (i.e., COSCAP) is overseen by the technical bureaus of the two regional organizations: ECOWAS and CEMAC (see Figure 1) while the implementation of the Nigerian project will be handled by a Project Coordination Unit (PCU), established in February 2007, within Nigeria's Federal Ministry of Transportation. Whereas the financial management and procurement responsibilities will be entirely borne by the PCU, Project Implementation Units (PIUs) located within each

beneficiary agency will provide technical support to the PCU by: a) drafting initial technical documentation in support of the project's procurement activities, and b) overseeing the implementation on the ground of the project's activities. As in other countries, financial and procurement assessments of the project's units (i.e., PCU and PIUs) have resulted in recommendations designed to address the shortcomings identified in terms of financial and procurement capacities. Disbursements for all activities benefiting the agencies will be centralized in one designated account managed by the Federal Ministry of Transportation's PCU in order to increase project's fiduciary compliance. Furthermore, both the PCU and the PIUs' staff who is made of Ministry and agencies personnel will be strengthened by externally recruited specialists in the area of procurement and aviation whose initial appointment will be for at least a year with terms of reference explicitly geared towards building capacity of the units and agencies' staff. These recruitments will be financed from the project using a Project Preparation Facility (PPF) line of financing in the amount of US\$ 800,000 which is slated to be effective before the end of July 2007.

3. Monitoring and evaluation of outcomes/results

24. The evaluation of outcomes will be done primarily based on ICAO's safety and security audits, using follow-up audits undertaken by ICAO certified consultants or ICAO itself to measure progress made against baseline values. In some cases such as airport security, project impact will be measured using data collected by individual CAA (see Annex 3 for details), although the source of the data will be either provided by independent operators such as airlines or certified by independent consultants. In order to preserve the confidentiality of the data presented in ICAO's audits, project indicators will only assess globally each country's compliance with ICAO's safety and security standards rather than identify individually the standards that have not been complied with. Nevertheless, discussions held with governments during project monitoring will cover specifically standards that have not been complied with, so as to secure the projected improvements in overall compliance rates. Every participating country will have their safety and security compliance with ICAO standards during the course of the project (i.e., at mid-term and at project closing).

Figure 1: Project institutional and financial relationships



4. Sustainability

25. In order to address the current aviation safety and security crisis, the Government of Nigeria has accelerated the reform of its aviation sector since the end of 2005. The most potent proof of this new determination to reform has been the adoption by parliament of a new legislation providing financial and administrative autonomy to the NCAA and to the NCAA's Director General who has been appointed for an initial five year term. Likewise, the concessioning to a private investor of Abuja's airport at the end of 2006 also marked a new and sustainable approach to airport infrastructure financing and maintenance in Nigeria that is expected to yield favorable results both in terms of overall airport safety and security but also accountability and governance. Lastly, the Nigerian Government's public acknowledgement of its aviation sector's woes, willingness to disclose air crash information as well as request technical and financial assistance from the Banjul Accord's COSCAP, the United Nations and the World Bank proves the country's political commitment to restore the highest standards of transparency, safety and security within its aviation sector. These factors have been translated into the program's standardized set of project outcome indicators and legal covenants in order to ensure its long term sustainability.

26. The scope of the project, especially its limitations due to its regional nature, precludes it from addressing some critical domestic issues, however. The overstaffing of the agencies, for instance, is only partially addressed by the project activities and will, on the long-run, hamper the ability of the Nigerian aviation agencies to grow autonomously. On this matter, the Bank's strategy in this sector is currently articulated around a three prong approach with: i) the implementation of the aviation component of the Economic Reform and Governance Project (ERGP) that is currently addressing the immediate needs of the sector and includes, among other things, the fencing of Port Harcourt and Abuja airports as well as an institutional study of the main aviation agencies; ii) the proposed Nigeria Project of the West and Central Africa Air Transport Safety and Security Program that has been designed to improve regional aviation safety and security through capacity building activities for the region's civil aviation authorities and targeted safety and security investment at the region's international airports; and iii) a possible domestic project largely funded by Nigeria that would be developed to address the nation's aviation sector remaining shortcomings (i.e. weak governance, lack of reliable funding and overstaffing of agencies). This project is therefore not expected to resolve the totality of the Nigerian aviation sector issues and the Government should commit clearly to taking on this third activity in order to ensure its long term impact and sustainability.

5. Critical risks and possible controversial aspects

27. The primary risk concerns the **implementation capacity of the project's activities by FAAN, NAMA, NCAA and NCAT**. In the case of Nigeria this risk is rated as substantial¹⁸, in spite of the fact that each agency has been operating for several years, because: a) none shows evidence of appropriately performing financial management and procurement systems, and b) none has ever managed a Bank's project. This assessment supports the

¹⁸ Risk for World Bank's project is rated, from the highest to the lowest, as follows: High (H), Substantial (S), Moderate (M), and low (L).

decision to locate the project's financial management and procurement responsibilities within a single PCU at the Federal Ministry of Transportation This PCU will, nevertheless, be assisted in its task by agency's PIUs whose role will primarily be to: a) draft initial technical documentation in support of the project's procurement activities, and b) oversee the implementation on the ground of the project's activities. This PCU/PIU approach was selected to: a) ensure project's visibility and support from the Federal Ministry of Transportation, b) secure ownership from both the Ministry and aviation agencies, c) assign dedicated manpower to project management whose operational and technical assistance cost will be financed by the Project, and d) promote a culture of information exchange and transparency among aviation agencies which historically have worked in silos.

28. Another project risk is the **limited ability of NCAA to rigorously enforce security and safety standards on national operators** such as airlines and airports. Fortunately, NCAA's leverage in these areas will be strengthened by the creation of regional aviation security and safety agencies. Indeed, the African Development Bank (ADB)'s grant provided to ECOWAS, UEMOA and CEMAC to finance the three COSCAP projects in WCA requires the creation, by June 2008, of three regional safety agencies. A subsequent grant to finance COSCAP activities centered on aviation security is also programmed with a similar PDO (i.e., creation of regional security agencies). Finally, the current crackdown by European nations on unsafe airlines (e.g., suspension in September 2005 of Cameroon Airlines' access to the French airspace) is forcing African governments to take aviation security and safety seriously like will the public disclosure, starting in 2008, by the ICAO of each member's country CAA safety audit compliance rate results. Nevertheless, this risk is rated as substantial.

29. An additional risk concerns **the ability of NCAA to secure and maintain a technically proficient workforce** so as to ensure the project's sustainability. Although the autonomy of the NCAA has been enshrined into law in November 2006 and a new management has been appointed with the head of the NCAA being nominated directly by parliament for a five year term, the number and share of unqualified personnel in NCAA remains high. Unless NCAA's workforce profile and number are radically readjusted in the coming years, serious concerns will remain about its ability to achieve world class aviation safety and security standards. For this reason, the restructuring study to be financed under the ERGP will provide the Nigerian Government with proposals to transform the NCAA into an efficient organization. A corrective action plan, derived from these recommendations, will be financed by the project and is planned to be completed by the end of 2009. Finally, these proposals will be reinforced by the Government's commitment to the Bank to improve the NCAA's oversight abilities as part of this project. In spite of these measures, this risk has been rated as substantial.

30. **Apart from the implementation arrangements, and in order to address governance risks**, the project design incorporates a variety of mitigation measures to ensure efficient and transparent decision making and use of resources. Among them are: a) the use from the program's Phase I of a technical database providing cost benchmarks for the standardized activities that will be implemented in Nigeria so as to secure the fairness of bids' cost, b) the designation of the PCU as the sole responsible entity for fiduciary and procurement matters so as to hold a single entity accountable for any project governance issues as part of the

procurement and execution of contracts, and c) the strengthening of the PCU and PIUs procurement and financial capacity through the transparent recruiting of experts consultant in these matters. In spite of these measures, project's governance risk was rated as substantial.

Table 4: Project risk analysis

Risks	Mitigation measures	Risk rating with mitigation
Limited project implementation capacity of FAAN, NAMA, NCAA and NCAT	Combined PCU/PIUs approach to distribute technical and fiduciary responsibilities	Substantial
Limited ability of NCAA to aggressively enforce security and safety standards on national operators	Creation of regional aviation security and safety agencies, public disclosure of ICAO's safety audit results	Substantial
Ability of NCAA to secure and maintain a technically proficient workforce	Corrective actions drawn from the restructuring and capacity building study financed under the ERGP	Substantial
Governance risks	Ministry level Accountability and recruitment of external assistance for PCU/PIUs	Substantial

World Bank, 2007

31. Based on the ratings given to the four above listed risks, overall risk for the project is rated as substantial.

6. Credit conditions and covenants

6.1 The conditions for negotiations of the IDA credits

None.

6.2 The conditions for Board approval

None.

6.3 The conditions for effectiveness of the IDA credit (above standard effectiveness conditions as specified in the General Conditions)

- The Recipient has adopted an Administrative, Financial and Accounting Manual and a Project Implementation Manual, both in form and substance, satisfactory to the Association; and
- The Recipient has established a Project Steering Committee satisfactory to the Association, comprising at least the representatives of the federal ministries of finance and transport, NCAA, NCAT, FAAN, NAMA and the PCU.

6.4 Legal covenants

- An external auditor to the PCU with qualifications, experience and terms of reference satisfactory to the Association has been appointed by the Recipient in accordance with the provisions of Section III of Schedule 2 to the Financing Agreement before December 31st, 2007.
- Project Coordination Unit and Project Implementation Units maintain staff satisfactory to the Association during the project duration;
- Financial reports on the activities of NCAA, NCAT, NAMA and FAAN have been provided to the Association no later than six months after the end of each fiscal year. To this end, the reports shall include statements of revenues collected, including those linked to the Ticket Sales Charges, and the detail of the expenses relating to security and safety activities;
- Midterm and end of project security audits carried out by ICAO's certified consultants are provided to the Association for analysis;
- NCAA's reports describing results of the crisis simulation exercises in Lagos, Abuja, Port Harcourt and Kano airports, including comments on the report from ICAO's certified consultants who observed the exercises, are submitted to the Bank within three months of each annual crisis exercise. First crisis exercise is to be carried out by no later than March 31st, 2008 in any of the four airports targeted by the Project with fourth airport first crisis exercise to be completed by no later than September 30th, 2008;
- No later than three months after each annual airport crisis-exercise, the PCU shall submit to the Association a report describing the results of each exercise as well as ICAO-certified expert's comments on the said report;
- No later than December 31st, 2007, NCAT and NAMA and NCAT and FAAN shall sign a Memorandum of Understanding (MOU) satisfactory to the Association relating to the long term training contracts between these agencies; and
- Quarterly reports containing information pertaining to rate of illegal objects, as defined by the ICAO, seized from passengers by airlines security in Lagos, Abuja, Port Harcourt and Kano airports are submitted quarterly to the Bank starting on May 15th, 2008.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

32. The need for expanding and improving air services and markets in Africa, to which this project contributes, has been acknowledged by the NEPAD. It is recognized that improvements and expansion of aviation infrastructure can make a significant contribution to facilitating inward investment in tourism and developing non-traditional exports with relatively high value added content in Africa. These cannot take place, however, without adequate security and safety of aviation operations. Accordingly, this project has the potential to indirectly impact the long term macro-economic growth prospects of African economies by: a) ensuring the sustainability of other investments in the sector (e.g., airport facilities expansion, airlines services deregulation), b) promoting tourism activities, c) enhancing overall investment climate (i.e., inward investment levels), and d) expanding exports trade.

33. While Annex 9 details these potential impacts, it is necessary to underscore that among all of the world's regions, Africa is the most dependent on aviation services when it comes to tourism activities with, according to the World Travel Tourism Council (WTTC), almost three (3) million direct and indirect tourism jobs supported by air services in 2004. Likewise inward investment levels as well as international market access to WCA countries high value perishable agricultural goods such as cherry tomatoes and flowers are highly affected by the level of security and safety of airlines operations to/from and within WCA. As such, the project can be viewed as an important building stone in the overall economic development strategy of the WCA countries.

34. Connecting West to Central and East Africa, Nigeria's prevalent geographical position sets the grounds for a future regional hub. The country's striving activities in the oil industry as well as its substantial tourist industry both rely on the aviation sector. In the case of tourism, the country has 309,000 jobs - or 50% more than all four Phase I program countries combined - and US\$ 124 million in annual revenues linked to the safe and secure operations of air carriers (see Figures 2 and 3 in Annex 9). Additionally, 1.5% of Nigeria's total capital investment depends on tourism activities (see Figure 4 in Annex 9), a relatively high figure given the importance of investments for petroleum exploration and production in the country.

2. Technical

35. In order to provide a comprehensive view of the allocation of funds, the activities to be financed under the project have been detailed according to their beneficiary agency as well as divided in the following seven categories (see Table 5):

Table 5: Nigeria project costs by activity category and by aviation agency (in US\$ millions)

	NCAA	FAAN	NAMA	NCAT	Total
Personnel training	4.00	0.00	4.80	6.86	15.66
Agency's equipment	2.55	1.70	0.00	0.00	4.25
Aviation equipment	0.05	0.05	2.79	1.54	4.43
Screening equipment	0.00	2.76	0.00	0.00	2.76
Crisis centers	0.00	1.30	0.00	0.00	1.30
Airport infrastructure	0.00	6.65	0.00	0.00	6.65
Miscellaneous	5.19	2.79	2.59	2.49	13.06
Total	11.79	15.25	10.18	10.89	49.76¹⁹

World Bank, 2007

a) Personnel training

The aim is to provide knowledge, experience and build capacity within the agencies in the field of air transport safety and security. Special attention will be also directed towards ensuring that airport and agency personnel are adequately trained to benefit fully from the equipment procured by the project.

¹⁹ Including US\$ 1.65 million of unallocated funds.

Total project cost for this activity is estimated at US\$ 15.66 million

b) Agency's equipment

This category includes the procurement of IT systems, security systems and the development of training facilities in order to facilitate inner agency communications, and increase the agency security with a view to improve overall productivity.

Overall cost for this activity is estimated at US\$ 4.25 million.

c) Aviation communication/navigational aid equipment

This equipment aims at improving air traffic control safety for the Nigerian airspace and at improving the field communication capacity of each agency's personnel.

Total cost for this activity is estimated at US\$ 4.43 million.

d) Airport passengers, cargo and luggage screening equipment

Screening equipment is procured to strengthen the security of Abuja, Lagos, Kano and Port Harcourt international airports.

Total cost for this activity is estimated at US\$ 2.76 million.

e) Crisis center equipment

Crisis management centers will be installed in Abuja, Lagos, Kano and Port Harcourt international airports in accordance with ICAO's requirements.

Total cost for this activity is estimated at US\$ 1.30 million.

f) Airport infrastructure and equipment

Airport infrastructure investments are essential for Nigerian international airports to meet the most stringent international security and safety standards. This category includes closed circuit television monitoring systems, aircraft remote parking and fire fighting equipment.

Total cost for airport infrastructure upgrade is estimated at US\$ 6.65 million.

g) Miscellaneous

This category comprises various consulting services, the project and agency audits and the project management costs.

Total cost for these items is estimated at US\$ 13.06 million.

3. Fiduciary

36. The overall assessment of fiduciary risks for this project has been rated as substantial in spite of the fact that the project's PCU will have adequate fiduciary capacity as part of the credit's negotiations condition. This reflects the experience to-date with the poor implementation performance of the aviation component of the ERGP. The PCU will be responsible for reporting (including preparation of Financial Management Reports - FMRs) to both the Government and the Bank.

37. The assessment revealed that there is inadequate procurement capacity in the Federal Ministry of Transportation which has never managed a Bank financed project in the past. This also stressed the need for procurement capacity enhancement as shown by delays incurred during the initial implementation phase of the ERGP.

38. A Procurement Specialist is being hired to assist the regular staff of the Federal Ministry of Transportation in handling the project's fiduciary responsibilities. The latter will also be assisted in their task by personnel of the four beneficiary agencies as described in Annex 6 of this document. Part of the PCU's Procurement Specialist (Consultant) terms of reference will include training and development of the PCU and PIUs designated Procurement Officer's skills in Bank procurement procedures. Identified weaknesses and risks resulting from the assessment will be addressed with the list of corrective measures that will be put in place prior and during project implementation as detailed in Annex 8 of this document.

4. Social

N/A

5. Environment

39. No sensitive environmental issues should be raised by the project implementation as construction activities will be limited in nature and should only cover the rehabilitation and/or construction of crisis centers and aircraft remote parking within existing airport's operational perimeters which are not encumbered by non-aviation related activities. Likewise, all rehabilitation work related to training centers and laboratories will take place within existing FAAN, NAMA, NCAA and NCAT buildings. However, all construction activities will be subjected to a prior review carried out by the Federal Ministry in charge of environment and the environmental specialist retained by the PCU using the project's Environmental and Social Management Framework. This will be done to ascertain if a full Environmental Assessment is required and associated construction/rehabilitation contracts will include social and environmental protection clauses whose implementation will be supervised by selected construction/rehabilitation supervision engineers.

6. Safeguard policies

40. The project is categorized B. The Environmental Assessment policy OP/BP 4.01 is triggered due to small civil works activities to be funded on various airport premises. The environmental impacts are expected to be small-scale and site specific, thus easily remediable. As due diligence, an Environmental and Social Management Framework (ESMF) has been prepared and disclosed both in Nigeria and in the World Bank's Infoshop prior to project appraisal.

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Habitats (OP/BP 4.04)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pest Management (OP 4.09)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Property (OPN 11.03, being revised as OP 4.11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involuntary Resettlement (OP/BP 4.12)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Forests (OP/BP 4.36)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Safety of Dams (OP/BP 4.37)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas (OP/BP/GP 7.60)*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways (OP/BP/GP 7.50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7. Policy Exceptions and Readiness

The project does not require any exceptions from Bank policies.

Annex 1: Country and sector background

41. The 23 countries of Western and Central Africa represent a total land area of over 9 million square kilometers, i.e. about the size of Canada, with a combined population of 281 million, i.e. about 4.5 % of world population. Most countries belong to the low income group, with per capita national incomes ranging from US\$ 130 (Sierra Leone) to US\$ 600 (Côte d'Ivoire). Only two countries, Cape Verde and Gabon, have a per capita income in excess of US\$ 1,000.

1. The Air Transport Market

42. As the air transport market is linked to the volume of the economy, traffic generation is rather low in the Region; the countries with the highest per capita and global income (or GDP) are also those where the higher air traffic figures are recorded.

Domestic air transport markets

43. The domestic air transport market is non-existent or marginal in some of the smallest countries of the sub-region, with the exception of the island states such as Cape Verde. Other countries have a limited domestic air transport market; only one country, Nigeria, has a really important domestic air transport industry.

44. Due to the lack of comprehensive statistics about regional air traffic, some estimates have been provided. The highest volume of regional traffic for the year 2004 is recorded in Senegal, with more than one million regional passengers, followed by Mali. Nigeria generates less regional traffic than Mali, Ghana or Cameroon, probably because the size of its economy makes it more self-sufficient than its neighbors'; other factors may be security and facilitation problems, as well as the weakness of Nigerian flag carriers on the regional market. Among individual routes, Lagos-Accra comes first with about 150,000 passengers (see Table 1 below). Other routes with sizeable traffic volumes are Dakar-Bamako, Dakar-Abidjan, Bamako-Abidjan; and Douala-Libreville. Actually, three high traffic density areas emerge: the Lagos-Accra-Freetown-Banjul corridor; the Dakar-Bamako-Abidjan corridor and the Douala-Libreville-Pointe Noire corridor. By contrast with these high traffic density areas, traffics in the Sahel area and in Central Africa's landlocked countries are minimal. Economic links are the main driving force behind the inter-state market. Non-business or government related air traffic is restricted to individuals in the higher income bracket.

45. The collapse of Air Afrique, subsequent abolition of barriers to market entry set by the Yaoundé Treaty, and the entry into force of the Yamoussoukro Decision affected the economic context of inter-state air transport but did not substantially alter these traffic patterns.

**Table 1: 2003 Estimates of Regional inter-state market for Nigeria
(In thousands of passengers)**

	Nigeria
Senegal	29.6
The Gambia	4.7
Guinea	6.3
Mali	28.7
Sierra Leone	87.5
Côte d'Ivoire	79.8
Ghana	144.0
Togo	10.9
Cameroon	18.6
Total	410.2

Source: Air Transport in West and Central Africa, Facts and Issues, Michel Ichès, 2003

Continental markets

46. Traffic with North Africa has developed steadily, capitalizing on traditional trade links (especially between Morocco and Senegal) and common culture. Maghreb airlines also offer attractive alternatives for onward connections to Europe, North America and the Middle-East. However, traffic volumes remain modest.

47. The major routes with Southern Africa traffic are to and from Johannesburg. Traffic with Eastern Africa comprises an important proportion of connecting traffic continuing to the Middle East and South Asia.

Intercontinental market

48. The intercontinental market is dominated by the traffic flows to and from Europe. It has steadily increased over the recent years at an average annual growth rate of nearly 12%, i.e. about double world average during the same period. The collapse of two of the Region's major airlines, Air Afrique and Nigeria Airways, may have affected individual routes but had no negative impact on total traffic. Elimination of services on some routes was quickly substituted by alternative routings, demonstrating that there is some degree of competition between the carriers (at least on markets served by more than one long haul carrier).

