Document of
The World Bank

Report No: ICR00002031

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-41630 IDA-41640 IDA-H2140 IDA-H2150)

ON A CREDIT

IN THE AMOUNT OF SDR 4.5 MILLION
(US$ 6.46 MILLION EQUIVALENT)
TO THE BURKINA FASO

ON A GRANT

IN THE AMOUNT OF SDR 10.2 MILLION
(US$ 14.50 MILLION EQUIVALENT)
TO THE REPUBLIC OF CAMEROON

ON A GRANT

IN THE AMOUNT OF SDR 4.9 MILLION
(US$ 7.10 MILLION EQUIVALENT)
TO THE REPUBLIC OF GUINEA

ON A CREDIT

IN THE AMOUNT OF SDR 3.8 MILLION
(US$ 5.51 MILLION EQUIVALENT)
TO THE REPUBLIC OF MALI

FOR A
WEST AND CENTRAL AFRICA AIR TRANSPORT SAFETY & SECURITY PROJECT

IN SUPPORT OF THE FIRST PHASE OF THE PROJECT'S HORIZONTAL ADAPTABLE PROGRAM LENDING

December 12, 2014

Transport And ICT Global Practice
Africa Regional Integration
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective September 21, 2014)

Currency Unit = Guinea Franc (GNF)
GNF 1.00 = US$ 0.00014
US$ 1.00 = GNF 6910.00

Currency Unit = Central African Franc (XAF)
XAF 1.00 = US$ 0.00196
US$ 1.00 = XAF 510.03

Currency Unit = West African CFA Franc (XOF)
XOF 1.00 = US$ 0.00196
US$ 1.00 = XOF 510.03

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADC	Airport Authority of Cameroon (*Aéroports du Cameroun*)
ADF	African Development Fund
ADM	Airport Authority of Mali (*Aéroports du Mali*)
AFD	French Development Agency (*Agence Française de Développement*)
AfDB	African Development Bank
AGETIPE	Agence d'Exécution des Travaux d'Intérêt Public pour l'Emploi
ANA	Air Navigation Agency (*Agence de la Navigation Aérienne*)
ANAC	Civil Aviation National Authority (*Agence Nationale de l'Aviation Civile*)
APL	Adaptable Program Loan
ASECNA	Air Navigation Safety in Africa and Madagascar Agency (*Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar*)
ASOA	Air Safety Oversight Agency
CAAs	Civil Aviation Authorities
CCTV	Closed-Circuit Television
CEMAC	Economic Community of Central African States (*Communauté Economique et Monétaire d'Afrique Centrale*)
COSCAP	Cooperative Development of Operational Safety and Continued Airworthiness Project
DGACM	Department of Civil Aviation and Meteorology (*Direction Générale de l'Aviation Civile et de la Météorologie*)
DNAC	National Directorate of Civil Aviation (*Direction Nationale de l'Aviation Civile*)

ECOWAS	Economic Community of Western African States
EU	European Union
FAA	Federal Aviation Administration (United States)
GNF	Guinea Franc
ICAO	International Civil Aviation Organization
ICR	Implementation Completion and Results Report
IDF	Institutional Development Fund
IP	Implementation Program
MTR	Mid-Term Review
NEPAD	New Partnership for Africa's Development
OP/BP	Operational Policy/Bank Procedures
PAD	Project Appraisal Document
PDOs	Project Development Objectives
PIT	Project Implementation Team
PPR	Procurement Post Review
RAPs	Resettlement Action Plans
RIAS	Regional Integration Assistance Strategy
SARP	Standards and Recommended Practices
SDR	Special Drawing Rates
SOGEAC	Society for Management and Operation of the Conakry Airport (*Société de Gestion et d'Exploitation de l'Aéroport de Conakry*)
SSA	Sub-Saharan Africa
TSA	Transport Security Agency (United States)
US	United States
US$	United States Dollar
USOAP	Universal Safety Oversight Audit Programme
WAEMU	West African Economic and Monetary Union (*Union Economique et Monétaire Ouest-Africaine – UEMOA)*
WCA	West and Central Africa (Region)
WCAATSSP	West and Central Africa Air Transport Safety and Security Program
WTTC	World Travel & Tourism Council
XAF	Central African Franc
XOF	West African CFA Franc
YD	Yamoussoukro Decision

Vice President:	Makhtar Diop
Country Director:	Colin Bruce
Senior Practice Director:	Pierre Guislain
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ICR Team Leader:	Marc Navelet

AFRICA
West and Central Africa Air Transport Safety & Security Project

CONTENTS

DATASHEET

A. Basic Information

Country:	Africa	Project Name:	West and Central Africa Air Transport Safety & Security Project
Project ID:	P083751	L/C/TF Number(s):	IDA-41630,IDA-41640,IDA-H2140,IDA-H2150
ICR Date:	12/12/2014	ICR Type:	Core ICR
Lending Instrument:	APL	Borrower:	BURKINA FASO CAMEROON GUINEA MALI
Original Total Commitment:	XDR 23.40M	Disbursed Amount:	XDR 23.09M
Revised Amount:	XDR 23.09M		

Environmental Category: B

Implementing Agencies:

Cameroon: Cameroon Civil Aviation Authority (CCAA)
Mali: Civil Aviation Authority (