49. The current overall traffic volume with Europe is estimated at about 4.6 million passengers annually (see Table 2 below). The country with the largest air traffic with Europe is Nigeria (just under one million passengers p.a.), closely followed by Senegal, (over 800,000 annual passengers). Cape Verde ranks third with about half a million passengers, followed by Ghana. All other countries trail behind with traffic volumes under 300,000 Passengers and most under 100,000. The first 4 countries (Nigeria, Senegal, Cape Verde and Ghana) account for about two-thirds of the total traffic recorded between Europe and the Region's 23 countries.

Table 2: 2003 Estimates of International market between West and Central Africa and Europe (in thousands of passengers)

	Portugal	Spain	France	UK	Belgium	Neth.	Germany	Switzerland	Italy	Total
Nigeria			126.7	491.7		197.1	86.3	35.6	40.8	978.2
Total Region	391.1	208.8	2,004.8	836.5	237.4	365.7	203.6	144.4	254.7	4,647.1

Source: Air Transport in West and Central Africa, Fact and Issues, Michel Ichès, 2003

50. Among the European countries with scheduled air links with the Region, France ranks first with about 2 million passengers, i.e. just below the 50% mark; UK is second with about one million, and Portugal third with about 400,000 passengers. France-Senegal and UK-Nigeria are the two major routes with over one-half million passengers. Côte d'Ivoire has lost its traditional rank among the West African states.

51. The Middle-East market is growing, especially with the increasing role of Dubai as a trade hub between West Africa and Asia. A large number of charter flights are also operated every year during the Hajj period (pilgrimage to Mecca). Much of the traffic with the Middle-East is carried as sixth freedom via European or North African connections, traffic data based on direct air services tend to underestimate this market. Much of the traffic with the Americas is also carried via sixth-freedom connections. Direct traffic has fallen because all major US carriers phased out their services to the Region whereas Air Afrique and Nigeria Airways, once the Region's major operators on the transatlantic route, disappeared from the market. South African's fifth freedom services provide the major direct link between the Region and North America.

Consolidated traffic results

52. Total air traffic of the 23 states amounted in 2003 to 11 million passengers p.a. (without double-counts) of which about 9 million on international routes, i.e. less than 2% of the World total. Out of this total, about 5 million were recorded inside the region: 3 million as **inter-state** and 2 million as domestic. Long haul traffic totals 6 million, of which Europe represents two-thirds (4.6 million) and the rest of Africa about one million.

Fares and costs

53. **Airfares in the Western and Central Africa Region are considered up to 50% higher than world averages**, thus hampering the development of traffic and the Region's economies. Historically, protectionist policies granting monopoly rights to state-owned airlines contributed to keep fares high. These barriers are now gone and new airlines were created in large numbers, but the size of the market remains small because of the low per capita income and barriers to the development of the tourism industry. This has an impact on air fares through less competition and higher costs, as fixed costs are spread over a smaller number of passengers, fleets and equipment are underutilized, etc. Jet fuel and other consumable goods used in air transport often have to be imported and are subject to all the extra costs associated with imported goods in developing countries. This is even worse in

landlocked countries where jet fuel must be trucked over long distances from the ocean ports.

54. According to airlines, airport landing fees and air navigation (ATM) charges in the Region are more expensive than elsewhere in the world. The underutilization of equipment and facilities because of low traffic is a key factor to these higher costs.

55. High interest rates make the cost of aircraft acquisition higher, especially for “undercapitalized” airlines. Too many of the Region’s airlines just do not have enough equity to support safe and sustainable operations. National regulatory authorities sometimes issue Air Operator Certificates without fully screening the applicants’ financial fitness. Low safety and security are also responsible for much higher insurance premiums.

The competitive context

56. With the elimination of the Yaoundé Treaty system and the coming into force of the Yamoussoukro Decision, many of the most heavily trafficked routes in the inter-state market were operated in 2003 by more than two carriers: 6 on Bamako-Dakar, 4 on Abidjan-Lagos, 3 on Douala-Libreville, 4 on Cotonou-Lomé, etc. However, such routes were not numerous, even though they carried the largest part of the traffic. Most other routes were served by only one or two carriers. On intercontinental routes, there was competition on the higher density routes: 9 carriers on Lagos-Europe, 5 on Accra-Europe, 7 scheduled carriers on Dakar-Europe (plus an even larger number of charter operators and 6th freedom connections offered by North African airlines). On the other hand, from Bangui to Europe there was only one carrier, with just one weekly service.

2. The Region’s Air Transport Industry

57. In 2003, the first three actors on the Region’s air transport market, Air France, British Airways and KLM, were not based in the Region. Out of the first ten, representing an aggregate of 4.8 million seats annually, i.e. 60% of the total supply on the market, only two airlines were based in the Region (Cameroon Airlines and Ghana Airways) and two on the Continent outside the Region (Ethiopian and South African), illustrating the relative weakness of the Region’s airline industry. The situation has improved since then with the rise of new airlines such as Air Senegal International and Virgin Nigeria but has also seen the demise of Ghana Airways and the drastic reduction of Cameroon Airlines’ activities.

58. With around 5 million passengers a year, Nigeria bears today the most active commercial aviation sector in WCA. The country has a large number of privately owned airlines which operate mainly on the country’s dynamic and highly competitive domestic market. For some carriers, this fierce competition led to a drop in the quality of service. Indeed, in April 2003, only 29 out of 34 airlines were cleared after NCAA’s audit of private airlines. This number has since then dropped further to a mere 18.

59. In 2006, three airlines led the domestic market with respective market shares of 25% for Virgin Nigeria, 20% for Chanchangi and 15% for Aerocontractors while the international market shares were drawn by international carriers as British Airways and Air France.

60. The infrastructure sector comprises ATM service providers, airport authorities and airport management companies, and ground handling organizations. More than half the Region's countries are members of ASECNA. The organization was established in 1959 as "multinational statutory body" with its headquarters in Dakar and provides Air Traffic Services for the upper space international airports. The Robertsfield ACC is another multinational body operating ATM services for Guinea, Liberia and Sierra Leone, with its headquarters relocated at Conakry. Ghana, Cape Verde and Nigeria have their own ATM organizations.

61. Most of the Region's airports are part of the public sector with some cases of partial privatization through concession arrangements or service contracts. Ground handling services are either provided in monopoly or left to each airline's initiative.

The role of air transport in the Region's development

62. The macro-economic weight of air transport in the Region can be estimated between 4 and 5 billion Dollars, of which about 60% for the traffic to and from Europe, whereas inter-state and domestic traffic represent respectively about 15 % and 8%.

63. Specific economic sectors would benefit from the improvement of air services: tourism, agriculture (especially for the export of off-season fruit and produce), and manufacturing (especially for the supply of spare parts and the movement of maintenance crews). Air transport may also be an alternative for communications to landlocked or isolated communities, where it can resist the competition of cheaper land transport. It also provides job opportunities for qualified workers, especially in the technical and managerial specialties. Pilots and crewmembers are only the most conspicuous examples of such jobs. This is of particular importance in Western and Central African countries which experience high rates of unemployment among higher education graduates.

3. Recent Events and Current Trends

The Yamoussoukro decision

64. The Yamoussoukro Decision (YD) came into force on 12 August 2002, after a two-year transition period. This has not immediately revolutionized the air transport business, but has strengthened the legal status of the air carriers' rights, in particular on fifth freedom sectors. On many routes, "third party" carriers (i.e. carriers that are not nationals of either country on a sector between two countries) now offer fifth freedom services; it even happens that some sectors are only served by fifth freedom carriers. On some heavily trafficked routes, the number of carriers now operating can be quite high, thus ensuring effective competition, whereas providing more travel and connection opportunities to consumers and a choice of schedules. All in all, the industry's executives and Civil Aviation officials are, on the average, rather satisfied that "the system works" and they feel relieved compared to what they feared when the YD came into force five year ago.

The collapse of Air Afrique and the end of the Yaoundé Treaty

65. Air Afrique's possible collapse has been considered a likely event ever since the early 1990s. All attempts to save the multinational carrier through "financial restructuring" eventually failed and the company had to stop its operations and file for bankruptcy on 8 February 2002. Air Afrique's market share had consistently gone down from 1997 to 2002 and its traffic decreased even on sectors where total traffic was growing steadily. During the same period, Cameroon Airlines and Air Gabon were doing comparatively better on their own markets. This illustrated Air Afrique's increasing inability to appeal to customers. As an immediate consequence, all speculations about "revising" or "updating" the Yaoundé Treaty became irrelevant. Discussions about "reviving" the multinational airline under a different form have so far been unsuccessful.

Consolidation forces in Europe's air transport industry

66. Without going into details, the huge weight of the traffic to Europe as well as at the market share of European carriers in the Region's air transport business, events affecting Europe's airline industry always have an impact for the Region. Air transport liberalization of the 1990s is progressively reshaping the structures of Europe's airline industry and transport patterns. Next steps are expected to be the "pooling" of traffic rights with the United States and possibly with some of West and Central Africa's sub-regional groupings. As a result of this consolidation process, three carriers: Air France-KLM, British Airways and Lufthansa altogether hold 30 % of West and Central Africa's air transport business.

The emergence of new carriers

67. The emergence of new carriers has quickly provided a substitute to Air Afrique's interstate services in West and to a lesser extent Central Africa. They operate smaller aircraft, offer higher frequencies and schedules better suited to the demand. They also own their fleet, are determined to "play by the rules" (comply with safety regulations, apply stable schedules and stable fare structures) and operate with a long term perspective. Some have the technical backing of a strong partner, such as Royal Air Maroc for Air Senegal and Air France for Air Ivoire. These recent developments now confirm that the collapse of Air Afrique was far from being a disaster for the Region's air transport. On the opposite, this event was an encouraging opportunity for the emergence of a new, private sector dominated, business minded and responsible air transport industry, although still vulnerable, more specifically for the landlocked states of Central Africa.

Prospects

68. Among the most widely used projections in the aviation community, there are those of the aircraft manufacturers and IATA's. According to Airbus Industries' projections, intra-Africa traffic would grow at an annual rate of about 4% for the next 15 years; Africa's traffic with USA and Asia would grow at nearly 5% until 2009 and at about 4% for the following decade; growth of the traffic with Europe and the Middle-East would be in excess of 4% p.a. According to Boeing's projections the world's GDP should grow at the annual

rate of 3 % over the 2000-2019 period, air traffic at the annual rate of 4.8 % and airfreight at the rate of 6.4 %.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

COSCAP Project

(Cooperative Development of Operational Safety and Continued Airworthiness)

69. Major donors including the ADB, the French Cooperation and the EU have agreed to finance under a grant agreement three COSCAP projects in WCA with one covering the UEMOA + Mauritania countries, one covering the CEMAC countries and one covering the non UEMOA countries within ECOWAS (also known as the Banjul Accord). These projects complement at the regional level the national activities that will be funded by this project.

70. The COSCAPs' main objective is to enable West and Central Africa to integrate the international civil aviation network by enhancing its civil aviation security along the lines of the Yamoussoukro Decision policies. To achieve this objective, the following goals need to be reached:

- Ensure reinforcement of aviation security and safety supervision capacity within the civil aviation institutions.
- Establish economic and technical rules for aviation security in line with the recommendations of the ICAO so as to enhance security and efficiency within the civil aviation sub-sector.
- Reduce the general costs of air transport.

To attain these objectives, the following issues need to be addressed:

- Harmonization, elaboration and adoption of technical regulations for civil aviation security and safety;
- Three autonomous and functional Regional Agencies for Aviation Security (RAAS) must be created and the air transport security supervision capacities must be enforced;
- The capacity for coordination and follow up on the Yamoussoukro Decision must be enforced ; and
- Capacities for follow up and management of Regional Economic Communities (REC) must also be enforced.

Project Name	COSCAP
Region	West and Central Africa
Project Cost	US\$ 19.37 million (value of December 2004)
Project Executives	<ul style="list-style-type: none"> - Communauté Economique et Monétaire d'Afrique Centrale (CEMAC) - West Africa Economic and Monetary Union (UEMOA) - Economic Community of West African States (ECOWAS)
Donors	<ul style="list-style-type: none"> - ADB : US\$ 6.74 million - French, UE, IFFAS coop: US\$ 6.98 million - Others (Boeing, Airbus, FAA...): US\$ 1.00 million - CEMAC: US\$ 1.17 million - ECOWAS/GAB: US\$ 1.17 million - UEMOA: US\$ 1.05 million - Governments: US\$ 1.25 million
Implementation starting date	May 2005
Project duration	37 months

ERGP – Aviation component
(Economic Reform and Governance Project)

71. Following three major commercial plane crashes between October 2005 and 2006 that cost the lives of more than three hundred people, the Federal Government of Nigeria put in place several measures to enhance the safety of airline travel. As part of this effort, the Government requested that about US\$15 million from the Economic Reform and Governance Project (ERGP) be reallocated to finance implementation of specific reforms and immediate physical investments in the aviation sector.

72. The specific activities to be funded are the following:

- (i) Institutional assessment and diagnostic audit of aviation industry including detailed organizational review of the five Aviation agencies: FAAN, NAMA, NCAA, NCAT and NIMET²⁰;
- (ii) Technical assistance to NCAA through secondment of experts from existing international aviation institutions like Flight Safety Foundation, Federal Aviation Authority and ICAO to train NCAA staff and assist NCAA recertify the aviation industry;
- (iii) Construction of a perimeter fence and patrol road around the operational areas of Port Harcourt and Abuja international airports managed by FAAN;
- (iv) Acquisition of four Low-Level Wind Shear Alert Systems for NAMA (one per runway): two in Lagos, one in Port Harcourt and one in Kano.

²⁰ Nigerian Meteorological Department

73. A number of up-front actions were necessary to ensure smooth implementation of the component. On the new ERGP Aviation component, the credit was amended thus setting aside about US\$ 15 million of the credit to finance the activities, including the Federal Ministry of Transportation as the Implementing Agency. Safeguard concerns included the stoppage of the farming activities that had been taking place within the operational areas of Port Harcourt and Abuja airports. It was agreed that the farming communities would harvest their crop as soon as it was ready and stop the farming activities immediately thereafter. The other safeguard concern was the need to create an alternative crossing for communities living near Abuja International Airport. After the envisaged construction of the new fence, the communities would be required to use a new route across an area that floods during the rainy season. FAAN undertook to construct a new crossing (drainage structure) for the community before the fencing work was completed.

74. For the purpose of managing the project component, the Hon. Minister of Aviation appointed a Project Execution Team (PET) comprising officials from the beneficiary agencies. The PET would be assisted logistically (in terms of office space and support personnel) by the aviation agencies and would report to the Federal Ministry of Transportation. Project procurement, however, would remain within the Federal Ministry of Finance, the oversight Ministry for the ERGP.

Project Name	ERGP – Aviation component
Country	Nigeria
Project Cost	US\$ 179.22 million (value of November 2004)
Component Cost	US\$ 15 million (value of May 2006)
Project Executives	<ul style="list-style-type: none"> - Nigerian Federal Ministry of Transportation - Federal Airports Authority of Nigeria (FAAN) - Nigerian Airspace Management Agency (NAMA) - Nigerian Civil Aviation Authority (NCAA)
Donors	<ul style="list-style-type: none"> - DFID: US\$ 22.53 million - Government Counterpart: US\$ 16.69 million
Implementation starting date	February 2005
Project duration	72 months

Activities	Total costs US\$ '000	Expected Completion Date
Supply and Installation of four Low Level Wind Shear systems (LLWAS) for NAMA (two in Lagos, one in Port Harcourt and one in Kano) including training on system operation	4,050	February 2008
Construction of perimeter fences and Roads for Port Harcourt airport	4,300	May 2008
Construction of perimeter fence and Roads for Abuja airport	1,800	May 2008
Institutional Assessment/Audit of the 5 agencies Functional and Process Review of FAAN and NAMA Restructuring plan for FAAN and NAMA Restructuring and development of business and financial model and guidelines for an autonomous NCAA	1,200	December 2008
Consultancy for restructuring and capacity building of NCAA for aviation regulatory and oversight enhancement		November
Consultancy for aviation experts secondment from ICAO, FAA, FSF and other similar international aviation organizations for initial recertification and processes towards achievement of ICAO, FAA and IASA ²¹ compliance	1,570	November 2008
Operating costs for PET	34	n.a.
Technical support for PET	100	n.a.
Total excluding unallocated	13,554	

²¹ International Aviation Safety Audit

Annex 3: Results Framework and Monitoring

Results Framework for project components

PDO	Outcome Indicators	Use of Outcome Information
<p>1) Improve NCAAs' compliance rates with ICAO's safety standards</p> <p>2) Improve NCAAs' compliance rates with ICAO's security standards</p> <p>3) Improve International airports' compliance with ICAO's security standards</p>	<ul style="list-style-type: none"> • Compliance rate with ICAO's safety standards • Percentage of technical personnel in compliance with ICAO's safety standards • Total NCAA budget level • Compliance rate with ICAO's security standards • Percentage of NCAA ICAO's certified security inspectors trained during the last three years • Level of NCAA budget dedicated to security • Percentage of airport security personnel with three or more years of experience • Number of serious problems recorded during annual airport crisis exercises • Percentage of embarking passengers stopped in possession of illegal objects as defined by the ICAO by private airlines security personnel. 	<p>Measure improvements in: 1) NCAAs' compliance rates with ICAO's security and safety standards, 2) targeted airports security levels, and 3) sustainability of these improvements.</p>
Intermediate Results One per Component	Results Indicators for Each Component	Use of Results Monitoring
<p>Component aviation safety</p> <ul style="list-style-type: none"> • Compliance rates with ICAO's safety standards reaches at least: • Percentage of technical personnel in compliance with ICAO's safety standards reaches at least: • NCAA's total budget level reaches at least: 	<ul style="list-style-type: none"> • >80% • >90% • US\$ 42 million 	<p>Identify problems and associated solutions in NCAAs safety oversight capacity</p>

Intermediate Results One per Component	Results Indicators for Each Component	Use of Results Monitoring
Component aviation security <ul style="list-style-type: none"> • Compliance rates with ICAO's security standards reaches at least: • Percentage of NCAAs' ICAO certified security inspectors trained during the last three years: • NCAA's budget level dedicated to security reaches at least: 	<ul style="list-style-type: none"> • >80% • >90% • US\$ 1.4 million 	<p>Identify problems and associated solutions in NCAAs security oversight capacity</p>
Component airport security <ul style="list-style-type: none"> • Percentage of airport security personnel with at least three or more years of experience: • Number of serious problems recorded during annual airport crisis exercises: • Percentage of embarking passengers stopped in possession of illegal objects as defined by the ICAO by private airlines security personnel: 	<ul style="list-style-type: none"> • >60% • < 10 /airport • < 4% 	<p>Identify problems and associated solutions in international airport security measures</p>

Arrangements for results monitoring for Nigeria

Outcome indicators	Baseline	Target values				Data collection and reporting		
		YR1	YR2	YR3	YR4	Frequency and reports	Data collection instruments	Responsibility for data collection
Component one : Compliance rates with ICAO's safety standards ²²	70%		>80%		>90%	Every 2 years	Field survey	ICAO certified consultant
Percentage of NCAA's technical personnel in compliance with ICAO safety standards	84%		>90%		>90%	Every 2 years	Field survey	ICAO certified consultant
NCAA's total budget level (in US\$ millions)	40		42		47	Annually	NCAA's annual report	NCAA
Component two : Compliance rate with ICAO's security standards	70%		> 80%		> 90%	Every 2 years	Field survey	ICAO certified consultant
Percentage of NCAA's ICAO certified security inspectors trained during the last three years	80%		> 90%		> 90%	Every year	NCAA's annual report	NCAA
Level of NCAA's total budget dedicated to security (in US\$ millions)	0.65		1.4		1.5	Annually	NCAA's annual report	NCAA
Component three : Percentage of airport security personnel with three or more years of experience	< 45%		> 60%		> 90%	Annually	NCAA's annual report	NCAA
Number of serious problems recorded during annual airport crisis exercises/ airport	Not available		<10		<3	Annually	NCAA's airport crisis report	ICAO certified consultant
Percentage of embarking passengers stopped in possession of illegal objects as defined by the ICAO by private airlines security personnel.	> 6%		<4%		<2%	Quarterly	Airlines' private security companies	NCAA

²² This figure averages the compliance rates of the following 5 critical elements of safety oversight: Specific Operating Regulations, Civil Aviation System and Safety Oversight Functions, Licensing and Certification Obligations, Surveillance Obligations and Resolution of Safety Concerns.

Annex 4: Detailed Project Description

1. Overview

75. Aside from South Africa, Nigeria has the largest aviation industry in Sub Saharan Africa (SSA). In 2006 (see Table 1), the top five airports of the country registered 8.14 million passengers with Lagos handling 5.0 million of them. In terms of international traffic, Lagos enjoys the same dominance with 2.1 million out of the 2.7 million international passengers transiting through it.

Table 1: Nigeria's top international airports historic traffic data

Airport	2004			2005			2006			
	Arrival	Departure	Total	Arrival	Departure	Total	Arrival	Departure	Total	
Abuja	Domestic	789,394	803,630	1,593,024	820,381	832,208	1,652,589	837,000	857,455	1,694,455
	Foreign	79,120	63,293	142,413	95,471	78,375	173,846	101,528	79,769	181,297
	Total	868,514	866,923	1,735,437	915,852	910,583	1,826,435	938,528	937,224	1,875,752
Calabar	Domestic	71,243	73,211	144,454	71,889	72,145	144,034	84,224	85,204	169,428
	Foreign	627	713	1,340	204	258	462	1,877	2,055	3,932
	Total	71,870	73,924	145,794	72,093	72,403	144,496	86,101	87,259	173,360
Kano	Domestic	102,059	84,771	186,830	98,708	79,896	178,604	74,201	71,637	145,838
	Foreign	89,299	108,707	198,006	85,784	102,576	188,360	115,884	130,560	246,444
	Total	191,358	193,478	384,836	184,492	182,472	366,964	190,085	202,197	392,282
Lagos	Domestic	1,241,494	1,243,217	2,484,711	1,351,709	1,337,382	2,689,091	1,415,605	1,434,155	2,849,760
	Foreign	922,559	957,567	1,880,126	1,016,870	1,035,230	2,052,100	1,052,781	1,099,534	2,152,315
	Total	2,164,053	2,200,784	4,364,837	2,368,579	2,372,612	4,741,191	2,468,386	2,533,689	5,002,075
Port Harcourt	Domestic	399,818	396,901	796,519	454,596	460,153	914,749	292,327	299,312	591,639
	Foreign	45,718	47,488	93,206	76,203	77,150	153,353	52,527	53,691	106,218
	Total	445,536	444,389	889,725	530,799	537,303	1,068,102	344,854	353,003	697,857
Total	Domestic	2,603,808	2,601,730	5,205,538	2,797,283	2,781,784	5,579,067	2,703,357	2,747,763	5,451,120
	Foreign	1,137,323	1,177,768	2,315,091	1,274,532	1,293,589	2,568,121	1,324,597	1,365,609	2,690,206
	Total	3,741,131	3,779,498	7,520,629	4,071,815	4,075,373	8,147,188	4,027,954	4,113,372	8,141,326

Source: NCAA, 2007

76. Today, the aviation sector in Nigeria is organized around four main agencies:

- **The Nigerian Civil Aviation Authority (NCAA):** It has been set up as an operationally and financially autonomous authority following the adoption of the Civil Aviation act of 2004 although it was created in 1999 after the break up of then FAAN. In late 2006, the Civil Aviation Act was modified and approved by parliament in an effort to strengthen NCAA's overall financial and administrative autonomy, including that of its Director General which was then appointed by parliament for a 5-year term. As shown in Table 2, NCAA's primary source of revenues (i.e., 90%) is derived from a fee collected by the Government on ticket sales within Nigeria. In spite of significant revenues, NCAA's financial situation suffers from high labor costs generated by more than 650 staff that absorbs more than 90% of its annual receipts.
- **The Federal Airport Authority of Nigeria (FAAN):** FAAN was established in August 1995 to carry out the functions of two previous organizations – The Nigerian Airports Authority (NAA) and Federal Civil Aviation Authority (FCAA). These two organizations which metamorphosed into FAAN were once more demerged in 1999 into FAAN and NCAA. FAAN currently manages all of Nigeria's twenty one main airports. Its role and functions are defined in the Federal Airport Authority Act of 1996 and its 1999 amended version and include for the most part the operations, maintenance and development of the nation's airport system. FAAN's role in Nigeria's airport system is, however, evolving as a concessionaire has been selected by the Federal Government to take over the management and development of Abuja international and domestic airport operations while a separate private consortium is

currently finishing the building of a new domestic terminal in Lagos. With more than US\$ 100 million in annual revenues and 5,000 employees (see Table 2), FAAN is the largest aviation agency in Nigeria.

- The Nigerian Airspace Management Agency: Act No 48 established NAMA in May of 1999, as a body corporate with perpetual succession and common seal. It provides air traffic services, including air traffic control, aeronautical telecommunications, visual and non visual aids, to enable public transport, private business and military aircraft flight within Nigeria's airspace. Its revenues are generated primarily from users' fees related to the services it is providing as well as from a portion of the charges collected from airlines tickets issued in Nigeria. With more than US\$ 50 million in revenues and in excess of 2,000 employees in 2004, NAMA is the second largest agency in Nigeria's aviation sector.
- The Nigerian College of Aviation Technology: It was created in 1964 in partnership with the ICAO as part of a United Nations' Development Program. NCAT manages four training schools; namely a flying school, an aircraft maintenance engineering school, an air traffic services/communications school and an aeronautical telecommunications engineering school located at Zaria. While it derives some revenues from its training activities, the College relies mostly on the Federal Government's direct subsidies to pay for its operations.

Table 2: Nigeria's aviation agencies financial statements for 2004

	NCAA	FAAN	NAMA	Total
Ticket Sales Charges	\$ 28.7	\$ -	\$ 12.0	\$ 189.0
Other income	\$ 2.3	\$ 104.4	\$ 41.6	
Collected	\$ 33.1	\$ 96.7	\$ -	
Wages	\$ 28.6	\$ 27.7	\$ 7.4	
Pension & Gratuity	\$ -	\$ 5.3	\$ 8.8	\$ 128.4
Overhead	\$ 2.8	\$ 31.4	\$ 16.4	
Net income before investment	\$ (0.4)	\$ 40.0	\$ 21.0	\$ 60.6
Nber of employees (2005)	658	5,299	2,062	8,019
Receivables:				
Govt agencies	\$ -	\$ 11.3	\$ -	
Oil companies	\$ -	\$ 9.3	\$ -	
Airlines services	\$ 7.8	\$ 24.8	\$ -	
Nigeria Airways	\$ -	\$ 11.0	\$ -	
Staff loans	\$ -	\$ 2.6	\$ -	
Others	\$ 1.0	\$ -	\$ -	
Total	\$ 8.8	\$ 59.0	\$ -	
Net cash equivalent	\$ 21.6	\$ -	\$ -	

Source: NCAA, FAAN and NAMA's financial accounts, 2004

2. National Aviation Issues

77. Apart from the demonstrated deficiencies in safety and security, a host of issues affect day-to-day operations of the aviation sector in Nigeria. Among the most pressing ones are:

- Governance: It is obvious that each Agency suffers today from the results of many years of mismanagement and poor governance. The recent decision of the Government to reform

these agencies and appoint new administrators following the string of air disasters in 2005 and 2006 will be beneficial but unlikely to result in immediate results as the inherited culture of poor governance will persist until all key staff are either replaced or retrained. In this context, the institutional study which is to be financed under the ERGP for all the sector's agencies will provide a valuable tool for pushing forward reform and restore good governance in each individual agency. In addition, the results of the study, to be finalized by the end of 2008, will validate selected project activities provided that a tangible need for funding has been recognized.

- **Lack of funding:** Although Table 2 suggests that NAMA, NCAA and FAAN derive substantial revenues from users' fees, a large portion of their revenues are generated by Ticket Sales Charges (i.e., NAMA and NCAA) and poorly recoverable users' fees (i.e., domestic airlines in the case of FAAN). Accordingly, while NCAA, NAMA and FAAN financial books look relatively healthy, the combination of delays by the Federal Authorities in transferring the ticket charge receipts as well as difficulties associated with the collection of users' fees from domestic airlines tend to leave these agencies often cash strapped. As a result, they rely heavily on Government's subsidies to finance their long term investment needs with the consequence that, more often than not, only facilities requiring urgent investments for safety or security reasons receive funding. This leaves each agency incapable of properly maintaining and planning for the replacement of their existing equipment and facilities which explains for the most part the poor quality of most aviation infrastructure in Nigeria.
- **Overstaffing:** By any account, NAMA, NCAA and FAAN are significantly overstaffed. For instance FAAN handles about 1,800 passengers/employee/year, which translates into an overall employee productivity level nearly ten times lower than that of its South African counterpart. Likewise, NCAA's staff number is twice as much as that of its South African counterpart which oversees an aviation sector four times larger. The obvious result of the current overstaffing is threefold: 1) it weakens each agency's overall operational efficiency by creating unnecessary layers of bureaucracy, 2) it translates into important and unnecessary wage bills that consume a large portion of their revenues, and 3) it precludes them from retaining the skilled employees they need, as they cannot adjust their salary scale to remain competitive with the private sector.

3. Addressing National Aviation Issues

78. Based on the observations made during preparation, as well as the data provided by the local aviation authorities, a specific investment program for the NCAA, NAMA, FAAN and NCAT was developed. Further than dealing with the program's development objectives, this investment program represents an answer to the specific issues raised and complements the activities to be financed by the Federal Government and the ERGP. These are:

- **Governance:** under the ERGP, the Bank will finance a sector wide institutional study. In addition, under Nigeria's component of the WCAATSSP, additional studies related to basic evaluation of training needs (i.e., NCAA, NAMA and NCAT) in combination with studies to confirm expressed technical needs (i.e., NAMA's SATCOM system) will be implemented to ensure maximum impact of the proposed training and equipment acquisition. Furthermore,

the involvement of the Bank in the sector will promote good governance as significant financing will be subjected to the Bank's procurement guidelines and scrutiny.

- **Lack of funding:** it is obvious that it will take some time to define and implement a more suitable and reliable way to finance each agency. In the meantime, some urgent needs exist in terms of human capital strengthening and equipment rehabilitation/acquisition in order for Nigeria's aviation sector to achieve higher levels of safety and security. The Nigeria component of the WCAATSSP proposes, thus, to act as a gap financing tool until such time when the Federal Government has devised a more reliable system to ensure proper financing of the various sector's agencies.
- **Overstaffing:** While the Nigeria component of the WCAATSSP will not finance staff redundancy costs per se, it will provide significant financing for retraining the most valuable staff with the anticipated results that increased skills will ultimately translate into more competitive salaries for this staff; and in higher retention rates. Also, since several of the project's indicators will measure staff expertise and skills as well as overall budget levels for the NCAA, it will be in the Federal Government's best interest to ensure that problems related to overstaffing be addressed within the timeframe of the Nigeria component of the WCAATSSP.

4. Project Components and Detailed Activities

79. On the basis of the shortcomings and needs previously identified, an investment list covering the national needs of the aviation sector in Nigeria was developed with total investment estimated at US\$ 49.76 million. In order to provide a comprehensive view of the allocation of funds, the activities to be financed under the project have been detailed following their beneficiary agency as well as divided in the following seven categories:

- a) Personnel training;
- b) Agency's equipment;
- c) Aviation's communication/navigational aid equipment;
- d) Airport passengers, cargo and luggage screening equipment;
- e) Crisis center equipment;
- f) Airport infrastructure and equipment;
- g) Miscellaneous; and
- h) Unallocated.

Table 3: Nigeria project costs by activity category and by beneficiary agency (in US \$ millions)

	NCAA	FAAN	NAMA	NCAT	Total
Personnel training	4.00	0.00 ²³	4.80	6.86	15.66
Agency's equipment	2.55	1.70	0.00	0.00	4.25
Aviation equipment	0.05	0.05	2.79	1.54	4.43
Screening equipment	0.00	2.76	0.00	0.00	2.76
Crisis centers	0.00	1.30	0.00	0.00	1.30
Airport infrastructure	0.00	6.65	0.00	0.00	6.65
Miscellaneous	5.19	2.79	2.59	2.49	13.06
Total	11.79	15.25	10.18	10.89	49.76²⁴

World Bank, 2007

a) Personnel training

80. For the NCAA, the aim is to enhance the knowledge base and the experience in aviation safety and security. Therefore, training for safety oversight personnel as well as security training for AVSEC personnel will be undertaken.

81. For FAAN, training in screening equipment technology know-how, operations and maintenance will be carried out for the users of the newly acquired equipment.

82. For NAMA, an assessment study of the existing personnel skills will be carried out in order to identify the specific needs for emergency training. The fields of training will encompass aviation safety, air traffic control and air traffic communication.

83. For NCAT, the rationale is to build capacity for the School to provide training to the regional aviation personnel in the near future. An exploratory study will be carried out prior to any actions with a view to validate the expressed equipment, infrastructure and training needs and/or identify additional needs.

84. Finally, leadership training will be provided to the top management of all four agencies in order to ensure capacity building at their level.

85. In order to ensure maximum impact a “train the trainers” philosophy will be used within each agency whereby a selected few personnel will be identified to receive training so as to become effective inspectors and trainers in their respective field. This will allow them to disseminate their knowledge to other members of the agency. Such an approach will not only ensure that a critical number of agency employees are taught the basic skills to properly enforce ICAO’s standards, but will also avoid that the knowledge be captured by a single individual within each agency.

Total project cost for this activity is estimated at US\$ 15.66 million.

²³ Training cost is included in the equipment acquisition cost as training is usually provided by the equipment supplier.

²⁴ Including US\$ 1.65 million of unallocated funds.

b) Agency equipment

86. The equipment acquired for the NCAA will be aimed at completing its technical library, enhancing its personnel training centers in Abuja and Lagos and deploying a centralized IT system at its headquarters to facilitate inner agency communications as well as improve overall productivity.

87. FAAN will be responsible for the installation of an electronic badge identification system for airport personnel in Abuja, Lagos, Port Harcourt and Kano international airports. The project also includes the installation of a central IT system at FAAN headquarters.

Overall cost for this activity is estimated at US\$ 4.25 million (see Table 3).

c) Aviation equipment

88. The acquisition of VHF/Radio equipment sets for NCAA and FAAN aims at improving the field communication capacity of each agency's personnel.

89. Regarding navigational aids, NAMA has requested a replacement of its current satellite communications system used for air traffic control as well as the extension of its VHF system coverage. Additionally, it has requested the deployment of resource and document management software and the installation of local area networks to facilitate the automation of its business processes such as flight plan submission and distribution automation.

90. For NCAT, the provision of runway lights, an instrument landing system and a VHF Omnidirectional Range navigation system (VOR) at the airport serving its training school has been devised to expand the scope of the airplane operations and flight management training it can instruct.

Total cost for this activity is estimated at US\$ 4.43 million (see Table 3).

d) Screening equipment

91. In order to strengthen airport security, a significant number of screening equipment for passengers, luggage and cargo will be installed in Nigeria's main international airports. Accordingly, X-Ray machines for freight and passenger luggage as well as explosive material tracers at Lagos, Kano and Port Harcourt airports will be procured for FAAN. The deployment of these new machines will ensure that 100% of all cargoes and luggage placed on board airplane operating from these airports have been screened.

Total cost for this activity is estimated at US\$ 2.76 million (see Table 3).

e) Crisis centers

92. Field missions have revealed that none of the four main international airports surveyed had effective crisis management centers. Accordingly, it was decided to include funding for FAAN to create crisis centers at these airports in order to meet ICAO's requirements on this issue.

Total cost for this activity is estimated at US\$ 1.30 million (see Table 3).

f) Airport infrastructure and equipment

93. Airport infrastructure deficiencies are one of the causes behind Nigerian international airports inability to meet the most stringent international security and safety standards. As a matter of fact, investment needs in this area were found to be particularly dire in terms of: a) closed circuit television monitoring systems, b) aircraft remote parking, or c) fire fighting equipment. Accordingly, it was agreed to finance the acquisition of these equipment for FAAN. 94. These investments are to be complemented by appropriate training of airport personnel both at NCAT (i.e., firefighters) and in-house.

Total cost for airport infrastructure upgrade is estimated at US\$ 6.65 million (see Table 3).

g) Miscellaneous

95. This last project cost category covers various items such as consulting services related to capacity strengthening, project audits and US\$ 8.61 million for PCU and PIUs related management and operating costs. The Nigerian government's contribution totals up to US\$ 3.11 million for salaries, office rentals and operating costs.

Total cost for these items is estimated at US\$ 13.06 million (see Table 3).

Annex 5: Project Costs

Federal Airports Authority of Nigeria			
Activities	Total costs US\$ '000	IDA financing	Local financing
Construction of a crisis management centers in Abuja, Kano, Lagos and Port Harcourt airports	1,300	100%	
Installation of a central IT system at FAAN headquarters	1,000	100%	
Design of an airport emergency plan in Abuja, Lagos, Kano and Port Harcourt airports	600	100%	
Aircraft Remote parking in the event of crisis in Lagos, Kano and Port Harcourt airports	1,500	100%	
Acquisition of CCTV system in Lagos, Port Harcourt and Kano airports	450	100%	
5 X-Ray machines for freight in Lagos, Port Harcourt and Kano airports	1,100	100%	
10 Fire Trucks for main airports in Abuja, Lagos, Port Harcourt and Kano airports	4,700	100%	
9 X-Ray machines for passenger luggage in Lagos, Port Harcourt and Kano airports	1,260	100%	
Electronic badge identification system for Airport personnel in Abuja, Lagos, Port Harcourt and Kano airports	700	100%	
5 Explosive Material Tracer (Acquisition, Maintenance & Training)	400	100%	
Acquisition of VHF/Radio equipment set	50	100%	
Total excluding PIU operating costs	13,060	13,060	0

Nigerian Airspace Management Agency			
Activities	Total costs US\$ '000	IDA financing	Local financing
Exploratory Study of the satellite communication needs	200	100%	
Replacement/Installation of the SATCOM and extension of VHF coverage	1,800	100%	
Installation of local area networks for Abuja, Lagos, Port Harcourt and Kano airports	488	100%	
Enterprise resource software (business automation) – Contingent on the results of institutional study	350	100%	
Enterprise information and document management system – Contingent on the results of institutional study	152	100%	
Emergency Training Need Evaluation Study	200	100%	
Provision for emergency training needs	4,800	100%	
Total excluding PIU operating costs	7,990	7,990	0

Nigerian College of Aviation Technology			
Activities	Total costs US\$ '000	IDA financing	Local financing
Exploratory study to validate the equipment and training needs	300	100%	
Acquisition of one "No frasca Truflite" Simulator and one "Frasca Mentor G1000" Trainer for the Flying School	769	100%	
Provision of runway lights, ILS & VOR for the Flying School	1,538	100%	
Construction of a non destructive testing laboratory for the Aircraft Maintenance Engineering School	423	100%	
Expansion of ATN/AFTN/AMHS Laboratory in the Air traffic services/Communications School	62	100%	
Establishment of the Cartography Laboratory in the Air traffic services/Communications School	92	100%	
Installation of Fire fighting training equipment in the Air traffic services/Communications School	4,668	100%	
Recruitment of instructors	300	100%	
Current and Re-currency training	550	100%	
Total excluding PIU operating costs	8,702	8,702	0

Nigerian Civil Aviation Authority			
Activities	Total costs US\$ '000	IDA financing	Local financing
Installation of a central IT system at NCAA headquarters	1,250	100%	
Security Upgrade: Design of security system and access control of headquarters and regional offices	700	100%	
Development of the Training center: Equipping of ICAO/COSCAP BAG offices in Abuja for training use	100	100%	
Development of the Training center :Rehabilitation of existing offices for use as training center in Lagos	300	100%	
Acquisition of VHF/Radio equipment set	50	100%	
Acquisition of equipment and services to upgrade the technical library	200	100%	
Institutional study Corrective Action Plan	3,000	100%	
Safety training for safety oversight personnel : Enhancement of the knowledge base and experience	3,000	100%	
Security training for AVSEC personnel : Enhancement of the knowledge base and experience	1,000	100%	
Total excluding PIU operating costs	9,600	9,600	0

Annex 6: Implementation Arrangements

1. Regional Coordination

96. The implementation of the program is done on a country basis, based on the arrangements agreed with each government. The African Development Bank and other donors are funding all activities relevant to the regional coordination of the program. They are implemented by the respective RECs (UEMOA, ECOWAS and CEMAC Secretariat). Therefore, the fiduciary elements of this coordination are not spelt out in this Annex, which focuses mostly on implementation arrangements of the Nigeria's credit funded under the program. No project-funded activity per se necessitates simultaneous involvement of two or more countries. In Nigeria, the PCU located within the Federal Ministry of Transportation will manage procurement and disbursement activities on behalf of the beneficiary agencies (i.e., FAAN, NAMA, NCAT and NCAA). If deemed necessary, additional staffing for the PCU will be recruited and/or trained on World Bank procedures.

2. Nigeria Project

97. The Project will be implemented by the Federal Ministry of Transportation through a Project Coordination Unit (PCU) established on February 13th, 2007 by the Honorable Minister of Aviation. The PCU is composed of Federal Ministry of Transportation's personnel and includes a Project Manager, an Accountant, two Procurement Officers and an Auditor. This personnel has been detached from the Ministry to work full time as members of the PCU. In addition, the PCU is to be strengthened by two consultants (i.e., a Procurement Specialist and an Aviation Specialist) who are being recruited using Bank's procedures for national competitive recruitment. These two individuals, expected to be hired by August, 2007, will be appointed for an initial duration of one year, renewable based on needs and performance, and will supplement the technical and procurement expertise of already appointed PCU members. Their terms of reference will specifically include the provision of on-the-job training to their PCU counterpart in order to build capacity within the Federal Ministry of Transportation.

98. The performance of the PCU will be reviewed jointly by the Federal Ministries of Finance and Transportation on a regular basis and during the Bank's supervision missions at least twice a year. Remedial measures will be taken in case of problems or non-performance.

99. The PCU has been established using terms of reference and staff with the necessary qualifications and experience acceptable to the Bank. The Bank will review any proposed change of PCU members. The PCU is empowered and accountable for implementation of the project on a day-to-day basis in line with procedures governing project preparation and implementation particularly the Project Implementation Manual. The composition of the PCU is presented below:

- A Project Officer/Team Leader;
- Two Procurement Officers;
- A Project Accountant;
- A Procurement Specialist to be sourced externally;

- A Technical Consultant to be sourced externally; and
- A Project Auditor.

100. In recognition of the fact that in-depth technical knowledge lies within each participating agency, Project Implementation Units (PIUs) have been established at NAMA, NCAT, NCAA and FAAN. Each PIU is staffed by agency personnel whose role through this full time assignment is to: a) draft initial technical documentation in support of the project's procurement activities undertaken by the PCU, and b) oversee and report back to the PCU on the implementation on the ground of the project's activities. The Bank has suggested, however, that consultants recruited nationally using the Bank's procedures be added to each PIU in order to assist PIU personnel and help each agency build project management and implementation capacity. The compositions of the PIUs are detailed below by agency.

NCAA's PIU was created on March 12th, 2007. It comprises:

- A Project Officer/Team Leader
- An international Aviation Specialist to be sourced externally;
- A Financial Officer; and
- A Procurement Officer to be sourced externally.

FAAN's PIU was created on April 4th, 2007. It comprises:

- A Project Officer/Team Leader;
- A Financial Officer;
- Two Procurement Officers;
- An Aviation Technical Consultant to be sourced externally; and
- A Project Auditor.

NAMA's PIU was created on February 16th, 2007. It comprises:

- A Project Officer/Team Leader;
- A Financial Officer;
- Two Procurement Officers;
- An Aviation Technical Consultant to be sourced externally; and
- A Project Auditor.

NCAT's PIU was created on March 8th, 2007. It comprises:

- A Project Officer/Team Leader;
- A Financial Officer;
- Two Procurement Officers, and
- A Project Auditor.

101. Oversight: Overall oversight of the project will be carried out by the Federal Ministry of Transportation. It will provide overall oversight, policy direction and resolve any issues/bottlenecks that may ensue to hamper project preparation and implementation. The PCU Team Leader, senior sector officials from the beneficiary agencies, and a representative of the Permanent Secretary of the Federal Ministry of Finance will participate in the oversight meetings as part of a Project Steering Committee (PSC) which will meet every quarter to review the

project's implementation status and performance. This review process will be based on standard quarterly project financial management, procurement and implementation reports that will be produced by the PCU for the Bank. The Federal Ministry of Transportation will provide the secretariat.

Scope of Services for the Project Coordination Unit, the Project Implementation Units, and the Project Steering Committee

Project Coordination Unit (PCU)

102. The Project Coordination Unit will undertake day-to-day management of the Project based on the applicable provisions of the Financing Agreement.

Responsibilities of the PCU

103. Specifically, the PCU will undertake the following project management activities:

- Prepare the project implementation plan;
- Select consultants accordingly to World Bank procedures;
- Invite bids according to World Bank procedures;
- Prepare project contractual documents;
- Prepare bidding documents;
- Conduct evaluation of bids;
- Undertake contract negotiations;
- Facilitate issuing of letters of awards;
- Recruit an environmental specialist on a retainer basis;
- Liaise with World Bank as part of coordination role;
- Discuss and agree with the consultants, suppliers and contractors detailed project activities;
- Facilitate the mobilization of contractors and consultants;
- Facilitate import clearance, where applicable;
- Supervise and monitor consultants and contractors;
- Supervise project implementation at all levels;
- Draw up procedures for receiving, verification and payment of invoices on timely basis;
- Ensure timely payments to consultants, suppliers and contractors;
- Timely prepare and submit progress reports;
- Ensure that financial audits are carried out in time;
- Ensure all safeguard policies are adhered to; and
- Keep and maintain all project records, reports and information.

Responsibility of PCU Team Leader (i.e., Project Manager)

104. The Team Leader shall provide the overall leadership of the project.

Specifically, the Team Leader shall:

- Manage the day-to-day activities;
- Plan, direct, control and coordinate the activities of their components;
- Implement the project in accordance with the overall plan of operations and activity schedules and report changes thereto;
- Monitor the performance of consultants, suppliers and contractors in accordance with agreed contractual obligations;
- Ensure that there is structured and consistent monitoring of progress of implementation, including quarterly reports, and annual audit reports.

Project Implementation Units

105. Each Project Implementation Unit will assist on a day-to-day basis the PCU to develop, review and supervise project activities benefiting it.

Responsibilities of the PIUs

106. Specifically, the PIUs will undertake the following project management activities:

- Draft technical specifications for bidding documents to be published by the PCU;
- Participate in evaluation bids at PCU's request;
- Participate in contract negotiations at PCU's request;
- Provide feedback to PCU on status of activities implementation;
- Provide feedback to PCU on technical studies; and
- Liaise with World Bank's Team as part of coordination role.

Project Steering Committee

107. The Bank has approved during appraisal the following PSC composition proposal by the PCU:

Chairman:

- Permanent Secretary, Federal Ministry of Transportation (Air Transport)

Members:

- Director, Planning, Research and Statistics
- All Heads (CEOs) of beneficiary Agencies (NAMA, FAAN, NCAA and NCAT)
- Deputy Director (Planning Research and Statistics)
- Representative of the Federal Minister of Finance
- Representative of the Nigerian's Air Force
- PCU Team Leader (also doubling as Secretary of Steering Committee)

Responsibilities of PSC

108. The PSC will be responsible for:

- Providing support and resolving any constraints that may hamper project implementation and would require interventions from other ministries or arms of the Government.
- Providing policy direction on matters relating to the project preparation and implementation.
- Carry out risk assessments of fiduciary risks related to the project implementation, in consistency with the current dialogue between the World Bank and the government on governance issues.

The PSC will meet at least quarterly.

109. The arrangement has been designed to ensure that the proposed project is implemented smoothly and speedily without compromising on quality, transparency and fiduciary responsibilities of the Government, and the World Bank.

Annex 7: Financial Management and Disbursement Arrangements

1. Financial Management Arrangements

110. The financial management assessment was carried out in line with the Financial Management Practice Manual (November 2005) of the Financial Management Board. The objective of the assessment is to determine whether the implementing entity has acceptable financial management arrangements, which will ensure: (i) that funds are used only for the intended purposes in an efficient and economical way; (ii) the preparation of accurate, reliable and timely periodic financial reports; and (iii) safeguarding of the entities' assets.

2. Country Issues

111. A review of implementation of CFAA (2000) recommendations in January 2005, further supported by a recent PEMFAR, observed that the Federal Government has made a significant effort to advance reform of the PFM system since 2003. Major achievements so far have been: (i) the adoption of an oil-based fiscal rule that has greatly improved the quality of macroeconomic management; (ii) launching of significant steps toward increased transparency of the budget process; (iii) more efficient cash management; (iv) procurement reforms; (v) updating the legal framework for PFM; (vi) reallocation of budget resources in support of Millennium Development Goal-related government functions; (vii) strengthening monitoring and evaluation; and (viii) introducing a more strategic longer-term focus in budget management. This has clearly helped reduce waste of public resources, particularly on the capital budget and payroll sides. The impact of these early measures is also evident in significantly improved fiscal and broader macroeconomic outcomes. Efforts are on going to improve governance through PFM initiatives and reforms articulated in the Government's NEEDS, which are supported under the CPS, specifically through the three Bank assisted projects (i.e., EMCAP, SCBGP and the ERGP).

3. Risk Assessment and Mitigation

112. General Risks: Non financial management specific risks that could have an impact on the successful implementation of the project. These preliminary risks are rated at a particular time through a specific process. The recommended mitigating measures when implemented successfully will yield significant improvement resulting in the residual risk ratings. The ratings will be reviewed during Supervision Missions and recorded in the Aide Memoire and Implementation Status Reports (ISR).

Risk	Preliminary Risk Rating	Risk Mitigating Measures incorporated in Project Design	Conditionality	Residual Risk Rating
Country Level Ensuring efficient, accountable and transparent decision making in the use of public resources	High	<ul style="list-style-type: none"> This Project is consistent with the objectives and approach of the Country Partnership Strategy (CPS) that supports Nigeria's NEEDS. The CPS aims to achieve the following results to national challenges: <ul style="list-style-type: none"> ➤ improved service delivery for human development, especially scientific innovations and technological creativity by all; ➤ improved environment and services for non-oil growth; enhanced intellectual pursuits; and ➤ Improved transparency and accountability for better governance which minimize opportunity for corrupt practices. The proposed Project supports results package under the above, in reforms that touch on national systems and institutions of accountability e.g. in budgeting, accounting and reporting systems, procurement management and auditing being supported by government and development partners. 	None	Moderate
Entity Level Weak institutional capacity to implement the project's components and to effectively monitor progress and embracing full accountability for results. Poor implementation performance of the	High	<ul style="list-style-type: none"> The project will be implemented by Federal Ministry of Transportation. The project governance structure plan includes the setting up of a Project Steering Committee (PSC). The PSC is will carry out risk assessment of fiduciary risks related to the project implementation. 	Establishment of a PCU with adequately qualified and experienced professionals is completed. Two external consultants, one procurement expert and one	Moderate

aviation component of the ERGP.			aviation specialist to be recruited to strengthen PCU's capacity.	
Project level				
No previous experience in Bank assisted project implementation by staff in the Project Coordination unit (PCU)	Substantial	<ul style="list-style-type: none"> • Appointment of appropriately qualified and competent key management and technical staff. • Capacity building in Bank procedures and disbursement guidelines. 	Maintenance of the key management and technical staff and leadership in the PCU during the life of the project should desirably be a covenant and documented in the Appraisal Aide Memoire.	Moderate
Sub-Overall Risk	High			Moderate

11.3. Control Risk: The fiduciary risk that the project's financial management system is inadequate to ensure project funds are used economically and efficiently and for the purpose intended. The mitigation measures recommended are intended to prevent the risks from occurring during the implementation of the project. The improvements achieved are expected to result in the stated residual risk ratings.

Risk	Preliminary Risk Rating	Risk Mitigating Measures Incorporated in Project Design	Conditionality	Residual Risk Rating
Budgeting				
Continued close monitoring of budget	Moderate	<ul style="list-style-type: none"> Development of project budget template taking into account the work plans from the four agencies participating in the project. Budget execution to be monitored through quarterly Interim Financial Reporting or statements (IFR). 	Quarterly Interim financial reporting (IFR) arrangements and formats to be agreed during project negotiations.	Low
Accounting				
Misuse of and failure to account for project funds	Moderate	<ul style="list-style-type: none"> Accounting and internal control procedures established and documented in Financial Procedures Manual (FPM). Institution of independent and effective internal audit function that is focused on risk management approaches. Recruitment of professionally qualified accountants. Employment of adequately qualified and experienced financial management staff and the deployment of robust accounting software for accounting and financial reporting. Project reporting guidelines and timelines included in the FPM. Implementation to be monitored by the PCU and status reports to be prepared quarterly for review by the PSC. The reports to be shared with FMOT and World Bank, for monitoring and follow up. 	Quarterly Interim Financial Reporting (IFR) arrangements and formats to be agreed during project negotiations.	Low
Accountability and reporting difficulties given the project's four benefiting agencies	Moderate	<ul style="list-style-type: none"> An integrated computerized financial accounting system will be established by the PCU. Project reporting guidelines and timelines included in the FPM. Periodic/Quarterly interim financial reports/statements 	Periodic/Quarterly Interim financial reports/statement to be used by the four agencies and formats	Low

		to be used to monitor accountability. • Implementation to be monitored by the PSC.	to be agreed during project negotiations.	
Internal Control				
Internal Audit	Moderate	<ul style="list-style-type: none"> The PCU's Internal Audit unit will be responsible for independent and effective internal audit and risk management function. Project accounting and reporting guidelines included in the FPM. PCU strengthened by using trained staff. 	None	Low
Internal control policies and procedures	Moderate		None	Low
Funds Flow				
Funds flow arrangements are simple, no delays are anticipated.	Low	<ul style="list-style-type: none"> Disbursement for all the four activities benefiting the agencies will be centralized in one designated account managed by the PCU. The PCU with an adequately qualified and competent accountant is already in place. Additional 2 Accountants and accounting technicians will be appointed on need basis. 	None PCU with a qualified accountant and auditor is already in place as a start.	Low
Financial Reporting				
Accountability and reporting difficulties as a result of the project's four benefiting agencies.	Moderate	<ul style="list-style-type: none"> Project reporting guidelines and timelines included in FPM. Implementation to be monitored closely by the PSC. 	None	Low
Delayed finalization and submission of annual financial statements	Moderate	<ul style="list-style-type: none"> Government financial reporting regulations and guidelines are consistent with IDA requirements and shall consistently be applied. 	None	Low
Auditing				
Availability of capacity in the office of the Federal Auditor General	Moderate	<ul style="list-style-type: none"> Arrangements for reliance on a comprehensive internal audit work program to ensure effective auditing of project funds. Federal Auditor General will appoint one of the private sector audit firms from the list of audit firms for the purpose of auditing the project. The auditor will be engaged within 90 days after project effectiveness. TOR that are satisfactory to the IDA will be prepared by PCU not later than the project's Board Date 	None	Low
Sub-overall Control Risk	Moderate			Low

114. Detecting abuse of Project Funds: The risk that in aggregate terms, there could be material misuse of loan proceeds at any of the different implementing levels fails to be detected in a timely fashion.

Risk	Preliminary Risk Rating	Risk Mitigating Measures Incorporated in Project Design	Conditionality	Residual Risk Rating
Misuse of and failure to account for project funds	Moderate	<ul style="list-style-type: none"> • Robust and risk based internal auditing approaches by an independent and effective internal audit unit as part of risk management function. • Compliance with requirement for periodic/quarterly interim financial reporting/statements arrangement that has been included in project design 	Periodic/Quarterly financial statement reporting arrangements and formats to be agreed during project negotiations	Low
Overall FM Risk Rating	Substantial	<ul style="list-style-type: none"> • The overall risk exposure is considered Substantial for this project. This will be mitigated substantially by implementing and adhering to the proposed risk management regimen, reducing it to moderate rating. The PCU will be well trained in Bank procedures and have a good appreciation of the use of computerized FM. A robust internal audit outfit that will apply risk based audit approach focus will be established and strengthened given the Substantial risk rating of the project. Finally, a living practical, simple and sound FM manual of financial procedures (FPM) will be in place at the PCU. 		Moderate

Weaknesses

115. The PCU has no previous experience in the implementation of Bank assisted project and the poor implementation performance of FMOT in the aviation component of the ERGP raises concerns as to the ability of the PCU to carry out its fiduciary responsibilities.

Action Plan

116. The plan below indicates the actions to be taken for the project to further strengthen its financial management system:

Ref No.	Action	Date due by	Responsible
1	Assign/Engage 2 additional professionally qualified Project Accountants with time to meet the agreed 3 and engages 1 more internal auditor to the 1 already in the PCU. In addition to these key FM staff, agreement has been reached for provision of a small number of supportive accounting technicians in both accounting and auditing functions based on project needs.	Key FM unit staff in place. Additional staff will be added gradually where there is justification based on project needs.	FMOT/PCU
2	Retain short-term consultant to: (a) advise on the set-up of the computerized FMS; and (b) train staff in the operation of the system.	September 30 th , 2007	PCU
3	Open Designated Dollar Account, Current Draw-down account in Naira. FMOF, FMOT and IDA advised of authorized bank signatories	August 31 st , 2007	PCU
4	Training FM staff on Bank FM and Disbursement guidelines and Procurement staff on Bank procurement guidelines	September 30 st , 2007	PCU/PIUs
5	Agreement of terms of reference for the external auditor and commence process of appointment in support of action 6.	September 30 st , 2007	PCU
6	Designation of an External Auditor for the PCU	December 31 st , 2007	PCU

4. Implementing Entity's Roles and Duties

117. In addition to overall coordination, the PCU will be responsible for overall accountability for the financial management of the credit.

118. Financial management services to the project will be provided respectively through an accounts and internal audit units that will be set up within the PCU solely for the project and will be staffed by one professionally qualified project accountant and one internal auditor who will be accountable to the project manager. The project accountant and project auditor will be supported by the accounting and auditing technicians, respectively. As work load necessitates, additional professionally qualified Project Accountants and Internal Auditors will be recruited for the duration of the project. Meanwhile, it was agreed that accounting technicians will be provided to the PCU to ensure that internal controls through segregation of duties is not undermined. The FM arrangements for the project are designed to: (i) ensure that funds are used for the purpose intended; (ii) ensure production of timely information for project management and government oversight; and (iii) to facilitate compliance with IDA fiduciary requirements. Specifically, the accounts unit will be responsible for: (a) preparing activity budgets, monthly Designated Account reconciliation statement, quarterly Statement of Expenses (SOEs) withdrawal schedule, quarterly Interim Financial Reports (IFRs), and annual financial statements, (b) ensuring that the project financial management arrangements are acceptable and forwarded to the Government (i.e., Ministries of Aviation and Finance) and IDA while continuously being improved and updated through the life of the project and, (c) monitoring, evaluating and reporting on project's financial evolution. The financial management arrangements will be reviewed twice a year either during a FM implementation support mission or as part of regular project supervision missions. However, the PCU will be able to call on the IDA's country based fiduciary staff for guidance and support any time during the life of the project.

119. Since the overall FM risk of the project is rated substantial, various measures to mitigate FM risks will be agreed upon prior to negotiations, including implementation of actions designed to strengthen the financial management system. Such measures will also be elaborated in the Governance Note for the project prepared by the Project Team and the Country Management Unit (CMU). The financial management arrangements will be reviewed periodically as part of regular project supervision missions.

5. Planning and Budgeting

120. Cash budget preparation will be detailed in the FPM. The annual cash budget will be broken down quarterly and monthly, in support of project activities as reflected in the approved work plan and procurement plan. All annual cash budgets will be sent to the Bank's Task Team Leader by the PCU at least two months before the beginning of the project fiscal year. Detailed procedures for planning and budgeting will be documented in the Financial Procedures Manual.

6. Internal Control and Internal Auditing

121. Internal control comprises the whole systems of control, financial or otherwise, established by the PCU in order to: (i) carry out the project activities in an orderly and efficient manner; (ii) ensure adherence to policies and procedures; (iii) safeguard the assets of the project; and (iv) secure as far as possible the completeness and accuracy of the financial and other records.

The key elements to ensure a sound internal control system will include:

- Segregation of duties;
- Physical control of assets;
- Authorization and approval;
- Clear channels of command;
- Arithmetic and accounting accuracy;
- Integrity and performance of staff at all levels; and
- Supervision.

122. In addition to these internal control measures, the PSC will be involved in the review of projects activities as well as their implementation. This, together with a robust internal audit unit applying risk based approaches in auditing the project, will promote transparency, accountability and substantially help to manage the risk of corruption.

123. Project activities will also be reviewed by the Internal Audit Unit (IAU). The Head of Internal Audit Unit will report to the Project Manager and, at minimum, will: (i) carry out periodic reviews of project activities, records, accounts and systems; (ii) ensure effectiveness of financial and accounting policies and procedures, as well as compliance with internal control mechanisms; (iii) review SOEs; (iv) physically verify purchases and assets; and (v) carry out other functions as stated in its approved charter. All project FM staffs are expected to undergo training in Bank procedures on Financial Management and Disbursements, as well as training on risk-based auditing.

7. Accounting

124. Project accounts will be maintained on a cash basis, augmented with appropriate records and procedures to track commitments and to safeguard assets. Accounting records will be maintained in dual currencies (i.e., Naira and \$). The Chart of Accounts will facilitate the preparation of relevant monthly, quarterly and annual financial statements, including information on the following:

- Total project expenditures;
- Total financial contribution from each financier;
- Total expenditure on each project component/activity; and
- Analysis of expenditures for goods, works, consultants' services, including auditing, training and other procurement and disbursement categories.

125. Annual financial statements will be prepared in accordance with relevant International Public Sector Accounting Standards (IPSAS). All accounting and control procedures will be documented in the FPM and regularly updated by the respective Project Accountant and approved by the PSC and shared with IDA and the Government.

8. Financial Reporting

126. Within the PCU, the project manager will ensure that the accountants will prepare the **Interim Financial Reports (IFR)** on a timely basis (i.e., monthly and quarterly) and that the **Annual Financial Statements** presented below are submitted. Quarterly and annual reports will have to be submitted respectively to: (i) the PSC, FMOT, FMOF and IDA - for the purpose of monitoring project implementation.

Monthly Reports

127. They will comprise:

- Bank Reconciliation Statement for each bank account;
- Statement of cash position for project funds from all sources, taking into consideration significant reconciling items;
- Statement of expenditure classified by project components, disbursement categories, and variance analysis with budgets; and
- Statement of Sources and Uses of funds (by Credit Category/ Activity showing IDA and Counterpart funds separately).

Quarterly Reports

128. They will include:

- Financial Reports, which will include a statement showing for the period and cumulatively (project life or year to date) inflows by sources and outflows by main expenditure classifications; opening and closing cash balances of the project; and supporting schedules comparing actual and budgeted expenditures. These reports will also include cash forecast for the following two quarters as well as analysis of disbursements against contracts;
- Physical Progress Reports, which will include narrative information and output indicators (agreed during project preparation), linking financial information with physical progress and highlighting issues that require attention;
- Procurement Reports, which will provide information on the procurement of goods, works, and consultants and on compliance with agreed procurement methods. These reports will compare procurement performance against the agreed plan at negotiations or subsequently updated, and highlight key procurement issues such as staffing and building Recipient's capacity;
- SOE withdrawal schedule, listing individual withdrawal applications relating to disbursements by the SOE method, by reference number, date and amount; and

- Designated account statement reconciliation, showing deposits and replenishments received, payments supported by withdrawal applications, interest earned on the account and the balance at the end of the reporting period.

129. Indicative formats for the reports were provided to the PCU shortly after project appraisal. The subsequent revised formats were submitted by the PCU on May 16th for approval by the Bank.

Annual Financial Statements

130. They will comprise:

- A Statement of Sources and Uses of funds (by Credit Category/by Activity showing IDA and Counterpart Funds separately);
- A Statement of Cash Position for project funds from all sources;
- Statements reconciling the balances on the various bank accounts (including IDA Designated Account) to the bank balances shown on the Statement of Sources and Uses of funds;
- SOE Withdrawal Schedule listing individual withdrawal applications relating to disbursements by the SOE Method, by reference number, date and amount; and
- Notes to the Financial Statements.

9. Auditing

131. The IDA Financing Agreement will require the submission of audited Annual Financial Statements for the project, within six months after year-end. In addition each of the four benefiting agencies will provide IDA audited financial reports on their activities no later than six months after the end of each fiscal year. The reports shall include statements of revenue collected, statements of expenses and statement on expenses relating to security and safety activities. A report on the use of the Ticket Sales Charge will be furnished to the Association no later than six months after the end of each fiscal year.

132. A qualified, experienced and independent external auditor will be appointed for the project and the benefiting agencies. He will audit the project activities based on TORs acceptable to IDA. Besides expressing an opinion on the **Annual Financial Statements** in compliance with International Standards on Auditing (ISAs), the auditor will be required to include a separate opinion paragraph on the accuracy and propriety of expenditures made under the **SOE procedures** and the extent to which these can be relied upon as a basis for loan disbursements. Regarding the **Designated Account**, the auditor will also be expected to form an opinion on the degree of compliance with IDA procedures and the balance at the year-end.

133. In addition to the audit report, the external auditor will be expected to prepare a **Management Letter** giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the IDA agreement.

10. Financial Management Supervision Plan

134. The first FM review will be carried out within the first six months of project implementation jointly with the procurement post review. A consultant will be engaged to carry out this detailed review which will cover all aspects of FM, internal control systems, reviewing the overall fiduciary control environment and tracing transactions from the bidding process to disbursements as well as SOE review. Thereafter, given that the FM risk rating for the project is substantial, subsequent reviews will be as follows: review of quarterly FMRs; review of audited Annual Financial Statements and management letter as well as timely follow up of issues arising; bi-annual transaction review which will be jointly done with the post procurement review by the procurement unit; participation in project supervision missions as appropriate; and updating of the financial management rating in the Implementation Status report (ISR). The FM staff within the Country Office will play a key role in monitoring the timely implementation of the action plan.

11. Fund Flows and Disbursement Arrangements

Bank and IDA Accounts

135. It is envisaged that a number of prior actions will have been undertaken between the project preparation phase and the signing of the Financing Agreement. In particular, there are FM activities reflected in the FM action plan that the Government of Nigeria has or will pre-finance in support of project preparation. These expenditures will be eligible for reimbursement in an aggregate amount not exceeding US\$ 250,000 equivalent, as part of a retroactive financing provision not exceeding US\$ 2,300,000 equivalent that will be provided in the Financing Agreement.

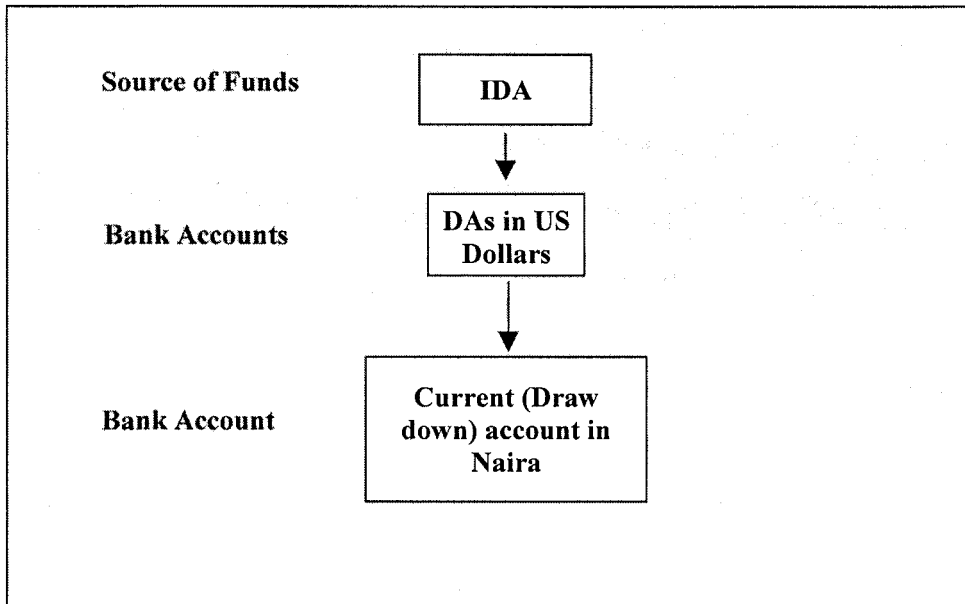
136. IDA will disburse the credit through a single US\$ Designated Account (DA), opened and operated by the PCU with support from its accounts unit. Specific funding, banking and accounting arrangements will be as follows:

- A US\$ DA account to which the initial deposit and replenishments from IDA funds will be lodged.
- A current US\$ Interest Account in a bank acceptable to IDA to which interest on the DA will be credited.
- A current draw down account in Naira to which draw-downs from the DA will be credited once or twice per month in respect of incurred eligible expenditures, maintaining balances on this account as close to zero as possible after payments.

137. All three (3) bank accounts will be reconciled with bank statements on a monthly basis by the PCU. A copy of each bank reconciliation statement together with a copy of the relevant bank statements will be reviewed monthly by the Project Accountant who will expeditiously investigate identified differences. Detailed banking arrangements, including control procedures over all bank transactions (e.g., check signatories, transfers, etc.) will be documented in the Financial Procedures Manual (FPM).

138. Additionally, the PCU will have an IDA Ledger Loan Account (Washington) in US Dollars/Naira/SDR to keep track of withdrawals from IDA credit. The account will show: (i) deposits made by IDA, (ii) direct payments by IDA, (iii) draw downs by the PCU, and (iv) opening and closing balances. The PCU will also be encouraged to register with the Disbursement Unit of the Bank for direct access to Client Connection facility, from where up to date information on the Credit disbursement data will be obtainable.

Funds Flow Diagram



Disbursement Methods

139. By effectiveness, the Project will use the **Transaction-based Disbursement Procedures** (as described in the World Bank Disbursement Handbook), i.e., replenishment, direct payment, reimbursement, and special commitments. When project implementation begins, the quarterly Interim Financial Reports (IFRs) produced by the Project will be reviewed. If the reports are found to be adequate and produced on a timely basis, and the Recipient requests conversion to report-based disbursements, a review will be undertaken by the Task Team Leader (TTL) to determine if the Project is eligible for report-based disbursement. The adoption of report-based disbursements by the Project will enable it to move away from time-consuming voucher-by-voucher (transaction-based) disbursement methods to quarterly disbursements to the Project's Designated Account based on IFRs. Detailed disbursement procedures will be documented in the FPM.

Minimum Value of Applications

140. The Minimum Value of Applications for reimbursement, direct payment and special commitment is 20 percent of outstanding advance made to the Designated Account.

Reporting on Use of Credit Proceeds

141. The supporting documentation for reporting eligible expenditures paid from the Designated Account should be a summary report of the Statement of Expenditures and records evidencing eligible expenditures for payments against contracts valued US\$ 500,000 or more for goods, US\$ 500,000 or more for works, US\$ 100,000 or more for consulting firms and US\$ 50,000 or more for individual consultants and a list of payments against contracts that are subject to the Bank's prior review. The supporting documentation for requests for direct payment should be records evidencing eligible expenditures (copies of receipt, supplier's invoices, etc). All supporting documentation for SOEs will be retained at by the accounts unit of the PCU and will be made available for review by periodic World Bank review missions, internal and external auditors. In addition, for Works, unless the activity to be financed has been subjected to a satisfactory prior review by an independent environmental safeguard specialist based on documentation to be provided by the PCU's environmental expert, disbursement against such activity will not occur.

Designated Account

142. The Designated Account will be managed by the PCU, under delegation of the FMOF. The currency for Designated Account will be United States Dollar. The allocation ceilings of the Designated Accounts will be as indicated on the Disbursement Letter (DL).

Counterpart Funding

143. The Government will provide US\$ 3.11 million by way of counterpart parallel financing for the project.

Monthly Replenishment Applications

144. The DAs will be replenished through the submission of Withdrawal Applications on a monthly basis by the accounts unit and will include reconciled bank statements and other documents as may be required until such time as the Recipient may choose to convert to report-based disbursement.

12. Disbursements by category

145. The table below sets out the expenditure categories and percentages to be financed out of the Credit proceeds.

Category	Amount of the Credit Allocated	Percentage of Expenditures
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	(expressed in SDR)	to be Financed (inclusive of taxes)
(1) Goods	12,660,000	100
(2) Works	2,450,000	100
(3) Consultants' Services	4,800,000	100
(4) Training	6,220,000	100
(5) Operating costs	3,640,000	100
(6) PPF	540,000	100
(7) Unallocated	590,000	
Total Amount	30,900,000	

Conclusion Statement:

146. The Financial Management Assessment conclusion is that subject to the recommended mitigation measures and the recommended action plan being implemented as per agreed time frame, the project has met the minimum FM requirement in accordance with OP/BP 10.02. Further, this objective will be sustained by ensuring that strong financial management systems are maintained for the project throughout its duration. Detailed Financial Management reviews will also be carried out regularly, either within the regular proposed supervision plan or a more frequent schedule if needed, to ensure that expenditures incurred by the project remain eligible.

Annex 8: Procurement Arrangements

1. General

Country Environment

147. Before 2000, public procurement in Nigeria was in fact unregulated and non-transparent, and represented a huge cost to the Treasury because of widespread fraud and corruptive practices. Since FY2001, Nigeria has been implementing slowly a procurement reform program based on the recommendations of the 2000 CPAR. A review of the implementation of the 2000 CPAR recommendations, as reflected in the recent PEMFAR, shows that implementation of the procurement reform program has brought about improvements in obtaining value for money in public sector expenditures and in introducing some level of transparency into the procurement process. Many CPAR recommendations have been implemented or are being carried out. In this regard, the CPAR of 2000 has been a positive catalyst, because it supported the agenda of financial sanitation of the current Government. The FGN took the following several key actions to advance the procurement reform.

148. The Federal Ministry of Finance (FMOF) circulated Guidelines for Due Process Certification of Contracts, contained in Circular No.F15775 of June 27, 2001, on “New Policy Guidelines for Procurement and Award of Contracts in Government Ministries and Parastatals.” The guidelines included a number of critical measures such as: (i) the abolition of Federal and Departmental Tender Boards and their replacement with Ministerial Tender Boards; (ii) the requirement for the preparation of quarterly procurement plans; (iii) the application of open competitive tendering procedures and the making of contract splitting to circumvent this principle a serious offence; (iv) the nationwide advertising of public contracts above 10 million Naira; (v) the creation of clearly defined and transparent tender and proposal evaluation criteria; (vi) the requirement to submit tender and performance securities, public tender openings, and award contracts to the lowest evaluated bidder; and (vii) the publication of tender awards in the national press, and the carrying out of procurement audits and inspections.

149. The Government created the Budget Monitoring and Price Intelligence Unit (BMPIU) in the same year as a Due Process Unit located within the Presidency, to ensure that this Circular was carried out. The BMPIU provides “due process certificates for award of contract” after review of the procurement documents prepared by the MDAs. The BMPIU also carries out due process reviews for the certification of contract payments. Market prices are reviewed for adequate guidance (“the right cost of the contract”); if proposed contracts are too costly compared with this price analysis, the BMPIU may not certify the proposed award of the contract and may request that the price be adjusted to the market level. The recent PEMFAR report indicated that contract prices were reduced substantially and, in 2004, reportedly saved the Treasury substantial amount. Six years after the 2000 CPAR, collaboration between procurement and financial management has been strengthened considerably. A Cash Management Team chaired by the Federal Minister of Finance, of which the BMPIU is a member, ensures that payments are made only when certified by the BMPIU.

150.A Public Procurement Act has been enacted by the Government in June 2007. The Act adheres to the principles of the UNCITRAL model law, and outlines the principles of open competition, transparent procurement procedures, clear evaluation criteria, award of contract to the lowest evaluated tender, and contract signature. The legislative framework is applicable to all procurement categories (suppliers, contractors, consultants) and must be applied for all public funds regardless of value. The Act has provisions for exceptions to competitive tendering, which are the exception rather than the rule. Also, the Government has already prepare draft implementation Regulations, Standard Bidding Documents and Manuals for the Procurement of Goods, Works and Consulting Services, which describes the minimum contents of the tender and proposal documents. The essential elements of these documents are in line with internationally acceptable procurement standards. The Procurement Act also presents the need for a complaints and appeals mechanism to be established.

151.*Procurement Risk at the Country level:* Substantial progress in procurement reforms has recently been made at the Federal Government level. The contract administration in the public sector, however, still suffers from inefficiency and delays in contract payments while additional delays in the Nigerian Customs are worsening the situation. Meanwhile, the current practice in which BMPIU has the authority to request contract price adjustments when they exceed market levels (i.e. negotiation of contract prices) is against the spirit of competition and allows potential abuses. Assurances were requested during project negotiations that this practice will not be applicable to contracts financed with the Credit fund. Also the Government was encouraged to discontinue this practice which may turn out to be counterproductive. For projects in Nigeria, in general, the key procurement issues and risks during implementation of projects that use the national system include: (i) the absence of appropriate regulation (bidding documents, Standard Evaluation formats, etc.); (ii) the lack of National Procurement Manuals; (iii) the lack of adequate record keeping; and (iv) inefficient contract management systems and techniques that are common in the public sector. These issues will be eliminated as soon as the draft Implementation, Regulations, Procurement Manual and the Standard bidding documents are finalized and made operational.

152.Currently, the Government Procurement reform program is being supported by an IDA Credit –ERGP with a substantial component focusing on procurement reforms and an IDF Grant, to assist Government address the weak procurement capacity in the public sector and to build appropriate partnership with the private sector. On the other hand, Government is also in the process of reforming the Custom practices to modernize them and make them more effective.

153.Though there has been improvement in obtaining value for money in public sector expenditures as well as increased levels of transparency in the procurement process, substantial steps are still being taken by Government to reform its procurement policy and practices to make them more efficient, effective and transparent. However, until the Procurement Act is fully operational and institutionalized, hopefully in the next one year, the procurement risk in the country will remain substantial.

154.*Procurement risk at the Federal Ministry of Transportation level:* The Federal Ministry of Transportation, particularly the Air Transport sector, does not have history of implementing Bank-financed projects apart from the ongoing Economic Reform and Governance Project

(ERGP). During the implementation of this project, substantial weaknesses have been identified. They especially include insufficient procurement capacity in both Federal Ministry of Transportation and the executing Agency (FAAN) which has lead to non adherence to procurement scheduling and inadequate contract management skills. However, these weaknesses will be mitigated by the proposed remedial measures detailed below, under Assessment of the PCU capacity.

Guidelines

155. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004, revised in October 2006; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised in October 2006, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are discussed during Appraisal and will be agreed between the Recipient and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Where applicable, the Bank's Standards Biddings Documents (SBD) for goods and works and Standard Request for Proposals for Consultants, as well as all standard evaluation forms, will be used throughout project implementation. Currently, there is no National SBD acceptable to IDA. Therefore, the Bank's SBD will be adapted for use by the project for all National Competitive Bidding (NCB packages).

Advertising

156. A comprehensive General Procurement Notice (GPN) will be prepared by the Recipient and published in the United Nations Development Business online (UNDB online) and in the Development Gateway Market (dgMarket) to announce major consulting assignments and any ICB²⁵. The GPN shall include all works under ICB, all goods contracts under ICB, and all large consulting contracts (i.e., those estimated to cost US\$ 100,000 or more). In addition, a specific procurement notice is required for all goods and works to be procured under ICB and request for expression of interest for contract expected to cost more than US\$ 100,000 shall be advertised in UNDB online and in dgMarket. An Expression of Interest (EOI) is required in the national gazette or a national newspaper or in an electronic portal of free access for all consulting firm services regardless of the contract amount. In the case of NCB²⁶, a specific procurement notice will be published in the national gazette or a national newspaper or an electronic portal of free access. Contracts awards will also be published in UNDB and dgMarket, in accordance with the Bank's Procurement Guidelines (para 2.60) and Consultants Guidelines (para 2.28).

²⁵ ICB: International Competitive Bidding

²⁶ NCB: National Competitive Bidding

Summary of Institutional Responsibility

157. The Project will be implemented by the Federal Ministry of Transportation through a Project Coordination Unit (PCU) already established and staffed with relevant key staff. The PCU, whose terms of reference, necessary qualifications and experience were acceptable to the Bank, is composed of Federal Ministry of Transportation's personnel and includes a Project Manager, an Accountant, two Procurement officers and an Auditor. In addition, the PCU is to be strengthened by two consultants (i.e., a procurement specialist and an aviation specialist) who are being recruited competitively using Bank procurement procedures. These two individuals, expected to be hired by August 2007, will be appointed for an initial duration of one year, renewable based on needs and performance, and will supplement the technical and procurement expertise of already appointed PCU members. Their terms of reference will specifically include the provision of on-the-job training to their PCU counterpart in order to build capacity within the Federal Ministry of Transportation.

158. The performance of the PCU, including procurement, will be reviewed jointly by the Federal Ministry of Transportation on a regular basis and during the Bank's supervision missions at least twice a year. Remedial measures will be taken in case of problems or non-performance. The PCU will be empowered to take implementation decisions for the project as shall be detailed out in the Project Implementation Manual (PIM).

159. In recognition of the fact that in-depth technical knowledge lies within each participating agency Project Implementation Units (PIUs) have been established at NAMA, NCAT, NCAA and FAAN. Each PIU is staffed by agency personnel whose role through this full time assignment is to: a) draft initial technical documentation in support of the project's procurement activities undertaken by the PCU, and b) oversee and report back to the PCU on the implementation on the ground of the project's activities. The Bank has suggested, however, that consultants recruited nationally using the Bank's procedures be added to each PIU in order to assist PIU personnel and help each agency build project management and implementation capacity. The compositions of the PIUs by agency are as detailed out in Annex 6 above.

Procurement of Works

160. Works procured under this project would include technical library space and training rooms at agency headquarters as well as construction of crisis centers and remote aircraft parking within existing airport passenger operational perimeters. The works procurement will be undertaken using the Bank's SBD for all ICB and National SBD designed on the basis of Bank Standard Bidding Documents due to no existence of National Standard Bidding Documents. Minor civil works estimated to cost less than US\$ 60,000 equivalent per contract, which are labor intensive, which do not lend themselves to grouping and therefore are unlikely to attract foreign bidders, may be procured under shopping procedures as detailed in paragraph 3.5 of the "Guidelines: Procurement under IBRD Loans and IDA Credits" May, 2004 and June 9, 2000 Memorandum "Guidance on shopping" issued by the Bank. To ensure that quality of the rehabilitation or renovation works are ascertained, relevant engineering staff of the FMOT will be assigned to assist with the design and supervision of the infrastructure facilities. The procurement plan will detail out acceptable procurement methods for the works contracts.

Procurement of Goods

161. Goods procured under this project would include navigational aids, luggage, passenger and cargo screening machines, patrol and ambulance vehicles, video monitoring equipment, electrical generators, radios, satellite communications systems, computers and electronic ID badges. Goods procurement will be undertaken using the Bank's SBD for all ICB and National SBD designed on the basis of Bank Standard Bidding Documents due to no existence of National Standard Bidding Documents. Procurement for readily available off-the-shelf goods that cannot be grouped, or standard specification commodities for individual contracts of less than US\$ 60,000 equivalent, may be procured under shopping procedures as detailed in paragraph 3.5 of the "Guidelines: Procurement under IBRD Loans and IDA Credits" May, 2004, and the Guidance on Shopping Memorandum" issued by IDA, June 9, 2000. Such contract will be awarded on the basis of written quotation obtained from at least three qualified suppliers in response to a written invitation. The invitation will include a detail description of the good, including basic specifications, quantity, quotation submission deadlines, completion date, a basic form of agreement, and any other relevant information. The procurement plan will detail out where such method will be applicable.

Selection of Consultants

162. Consulting services will include technical and financial audits and reform study for the agencies included in the WCAATSSP's Nigeria project. Likewise, it will encompass drafting of national and airport specific security plans. Consultants will be selected using Request for Expressions of Interest, short-lists and the Bank's Standard Requests for Proposal, where required by the Bank's Guidelines. Short lists of consultants for services estimated to cost less than US\$ 100,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 through 2.8 of the Consultant Guidelines.

Operating Costs

163. The operating costs shall include travel expenditures and other travel-related allowances with prior clearance from IDA; equipment rental and maintenance; vehicle operation, maintenance and repair; materials and supplies; utilities and communication expenses; and bank charges. Operating Costs financed under the project will be procured using implementing agency's administrative procedures that shall be acceptable to the Bank.

Trainings, Workshops, Seminars and Conferences

164. Training, workshops, seminars and conferences attendance and study tours will be carried out on the basis of approved annual programs that will identify the general framework of training and similar activities for the year, including the nature of training/study tours/workshops, the number of participants, and cost estimates.

2. Assessment of the PCU's capacity to carry out procurement activities

165. An assessment of the capacity of the PCU to implement procurement actions for the project has been carried out in accordance with Procurement Services Policy Group (OCSPR) guidelines dated August 11, 1998. The assessment reviewed the organizational structure for implementing the project and the roles of the key actors in project implementation. The detailed assessment is in the project files. The assessment revealed that there is inadequate procurement capacity in the Federal Ministry of Transportation which has never managed a Bank financed project in the past. This also stressed the need for procurement capacity enhancement as shown by delays incurred during the initial implementation phase of the ERGP.

166. Regular staff of the Federal Ministry of Transportation has been assigned to the PCU in order to take on the project's fiduciary responsibilities. They will be assisted in their task by personnel of the four beneficiary agencies as described in Annex 6 of this document. In light of the limited knowledge of Bank's operations of the procurement Officers assigned to the PCU's, the Federal Ministry of Transportation has agreed to recruit through competitive process, technical specialists; including a procurement specialist to help build up the low capacity. The PCU will, therefore, be responsible for the implementation of project activities on a day-to-day basis in line with the PIM and Bank guidelines. Part of the PCU's Procurement Specialist (Consultant) terms of reference will include training and development of the PCU and PIUs designated Procurement Officer's skills in Bank's procurement procedures.

167. The key issues and risks concerning procurement for implementation of the project have been identified and include: (i) lack of appropriate structure (staffing) in place to manage the procurement function for implementation; (ii) lack of appropriate Regulation (bidding documents, Standard Evaluation formats, etc.); (iii) lack of Project Implementation Manual including Procurement and Financial Management Manuals; (iv) existing staff does not have experience in Bank procurement procedures, (v) lack of adequate record keeping; (v) lack of procurement planning and noticeable split of contracts leading to high cost of contract in some cases; (vi) inadequate contract management systems and techniques; and (vii) frequent and undue interference in procurement decisions. Accordingly, the following list of corrective measures will be put in place to address the issues and risks prior and during project implementation.

	Action	Responsibility	Due Date	Remarks
1	Procurement Plan for the first 18 months prepared and agreed with the Bank	FMOT	Submitted and reviewed by IDA	Has been agreed on during Negotiations
2	Prepare and adopt an acceptable Project Implementation Manual (PIM)	FMOT	By October 31 st , 2007	To be reviewed and cleared by IDA
3	Adoption of a Generic Procurement manual for Bank financed Projects in Nigeria	FMOT	By December 31 st , 2007	To be reviewed and cleared by IDA
4	Set up adequate filing system	FMOT	By October 31 st , 2007	To ensure easy retrieval of information/data
5	Computerized record system	FMOT	By October 31 st , 2007	To ensure easy retrieval of information/data
6	Organized Contract Management training for project staff	FMOT/Bank	by October 31 st , 2007	To improve project staff cont. mgt. skills
7	Develop procurement and tracking system	FMOT	By October 31 st , 2007	To monitor effectiveness and efficiency of procurement

Country	Procurement Unit	Item Assessed	Assessment				Major Weaknesses	Risk Assessment			Actions Proposed	Proposed Completion Date
			Null	Poor	Fair	Satis.		Low	Moderate	Substantial		
Nigeria		Organization and Staffing		X			The PCU assigned staff does not have Bank procurement experience.			X	Staff has been assigned and EOI to recruit relevant TAs including Procurement Specialist published Also the assigned staff will be trained.	By October 31, 2007
		Professional Experience				X		X				
		Control System		X			There is no significant follow up and control done by the MDAs in the Public service.			X	Include this control in the Bank's audits (IPR & PPR).	
		Procedure Manual				X	There is no Procurement procedure manual		X		Adapt the Generic Procurement Manual for Bank financed projects in Nigeria.	By December, 31, 2007
		Procurement Planning and monitoring			X		Familiar with preparation of procurement plan and its updating. However there is no reflex on feedback for the Executing agency			X	(i) Extract on quarterly basis from the procurement plan the ongoing process including actual date to inform PCU and PIUs' management on progress made for follow up purpose D	During implementation on quarterly basis
		Record keeping and filing system			X		Although efforts have been made regarding equipment, there is insufficient space for archiving documents.		X		Launch a new local for archiving.	By October 31, 2007

Other Actions:

- A detailed procurement plan for the first 18 months has been prepared and being reviewed by the Bank

168. In view of the level of risk identified above, the overall project risk for procurement is Substantial. One of the major problems in project implementation in Nigeria is the change of staff mid-stream. Assurances will be given by the Recipient that staff who would have received training under the project would not be changed except for reasons to be mutually agreed between the Government and IDA.

Procurement Plan

169. The Recipient has prepared a detail procurement plan for the first eighteen months of project implementation which provides the basis for the procurement methods. The Plan has been reviewed by the Bank, discussed during Appraisal and agreed on during Negotiations before being made available to beneficiary agencies, and the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Publication of Results and Debriefing

170. On-line (DG Market, UN Development Business, and/or Client Connection) publication of contract awards will be required for all ICB, NCB, Direct Contracting and the Selection of Consultants for contracts of US\$ 100,000 or more. In addition, where prequalification has taken place, the list of pre-qualified bidders will be published. With regard to ICB, and large-value consulting contracts, the Recipient will be required to assure publication of contract awards as soon as IDA has issued its 'no objection' notice to the recommended award. With regard to Direct Contracting and NCB, publication of contract awards could be in aggregate form on a quarterly basis and in local news papers. All consultants competing for an assignment involving the submission of separate technical and financial proposals, irrespective of its estimated contract value, should be informed of the result of the technical evaluation (number of points that each firm received), before the opening of the financial proposals. The PCU will be required to offer debriefings to unsuccessful bidders and consultants should the individual firms request such a debriefing. The public will have unhindered access to these publications.

Frequency of Procurement Supervision

171. In addition to the prior review supervision to be carried out from Bank's offices, the capacity assessment of the PCU has indicated the need for field supervision missions to occur at least twice a year so as to carry out post review of procurement actions.

3. Detailed procurement plan

- **Bank's approval Date of the procurement Plan:** 7/24/2007
- **Date of General Procurement Notice:** 6/3/2007
- **Period covered by this procurement plan:** Fiscal Year 2008 – 2009 (18 months)

Goods

Prior Review Threshold:

	Procurement Method	Prior Review Threshold (US\$)	Comment
1.	ICB (Goods)	≥ 250,000	All
2.	LIB (Goods)	≥ 250,000	All
3.	NCB (Goods)	< 250,000	First contracts
4.	Direct Contracting	All	All
5.	Shopping	≤ 60,000	None

Note: ICB=International Competitive Bidding
LIB=Limited International Bidding
NCB=National Competitive Bidding

1	2	3	4	5	6	7	8	9	10
Ref. No.	Contract (Description)	Benefiting Agencies	Estimated Cost US\$, 000	Procurement Method	Pre or Post qualification	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Expected Date of contract signature
001	Aircraft Fire fighting Equipment	NCAT	3,855.00	ICB	Post	No	Prior	April 2008	June, 2008
002	Fire Tender Vehicles	FAAN & NCAT	5,040.00	ICB	Post	No	Prior	Jan. 2008	March 2008
003	Multiple contracts for Utility Vehicles	PCU & PIUs	255.00	NCB	Post	No	Prior	July 2007	Sept. 2007
004	Ambulance Vehicle	NCAT	86.00	NCB	Post	No	Post	Feb. 2008	March 2008
005	Multiple contracts for Office Equipment	PCU & PIUs	60.00	Shopping	Post	No	Post	June 2007	June 2007
006	Supply & Installation of LAN Equipment	NAMA	420.00	ICB	Post	No	Prior	Aug. 2008	Nov. 2008
007	Enterprise Resource software Business Automation)	NAMA	350.00	ICB	Post	No	Prior	Nov. 2008	Jan. 2008
008	Enterprise Information and document management	NAMA	152.00	NCB	Post	No	Post	Nov. 2008	Dec. 2008
009	Multiple contracts for VHF Radio	NCAA, & FAAN	100.00	NCB	Post	No	Post	Dec. 2007	Jan. 2008

	Equipment								
010	Supply & Installation of IT Equipment	FAAN	350.00	ICB	Post	No	Prior	Sept. 2008	Oct. 2008
011	CCTV Equipment	FAAN	447.69	ICB	Post	No	Prior	Jan. 2008	March 2008
012	Scanning Equipment	FAAN	2,836.80	ICB	Post	No	Prior	Feb. 2008	March 2008
013	Electronic Badge ID's System	FAAN	700.00	ICB	Post	No	Prior	Feb. 2008	March 2008
014	Cartographic Laboratory Equipment	NCAT	92.00	NCB	Post	No	Prior	Oct. 2008	Dec. 2008
015	Upgrading of ATN / AMHIS Laboratory Equipment	NCAT	60.00	Shopping	Post	No	Post	Dec. 2008	Feb. 2009
016	Equipment for Technical Library	NCAA	200.00	NCB	Post	No	Prior	Nov. 2007	Jan. 2008
017	Equipment for Training Centre	NCAA	100.00	NCB	Post	No	Post	Jul. 2008	Sept. 2008

Works and non-consulting services

	Procurement Method	Prior Review Threshold US\$	Comment
1.	ICB	≥ 500,000	All
2.	NCB	< 500,000	First contracts
3.	Direct Contracting	All	All
4.	Shopping	< 60,000	None

Note:ICB=International Competitive Bidding
NCB =National Competitive Bidding

1	2	3	4	5	6	7	8	9	9
Ref. No.	Contract (Description)	Benefiting Agencies	Estimated Cost US\$, 000	Procurement Method	Pre or Post qualification	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Expected Date of contract signature
001	Rehabilitation of Existing offices for use as training centre	NCAA	300.00	NCB	Post	No	Post	Nov.2007	Jan. 2008
002	Construction of NDT laboratory	NCAT	423.00	NCB	Post	No	Post	Dec. 2008	Feb. 2008
003	Construction of Fire Fighting Training Laboratory	NCAT	45.00	NCB	Post	No	Post	Dec. 2008	Feb. 2008

Selection of Consultants

Prior Review Threshold:

	Selection Method	Prior Review Threshold US\$	Comment
1	QCBS (Firms)	≥ 100,000	All
2	Single Source (Firms)	All	All
3	Single Source (Individual)	All	All
4	Consultants qualification (CQS)	< 100,000	First contracts
5	Individual Consultant	≥ 50,000	All

Note :

QCBS=Quality and Cost Based Selection.

CQS=Consultant Qualification Selection

SSS=Single Source Selection

IC=Individual Consultant

Any Other Special Selection Arrangements: N/A

1	2	3	4	5	6	7	8
Ref. No.	Description of Assignment	Benefiting Agency	Estimated Cost US\$,000	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Expected Date of Signature
001	Design and supervision of installation of central IT system	NCAA	300.00	QCBS	Prior	March 2008	Aug. 2008
002	Design and supervision of installation of security system upgrade	NCAA	200.00	QCBS	Prior	April 2008	Aug. 2008
003	Technical assistance for implementation of ICAO safety corrective action plan	NCAA	3,000.00	QCBS	Prior	May 2008	Sep. 2008
004	Design and supervision of construction of crisis management center	FAAN	200.00	QCBS	Prior	March 2008	July 2008
005	Design and supervision of installation of IT system at FAAN headquarters'	FAAN	300.00	QCBS	Prior	Nov. 2007	Feb. 2008
006	Design of airport emergency plan	FAAN	600.00	QCBS	Prior	March 2008	July 2008
007	Evaluation of SATCOM's Upgrade Needs	NAMA	200.00	QCBS	Prior	April 2008	Aug. 2008
008	Design and supervision of upgrading/installation of SATCOM equipment	NAMA	300.00	QCBS	Prior	April 2008	Aug. 2008
009	Design and supervision of installation of LAN	NAMA	68.00	CQS	Prior	Feb. 2008	Feb. 2008
010	Emergency training needs study	NAMA	200.00	QCBS	Prior	March 2008	July 2008
011	Exploratory study on equipment, infrastructure and training needs	NCAT	300.00	QCBS	Prior	Jan 2008	May 2008

012	Engagement of instructors for NCAT	NCAT	300.00	IC	Prior	Dec. 2008	Jan. 2009
013	Recruitment of an Aviation Technical Consultant for the PIU ²⁷	NAMA	110.00	IC	Prior	June 2007	August 2007
014	Recruitment of an Aviation Specialist for the PIU	NCAA	300.00	IC	Prior	June 2007	August 2007
015	Recruitment of a Procurement Consultant for the PIU	NCAA	110.00	IC	Prior	May 2007	August 2007
016	Recruitment of an Aviation Technical Consultant for the PIU	FAAN	110.00	IC	Prior	June 2007	August 2007
017	Recruitment of a Procurement Consultant for the PIU	FAAN	110.00	IC	Prior	June 2007	August 2007
018	Recruitment of a Procurement Specialist	PCU	110.00	IC	Prior	May 2007	August 2007
019	Recruitment of an Aviation Specialist	PCU	300.00	IC	Prior	May 2007	August 2007

Short list comprising entirely of national consultants: Short list of consultants for services, estimated to cost less than US\$ 100,000 equivalent per contract, may comprise entirely of **national consultants** in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

²⁷ For the technical assistance to NAMA, FAAN and the NCAA as well as for the recruitment of the Procurement and Aviation Specialists, recruitment activities correspond to the estimated value of each individual consultant first year contract as well as a prorated value of their contract for an extra six months.

Annex 9: Economic and Financial Analysis

172. Today West and Central Africa's (WCA) air transport sector faces many safety and security issues and individually, most of the WCA States do not have the financial and human resources to comply with either US, European or ICAO's safety and security requirements. In West and Central African countries, the regional Air Transport Program initiated by the Bank is aiming to enhance the compliance with security and safety international standards in support of the economic and social development in the Region. Specific economic sectors would benefit from the improvement of air services namely tourism, trade (manufacturing, agriculture) or employment.

173. Measuring the economic benefits of the implementation of the program would require forecast data about the quantitative impact of putting in place measures that would strengthen safety and security of air transport in the targeted countries. No such information is available, however, and no cost-related data can be obtained to make relevant computations. Furthermore, the nature of the investments financed (i.e airport security infrastructure and equipment, safety and security training) make any quantification of these benefits difficult as these investments are among many others necessary to strengthen the aviation sector's growth potential. Nevertheless, it is still possible to highlight today's impact on the aviation sector globally in SSA countries based on available studies and surveys. More specifically the major impacts of the project would be on tourism, travel fares, trade and investment into Africa.

1. Tourism in Africa – the Role of Aviation

174. In 2004, according to a World Tourism Organization (WTO) report, Africa accounted for 4 % of international tourist flows, or 30 million tourists. Among African countries, five, namely Morocco, Tunisia, South Africa and the Seychelles accounted for 60% of that total (see Table 1), while Nigeria and WCA countries accounted for only, respectively, 2.1% and 13.0% of that same total.

Table 1: Tourism in Africa (2004)

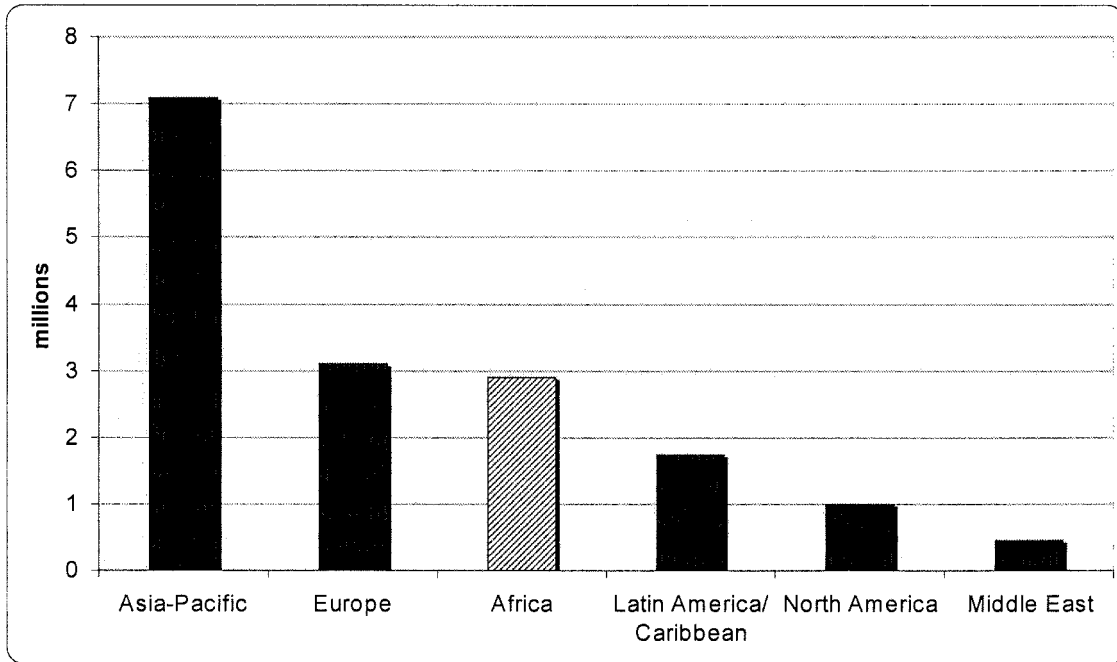
	Number of Tourists	Share in tourists' flow to Africa
<i>Cameroon</i>	320,000	1.1%
<i>Mali</i>	145,188	0.5%
<i>Burkina Faso</i>	290,005	1.0%
<i>Guinea</i>	50,000	0.2%
<i>Nigeria (1998)</i>	640,000	2.1%
<i>Morocco, Tunisia, South Africa, Kenya, the Seychelles</i>	18,000,000	60.0%
<i>Rest of Africa</i>	10,554,807	35.2%
<i>Total Africa</i>	30,000,000	100.0%

Source: see References

175. Although African's share of international tourism is limited, with nearly 3 millions jobs, it boasts the third largest number of direct and indirect tourism employments linked to air activities

worldwide (see Figure 1). Such number provides strong evidence of the unusually large dependency of Africa's tourism activities on aviation services. Thus, Africa, and for that matter WCA countries depend, more than any other world's regions or countries on aviation activities for their tourism activities.

Figure 1: Tourism-related employment (indirect + direct) supported by air (2004)



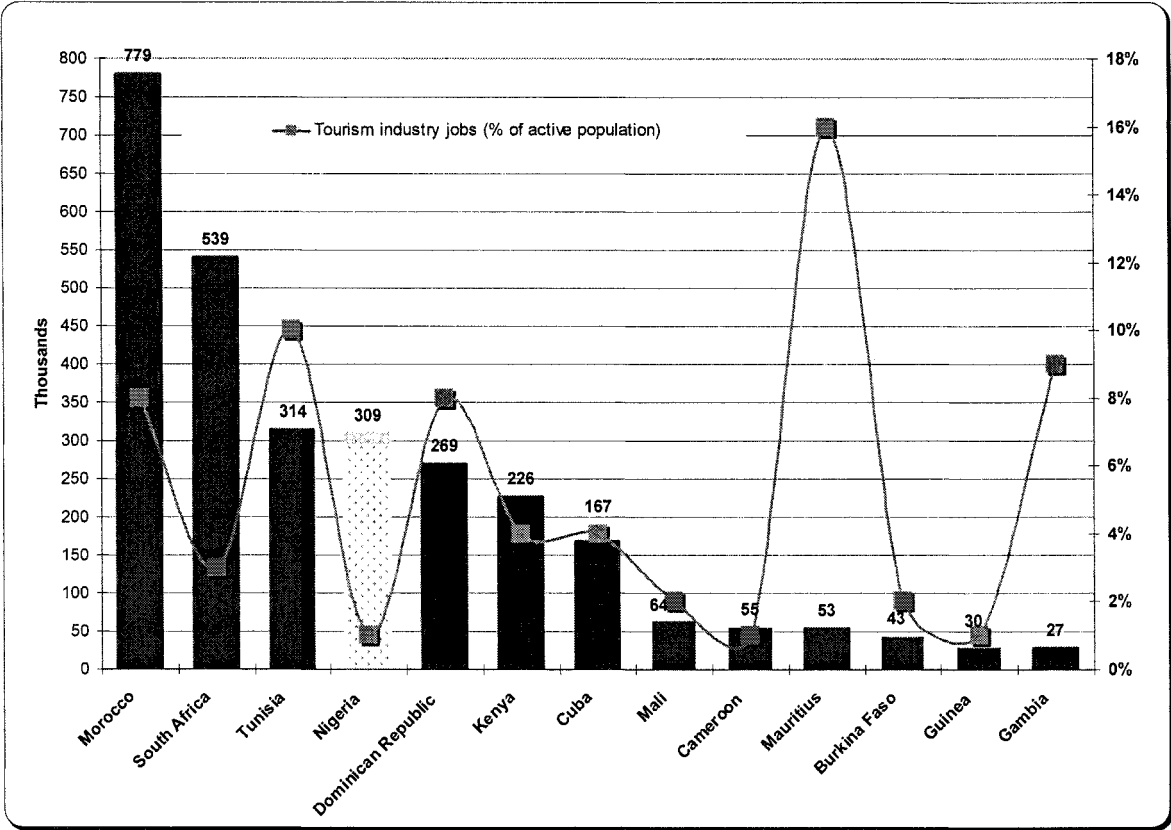
Source: OEF-WTTC, 2004

176. The proportion of direct employment generated by tourism in Nigeria is in the range of Africa's most visited countries (see Figure 2); its ratio of direct employments to the yearly number of attracted tourists is actually more than four times higher than in Morocco, South Africa, Kenya, Tunisia and the Seychelles combined. This underscores Nigeria's past ability to generate a significant amount of jobs from tourists and reflects the country's potential to carry on. At a regional level, Nigeria is the leading country with the 309,000 jobs its tourism supports annually. However, in spite of this dominant position, revenues generated by these activities accounted in 2004 for US\$ 124 million/year (see Figure 3) since tourists only spend on average US\$ 194 per stay in the country, compared to US\$ 537 per stay in Burkina Faso and US\$ 1988 per stay in Cameroon. Lastly, 1.5% of Nigeria's total capital investment depends on tourism activities (see Figure 4), a relatively high figure given the massive capital investments for petroleum exploration and production.

177. These numbers underscore the importance of tourism for these countries' economy and, consequently, that of air transport which is in all WCA the primary mode of transport utilized for international tourists to reach them. By connecting West to Central Africa, Nigeria's prevalent geographical position sets the grounds for a future regional hub. Additionally, the country's striving activities in the oil industry as well as its tourist industry both rely on the aviation sector. As such, any improvements in air safety and security, in as much as it should translate in lower air fare and greater air service frequency, can impact positively this sector; thus boost tourism

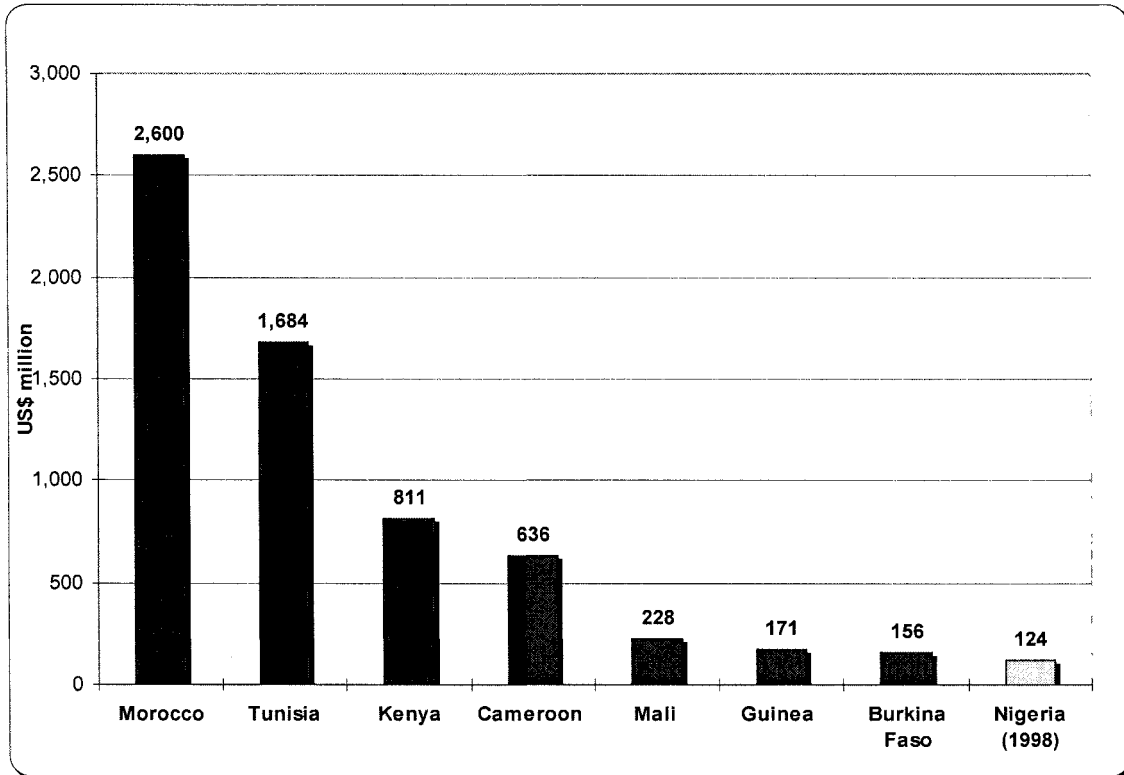
related employment, revenues and investment. It is not by mistake that the dominant countries in the African tourism industry (i.e., the Group of five) all boast world class air carriers which are supported by world class civil aviation authorities and airport security and safety. Indeed, among this group of five, all but the Seychelles which does not have national airlines, have civil aviation authorities certified Category I by the US FAA and airports certified by the US TSA for direct flights to the USA.

Figure 2: Tourism industry direct employment in 2004



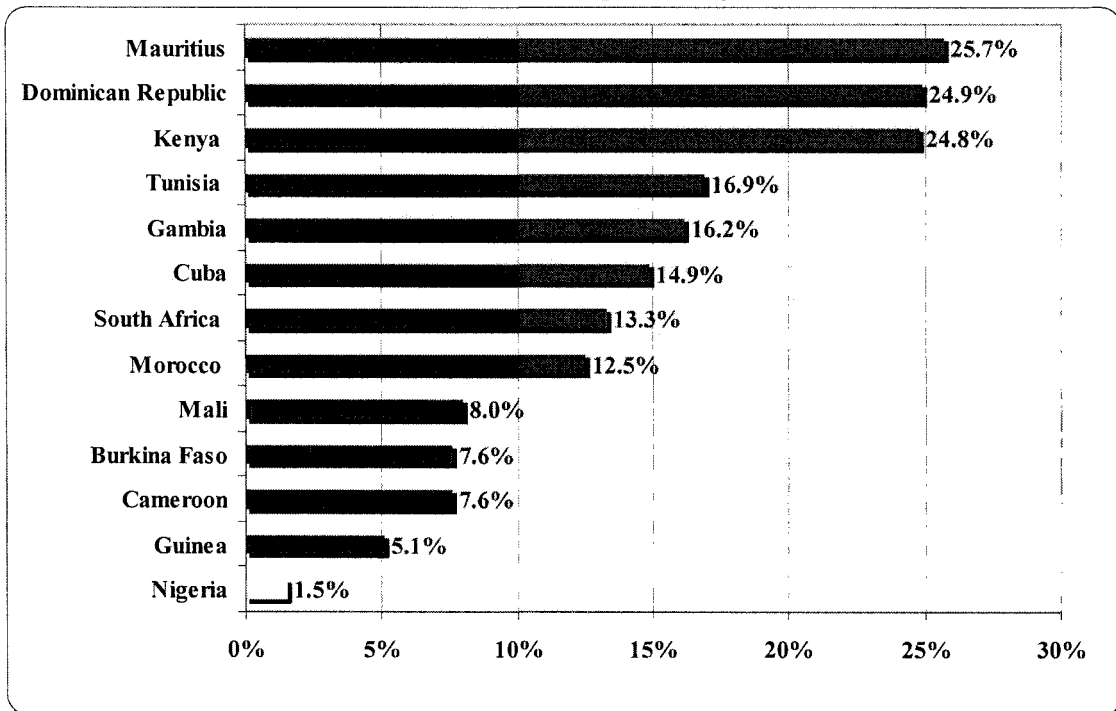
Source: WTTC, 2004

Figure 3: Annual tourism revenues (2004)



Source: WTTC, 2004

Figure 4: Tourism capital investment as a percentage of total investment (2004)

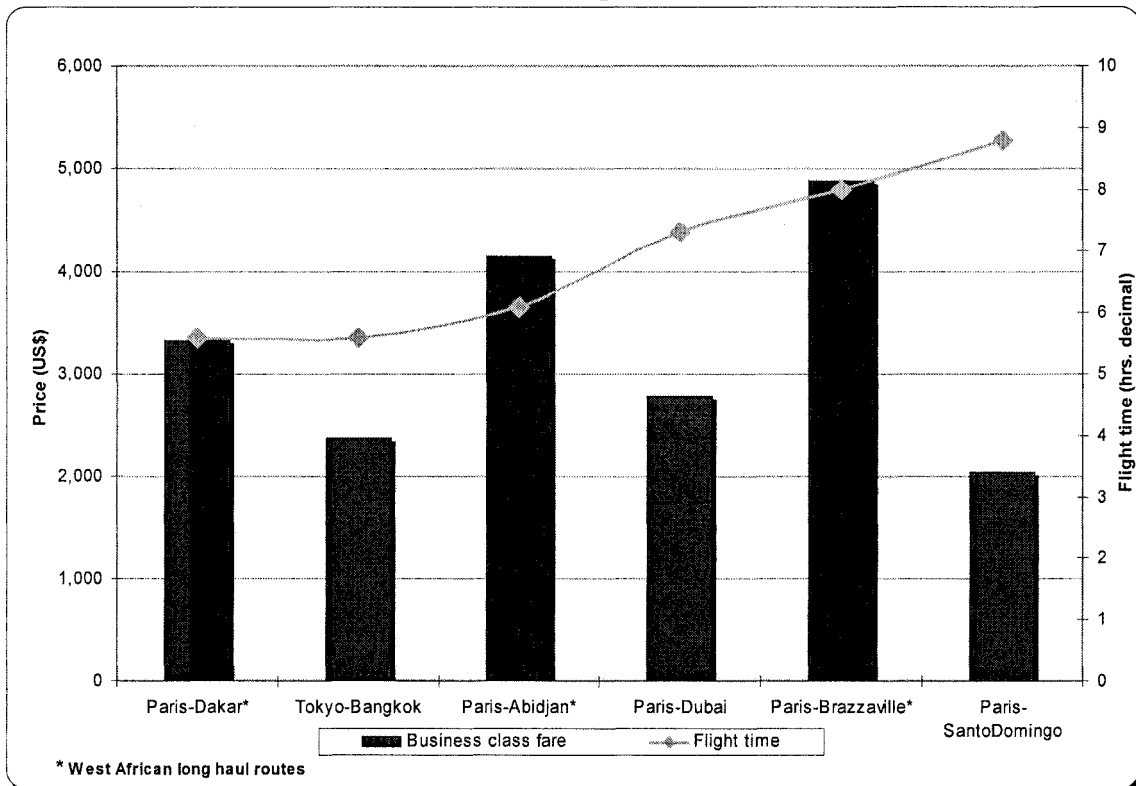


Source: WTTC 2004

2. Impact of Aviation/Airport Safety and Security on Air Services Frequency and Price

178. Air transport services in Africa, and especially WCA countries, are characterized by the scarcity of frequency offered as well as the high level of fares they command. As shown in Figure 5, for international flights of comparable times and distance, people traveling to/from Africa will pay anywhere from 40 to 138% more per miles flown in business class. Such difference in price reflects mostly the lack of competition to/from Africa whereas non-African international carriers hold a dominant position on most international city pair services as local carriers, when they exist, cannot simply compete head-to-head with vastly larger European carriers in large part due to poor safety and reliability records that hamper their competitiveness. This situation is not, however, irreversible as shown by the successful growth of national, albeit partially privately owned, African carriers such as Kenya Airways or Air Senegal International which have succeeded in competing head-to-head with European carriers with the correlated results of lowering air fares on these routes as well as increasing frequency. One key aspect of these success story is that both carriers have benefited from secured and safe airport infrastructure (i.e., both Dakar and Nairobi airports are certified by the US TSA for direct flights to the US) as well as adequately competent technical oversight from their respective civil aviation authorities (i.e., Kenyan Civil Aviation Authorities is certified Level I by the US FAA while Senegal's is on the verge of obtaining this certification).

Figure 5: Compared return fares on a sample of WCA and other long haul routes



Source: Iches, Michel: "Air Transport in Western and Central Africa: Facts and Issues." The World Bank Group, August 2003.

179. A similar situation, although with even more pervasive effects exists in WCA regional aviation markets. Here competition is even more restrained as countries continue to protect jealousy their national carriers behind safety and security arguments in spite of the adoption of the YD whose main purpose was to fully liberalize regional traffic. Indeed, time and time again evaluations of the YD have shown that most countries were failing in implementing it with the worst offenders, such as Senegal, often hosting national champions. It has become amply clear, therefore, that any improvements in the general level of aviation safety and security in WCA would preclude most countries from using the safety and security arguments to restrict market access and, thus, result in increasing service frequency as well as, more than likely, lower air fares.

3. Impact of Aviation/Airport Safety and Security on Investment

180. According to a survey made by the consultant agency Healey and Baker in 2003, at a worldwide level 56 % of the companies consider international air transport links to be an essential factor for locating businesses. Another survey made by IATA showed that 18% of businesses' past investment decisions were directly affected by the absence of reliable, safe and secure air transport links. This suggests that providing SSA countries with minimum safety and security requirements in the civil aviation field can contribute to creating investment-attractive conditions for international companies.

181. An example of these investment-attractive conditions is the ability to negotiate and to conclude partnerships: a survey made by the Aviation Services of the City of London pointed out that while new technology, such as video or audio conferencing, can be useful, companies in the financial and business services sector still consider flying for face-to-face meetings to be essential for winning new business and developing clients' relationships. However, among the Safety and Security Project's objectives is that Airport authorities have adequate procedures in terms of passengers' control. A survey made by IATA in 2005 on a poll of 5 countries (Chile, China, the Czech Republic, France, the US) demonstrated that more than 65% of businesses consider passenger air services as vital or very important for servicing or meeting consumer. Chinese firms for instance place the greatest reliance on passenger air services for servicing or meeting clients, with nearly 90% of their businesses reporting that they are vital or very important.

182. Also, overall, 85% of businesses report that passenger air services are at least sometimes important for their sales, with 70% considering them to be either vital or very important. This dependency on air services means that companies have incentives to locate their operations in the vicinity of major airports. Broadening the conclusions of this survey to WCA countries shows that the project could have significant benefits on the overall region's investment climate.

4. Impact of Aviation/Airport Safety and Security on Exports Trade

183. A safe and secure air transport system is one of the major levers to sustain growth in the volume and the value of the goods. Indeed, worldwide, up to 40% of the value of international trade in manufactured goods is transported by air. However, 60% of air cargo is actually carried as belly cargo by passenger airplanes. This means that air cargo rates are directly affected by the

level of competition that exists on any given routes between passenger airlines. As such, favorable international air cargo rates to/from WCA cannot be secured without a vibrant air passenger market which itself is subjected to the limitation imposed by low safety and security standards in the region. As shown by the example of Kenya and Senegal, selected high value perishable high value agricultural goods such as cherry tomatoes (Senegal) or flowers (Kenya) can only gain international market access if the countries where they are produced have direct and affordable air links with their export markets (i.e., Western Europe in the case of Senegal and Kenya). Once more, such air services depend in large part on the level of air security and safety that the exporting countries maintain.

5. Conclusions

184.Improvements in WCA's aviation security and safety standards will not in and by themselves increase tourist flows, inward international direct investment or international trade. However, they will undoubtedly be an important enabler of future growth in these activities as all depend heavily on the ease, affordability and access to the WCA market. The project should, therefore, be viewed as an important building stone in the overall economic development strategy of the WCA countries.

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Annex 10: Safeguard Policy Issues

1. Environmental Assessments and Resettlement Action Plans

185.No sensitive environmental issues should be raised by the project implementation as construction activities will be limited in nature and should only cover the rehabilitation and/or construction of crisis centers and aircraft remote parking within existing airport's operational perimeters which are not encumbered by non-aviation related activities. Likewise, all rehabilitation work related to training centers and laboratories will take place within existing FAAN, NAMA, NCAA and NCAT buildings. However, all construction activities will be subjected to a prior review carried out by the environmental specialist retained by the PCU and the Ministry in charge of environment. In addition, the Environmental and Social Management Framework will be used to ascertain if a full Environmental Assessment is required and associated construction/rehabilitation contracts will include social and environmental protection clauses whose implementation will be supervised by selected construction/rehabilitation supervision engineers.

2. Safeguards – Related Risks

186.The project is categorized B. The Environmental Assessment policy OP/BP 4.01 is triggered due to small civil works activities to be funded on various airport premises. The environmental impacts are expected to be small-scale and site specific, thus easily remediable. The activities funded through Government counterpart parallel financing also do not trigger any additional safeguard policies. As part of normal due diligence work, an Environmental and Social Management Framework (ESMF) has been prepared and disclosed both in Nigeria and in the World Bank Infoshop prior to project appraisal.

187.An adapted ESMF will be produced for each additional project of Phase II, as the lessons learned from Phase I demonstrate the safeguards triggered may vary despite the similarities of the project activities.

3. Alternatives Considered to Minimize Adverse Safeguards –Related Impacts

n/a

4. Consultations with Various Stakeholders and Affected Groups

188.Stakeholders include local government officials and agency representatives, from whose consultations originated the project activities.

5. Long-term Adverse Safeguard Impacts

189.The safeguards impacts identified are not expected to have any long term or cumulative impacts.

6. Assessment of Capacity and Commitment of Client to Address Safeguard Issues

190. The PCU will retain the service of an environmental specialist, who will be responsible for following up the recommendations of the ESMF and ensuring that environmental clauses are included in contracts and bill of quantities. He/She will also be responsible for screening all the construction sub-projects in the different airport locations using the ESMF and ascertaining if further environmental work like an EIA or ESIA would be necessary.

7. Funding of Safeguard Mitigation Measures

191. Costs for covering safeguard mitigation measures are included in the bills of quantity.

8. Mechanisms to Monitor the Implementation of Mitigation Measures

192. The environmental specialist recruited on a retainer basis by the PCU will follow up environmental issues as they arise during project implementation. Additionally, once civil works have started in all the four airport premises, a Bank mandated environmental specialist will go examine if the ESMF is being applied, especially whether the environmental guidelines for construction works are enforced.

9. References to Mitigation Measures in the Project Legal Arrangements

193. The mitigation of adverse environmental and social impacts identified have been incorporated into the credit agreement and will be incorporated into contract documents.

10. Supervision Arrangements including staffing and Resources

194. The project countries have participated in the Bank's safeguards workshops for senior environmental staff of the countries; this has laid the foundation for sound environmental and social management.

Annex 11: Project Preparation and Supervision

	Planned	Actual
PCN review		12/18/2003
Initial PID to PIC		03/22/2007
Initial ISDS to PIC		03/22/2007
Appraisal	04/06/2007	05/02/2007
Negotiations	04/06/2007	07/24/2007
Board/RVP approval	06/15/2007	08/23/2007
Planned date of effectiveness	10/15/2007	11/21/2007
Planned date of mid-term review	03/31/2009	10/15/2009
Planned closing date	12/31/2010	06/30/2011

Key institutions responsible for preparation of the project:

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Pierre Pozzo di Borgo	Sr. Transport Specialist	AFTTR
Justin Runji	Sr. Transport Specialist	AFTTR
Warren Waters	Regional Environmental and Safeguards Advisor	AFTQK
Sameena Dost	Sr. Counsel	LEGAF
Chau-Ching Shen	Sr. Finance Officer	LOAFC
Africa Eshogba Olojoba	Sr. Environmental Specialist	AFTS3
Bayo Awosemusi	Lead Procurement Specialist	AFTPC
Akinrinmola Oyenuga Akinyele	Financial Management Specialist	AFTFM
Sariette J. Jippe	Language Program Assistant	AFTTR
Antoine Lema	Consultant	AFTTR
Christopher Cozzone	Intern	AFTTR

Bank funds expended to date on project preparation:

1. Bank resources: US\$ 82,522.29
2. Trust funds: US\$ 0.00
3. Total: US\$ 82,522.29

Estimated Approval and Supervision costs:

1. Remaining costs to approval: US\$ 5,000
2. Estimated annual supervision cost: US\$ 82,000

Annex 12: Documents in the Project File

- Projet “COSCAP” pour la supervision de la sécurité aérienne dans les Etats membres de la CEMAC et de Sao Tome e Principe – Document Cadre (July 2000)
- Project Concept Note (December 2003)*
- Rapport d’étude technique pour la construction de la clôture de l’aéroport international de Douala (Septembre 2003)
- Project Information Document (January 2004)
- Questionnaire Banque mondiale pour l’amélioration de la Sécurité et de la Sûreté aériennes (Mai 2004)
- OSTA Safety Audit of African Airlines (July 2004)

Annex 13: Statement of Loans and Credits

			Original Amount in US\$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P074525	2004	2[3W] UEMOA: Capital Markets Development	0.00	96.39	0.00	0.00	0.00	97.02	1.90	0.00
P074850	2004	3A-HIV/AIDS for Abidjan Lagos Transport	0.00	0.00	0.00	0.00	0.00	16.37	-1.43	0.00
P069258	2004	[3S] Southern Africa Power Market (APL1)	0.00	178.60	0.00	0.00	0.00	190.04	-0.75	0.00
P064573	2004	Senegal River Basin GEF Project	0.00	0.00	0.00	5.26	0.00	4.98	0.08	0.00
P082613	2004	Regional HIVAIDS Treatment Project	0.00	0.00	0.00	0.00	0.00	60.51	0.00	0.00
P072881	2003	[3T] BEAC Regional Payment System	0.00	14.50	0.00	0.00	0.00	15.93	2.16	0.00
P070073	2003	2Nile Transboundary Environmental Action	0.00	0.00	0.00	8.00	0.00	7.65	0.27	0.00
P063683	2001	[3E] REGIONAL TRADE FACILITATION PROJECT	0.00	5.00	0.00	0.00	0.00	0.55	0.25	0.00
Total:			0.00	294.49	0.00	13.26	0.00	393.05	2.48	0.00

AFRICA
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
1999	AIF	0.00	72.78	0.00	0.00	0.00	31.77	0.00	0.00
1999	AIF (Mgmt)	0.00	0.20	0.00	0.00	0.00	0.10	0.00	0.00
2003	AIFH	0.00	20.00	0.00	0.00	0.00	2.00	0.00	0.00
2001	AfrbnkCorp	0.00	0.00	3.00	0.00	0.00	0.00	3.00	0.00
1993	Africa Fund	0.00	7.50	0.00	0.00	0.00	7.50	0.00	0.00
2002	Africap	0.00	2.00	0.00	0.00	0.00	0.77	0.00	0.00
1997/99	Aminex	0.00	0.12	0.00	0.00	0.00	0.12	0.00	0.00
2000/01	Celtel	0.00	0.00	10.00	0.00	0.00	0.00	10.00	0.00
	Energy Afr Ltd	0.00	38.02	0.00	0.00	0.00	38.02	0.00	0.00
2002	MTNN	85.00	15.00	0.00	0.00	19.09	14.56	0.00	0.00
2002	Osprey	0.00	0.25	0.00	0.00	0.00	0.25	0.00	0.00
2001	PAIP	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	SABCO	22.00	10.00	0.00	0.00	0.00	10.00	0.00	0.00
2001/04	TV Africa	0.00	0.22	0.00	0.00	0.00	0.17	0.00	0.00
	Total portfolio:	107.00	181.09	13.00	0.00	19.09	105.26	13.00	0.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
1999	AIF	0.00	0.03	0.00	0.00
2003	African Lakes	0.00	0.01	0.00	0.00
2001	MACS	0.00	0.00	0.00	0.04
2001	PAIP	0.00	0.04	0.00	0.00
	Total pending commitment:	0.00	0.08	0.00	0.04

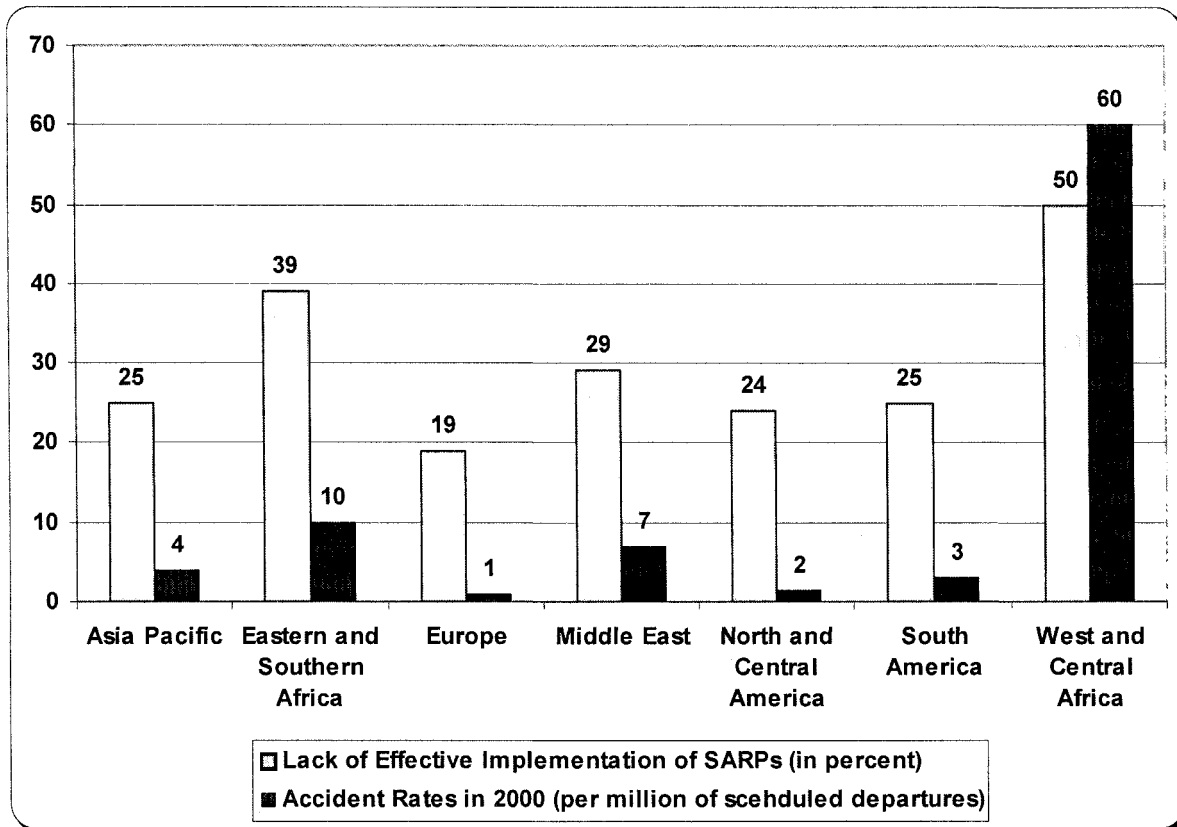
Annex 14: Country at a Glance

Nigeria

Category	Indicator	2000	2004	2005
People	Population, total (millions)	117.6	128.7	131.5
	Population growth (annual %)	2.4	2.2	2.2
	Life expectancy (years)	43.8	43.7	..
	Fertility rate (births per woman)	6	5.6	..
	Infant mortality rate (per 1,000 live births)	107	101.4	..
	Under 5 mortality rate (per 1,000 children)	207	196.6	..
	Child immunization, measles (% of under 12 mos)	35	35	..
	Prevalence of HIV, total (% of population aged 15-49)	3.9
	Primary completion rate, total (% age group)	..	75.2	..
	Net primary enrollment (% relevant age group)	95.5	99.2	..
	Net secondary enrollment (% relevant age group)	..	34.6	..
Environment	Surface area (thousands of sq. km)	923.8	923.8	923.8
	CO2 emissions (metric tons per capita)	0.4
	Access to improved water source (% of total pop.)	..	48	..
	Access to improved sanitation (% of urban pop.)	..	53	..
Economy	GNI, Atlas method (current US\$ billions)	33.1	55.3	74.2
	GNI per capita, Atlas method (current US\$)	280	430	560
	GDP (current US\$ billions)	42.1	72.1	99
	GDP growth (annual %)	4.2	6	6.9
	GDP implicit price deflator (annual % growth)	27.9	19.9	26.9
	Value added in agriculture (% of GDP)	28.8	16.6	23.7
	Value added in industry (% of GDP)	43.6	56.9	56.3
	Value added in services (% of GDP)	27.6	26.5	19.9
	Exports of goods and services (% of GDP)	53.3	54.6	53.1
	Imports of goods and services (% of GDP)	37.5	37.4	35.2
Gross capital formation (% of GDP)	17.7	22.4	21	
Technology and infrastructure	Fixed lines and mobile telephones (per 1,000 people)	5	79.1	..
	Internet users (per 1,000 people)	0.7	13.7	..
Trade and finance	Merchandise trade as a share of GDP (%)	70.6	62.9	59.3
	High-technology exports (% of manufactured exports)	0.4
	Net barter terms of trade (2000 =100)	100	122.3	..
	Foreign direct investment, net inflows in reporting country (current US\$ millions)	1100	1900	..
	Present value of debt (% of GNI)	..	70.7	..
	Total debt service (% of exports of goods and services)	8.2	8.2	..
	Long-term debt outstanding (DOD, current US\$ billions)	30.2	31.3	..
	Aid per capita (current US\$)	1.57	4.45	..

Source: World Development Indicators database, April 2006

Annex 15: Current Safety Oversight and Accident Situation of Air Transport in WCA



This chart, which was prepared on the basis of information received by ICAO, demonstrates the **relationship between the lack of adequate air transport safety oversight and accidents**. The left column for each region shows the percentage of findings (non-compliance) of ICAO's audits of the regions CAA. The right column shows the accident rates of scheduled air traffic. For the chart we clearly can derive two conclusions:

1. Poor safety oversight correlates directly with high accident rates;
2. West and Central Africa region has the highest accident rate, about 30 times higher than the USA (for illustration: the US would have one major air crash every single week if they had the same safety record as WCA countries).

In order to successfully address the safety issues of any country, **adequate safety oversight by the county's Civil Aviation Authority must be the prime focus.**

Annex 16: Country Selection Process

195. Tables 1 and 2 present the Project Team's analysis and rationale for a phased approach based on each WCA country's ability, willingness and expected benefit from participating in this project. Table 1 presents the evaluation criteria used to assess which country should be included in any or all of three project phases. These are, namely:

- **Financial capacity** – in this case, the Project Team sought to estimate based on year 2000 air traffic volumes, the level of resources that each airport/country could derive from an average security fee of \$3 per international passenger and \$1 per domestic passenger. The level of these fees, while it varies from country-to-country and airport-to-airport, reflects African averages and provides a good indication of the amount of resources that each airport or country could dedicate to ensure long term sustainability of security improvements that would result from project implementation.
- **Safety** – for this criteria, the Project Team used the rating employed by the US Federal Aviation Agency (i.e., the International Aviation Safety Assessment program - IASA) to determine whether existing Civil Aviation Authority (CAA) in each of the project country had already reached an adequate level of safety compliance.
- **Security** – US Transport Security Agency (TSA) agency certification was used to assess whether a given airport was secured enough to allow for direct flights connection to/from the US.
- **Need for Project Assistance** – based on the outcome of the three previous criteria (i.e., financial capacity, safety and security) as well as the review of existing ICAO's security assessment reports for 17 country's airports, the Project Team assigned a rating scale of high, medium or low need for project assistance to each country. Using this rating, one country: Cape Verde whose CAA is already IASA certified and has direct flight rights with the US, was judged to not requiring assistance. All other countries, with the exception of Senegal, Gabon and the Gambia, saw their need for this project ranked high. Gabon and the Gambia's medium rating came primarily from the fact that both countries CAA have relatively high level of resources and proven achievements track record. In the case of Senegal, the country CAA, the low rating was motivated by the fact that the country is close to obtaining its IASA certification from the US FAA.
- **Project Impact on Aviation Activities Growth** – this criterion was used in recognition of the fact that similar improvements in aviation safety and security would have different impacts in the countries included in the project. Like the previous criteria, a rating scale of high, medium and low was used. In this specific case, the Project Team reviewed each country to evaluate whether aviation security and safety improvements would spur aviation activities growth because they would suddenly enable that country or that country's main international airport to: 1) promote international tourism more efficiently (i.e., lower airline insurance costs, thus lower the cost of tourism in this country – case of the Gambia), 2) maintain or enhance its status as a regional hub (i.e., case of Abidjan or Douala) or 3) strengthen international services to/from this country (i.e., case of Senegal and to a lesser degree of Congo, Central African Republic, Cameroon, Gabon, Guinea and Mali). For those countries which had received a low rating, the Project Team judged that the level of aviation activities in these countries were highly dependent on local economic and political conditions

and that, although highly desirable, improvements in aviation safety and security would not make a significant difference in the level of their aviation activities.

- **Capacity to Implement** – this last criterion was utilized to evaluate the risk associated with implementing the national component of the project. Like both previous criteria, a rating scale of high, medium and low was used. Individual country ratings were assigned based on the Bank’s prior experience in implementing projects in these countries as well as the Project Team specific knowledge of the respective program implementation capacity of local CAAs and airport authorities.

196. Using the results of this evaluation, the Project team assigned each country to none, one, two or three of the phases listed in Table 1 with:

- **Phase I:** it includes the countries that the Project Team judged to be most ready, and where project assistance can immediately yield high returns. These are: Burkina Faso and Mali for the UEMOA COSCAP, Guinea for the Banjul Accord COSCAP and Cameroon for the CEMAC COSCAP.
- **Phase II:** It incorporates a second tier of countries which, although they need equally as much assistance from the project, are either less ready to receive immediate assistance. These countries are also the most likely to be added in subsequent phases of the project.
- **Phase III:** it takes into account all the remaining countries.

197. The Project Team proceeded then to develop estimates of the level of investment necessary to implement the components of the project, with, however, the actual figures for the countries of Phase I. Table 2 presents the results of this work. As can be seen, cost estimates were produced for each country’s CAA and airport-related components grouping the remaining ones in a last category called “other”.

198. For each country, the number of airports to be covered under the project was taken into account as well as Project Team knowledge of current airport security installations based on recent physical inspections of these facilities (e.g., Abidjan, Douala, Yaoundé) or ICAO inspections reports. Using these cost item figures, total estimated cost to implement the national component of the project for the countries in Phases I, II and III came, respectively, at US\$ 33.8, 103.8 and 151.5 million.

Table 1: Project country proposed phasing

COSCAP	Country	Primary Airports	Passenger Traffic-2000	Financial Capacity		Project Evaluation Criteria			Project Country Phases*				
				Estimated Airport Total	Security Fee Receipt Country Total	Safety FAA IASA Certification	Security TSA Certified	Need for Project Assistance	Project Impact on Aviation Activities Growth	Capacity to Implement	I	II	III
WAEMU	Benin	Cotonou	310,459	\$ 810,423	\$ 810,423	No	No	High	Low	Low	✓		
	Burkina Faso	Ouagadougou	232,312	\$ 599,354	\$ 599,354	No	No	High	Medium	Medium	✓		
	Côte d'Ivoire	Abidjan	1,081,256	\$ 2,973,674	\$ 2,973,674	No	No	High	High	Medium	✓		
	Guinée Bissau	Bissau	<75,000	n.a.	n.a.	No	No	High	Low	Low	✓		
	Mali	Bamako	327,106	\$ 932,518	\$ 932,518	No	No	High	Medium	Medium	✓		
	Mauritanie	Nouakchott	226,096	\$ 435,726	\$ 435,726	No	No	High	Low	Low	✓		
	Niger	Niamey	84,096	\$ 245,480	\$ 245,480	No	No	High	Low	Low	✓		
	Senegal	Daakar	1,224,633	\$ 3,564,367	\$ 3,564,367	No	Yes	Low	High	High	✓		
	Togo	Lome	232,578	\$ 563,788	\$ 563,788	No	No	High	Low	Low	✓		
	Cape Verde	Saï	635,532	\$ 1,144,104	\$ 1,144,104	Yes	Yes	Low	n.a.	High			
Banjul Accords	Other Airports		412,271	\$ 474,321	\$ 474,321	No	Yes	Low	n.a.	High		✓	
	Ghana	Accra	673,504	\$ 1,858,056	\$ 1,858,056	No	Yes	Low	n.a.	High		✓	
	Guinea	Conakry	293,484	\$ 746,540	\$ 746,540	No	No	High	Medium	Low	✓		
	Liberia	Monrovia	n.a.	n.a.	n.a.	No	No	High	Low	Low		✓	
		Lagos	2,695,597	\$ 4,804,483		No	No						
		Abuja	947,848	\$ 1,058,048		No	No						
	Nigeria	Port Harcourt	342,769	\$ 439,635	\$ 7,039,596	No	No	High	Low	High		✓	
		Kano	295,919	\$ 622,463		No	No						
		Kaduna	114,967	\$ 114,967		No	No						
		Freetown	110,454	\$ 331,362	\$ 331,362	No	No	High	Low	Low		✓	
CEMAC	The Gambia	Banjul	321,126	\$ 924,638	\$ 924,638	No	No	Medium	High	High	✓		
	Cameroon	Douala	439,279	\$ 1,116,885	\$ 1,437,251	No	No	High	Medium	Medium			
		Yaounde	197,762	\$ 320,366	\$ 320,366	No	No	High	Medium	Medium			
	Central African Republic	Bangui	76,755	\$ 180,263	\$ 180,263	No	No	High	Low	Low		✓	
	Chad	N'Djamena	50,000	\$ 70,000	\$ 70,000	No	No	High	Low	Low		✓	
		Brazzaville	411,678	\$ 566,448	\$ 566,448	No	No	High	Low	Low		✓	
	Congo	Pointe Noire	137,740	\$ 179,998	\$ 179,998	No	No	High	Medium	Medium		✓	
	Equatorial Guinea	Malabo, Bata	212,700	\$ 638,100	\$ 638,100	No	No	High	Medium	Medium		✓	
		Libreville	753,557	\$ 1,402,175	\$ 1,402,175	No	No	High	Medium	Medium		✓	
	Gabon	Port Gentil	317,996	\$ 318,904	\$ 1,721,079	No	No	Medium	Medium	Medium		✓	
Sao Tomé & Principe	Sao Tomé	47,400	\$ 142,200	\$ 142,200	No	No	High	Medium	Medium		✓		

*The phases could change depending on the state of readiness and the level of commitment to the reforms

Table 2: Estimated costs by countries and groupings

COSCAP	Country	Project Activities Components Estimated Costs				Project Country Phases*		
		CAA oversight capacities strengthening	Airport security & safety improvements	Others	Total	I	II	III
	Bénin	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500		\$ 7,337,500	\$ 7,337,500
	Burkina Faso	\$ 2,050,000	\$ 2,900,000	\$ 1,400,000	\$ 6,350,000	\$ 6,350,000	\$ 6,350,000	\$ 6,350,000
	Côte d'Ivoire	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000		\$ 5,900,000	\$ 5,900,000
	Guinée Bissau	\$ 3,187,500	\$ 4,312,500	\$ 900,000	\$ 8,400,000			\$ 8,400,000
	Mali	\$ 2,200,000	\$ 2,850,000	\$ 400,000	\$ 5,450,000	\$ 5,450,000	\$ 5,450,000	\$ 5,450,000
	Mauritanie	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500		\$ 7,337,500	\$ 7,337,500
	Niger	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500		\$ 7,337,500	\$ 7,337,500
	Senegal	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000		\$ 5,900,000	\$ 5,900,000
	Togo	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500			\$ 7,337,500
	Cape Verde	n.a	n.a	n.a	\$ -	\$ -	\$ -	\$ -
	Ghana	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000			\$ 5,900,000
	Guinea	\$ 1,050,000	\$ 5,250,000	\$ 700,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000
	Liberia	\$ 3,187,500	\$ 4,312,500	\$ 900,000	\$ 8,400,000			\$ 8,400,000
	Nigeria	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500		\$ 7,337,500	\$ 7,337,500
	Sierra Leone	\$ 3,187,500	\$ 4,312,500	\$ 900,000	\$ 8,400,000			\$ 8,400,000
	The Gambia	\$ 210,000	\$ 3,300,000	\$ 410,000	\$ 3,920,000		\$ 3,920,000	\$ 3,920,000
	Cameroon	\$ 1,900,000	\$ 11,250,000	\$ 1,850,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000
	Central African Republic	\$ 3,187,500	\$ 4,312,500	\$ 900,000	\$ 8,400,000			\$ 8,400,000
	Chad	\$ 3,187,500	\$ 4,312,500	\$ 900,000	\$ 8,400,000		\$ 8,400,000	\$ 8,400,000
	Equatorial Guinea	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000			\$ 5,900,000
	Congo	\$ 2,125,000	\$ 4,312,500	\$ 900,000	\$ 7,337,500			\$ 7,337,500
	Gabon	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000		\$ 5,900,000	\$ 5,900,000
	Sao Tomé & Príncipe	\$ 2,125,000	\$ 2,875,000	\$ 900,000	\$ 5,900,000			\$ 5,900,000
		\$ 46,722,500	\$ 87,362,500	\$ 19,160,000	\$ 153,245,000	\$ 33,800,000	\$ 93,170,000	\$ 153,245,000

*The phases could change depending on the state of readiness and the level of commitment to the reforms

Note: Cost estimates made prior to the Negotiations

MAP SECTION



**NIGERIA
WEST AND CENTRAL AFRICA
AIR TRANSPORT SECURITY
AND SAFETY PROJECT**

**P100785
PHASE 2 OF P083751**

- INTERNATIONAL AIRPORT
- PROVINCE CAPITALS
- NATIONAL CAPITAL
- RIVERS
- MAIN ROADS
- RAILROADS
- PROVINCE BOUNDARIES
- INTERNATIONAL BOUNDARIES

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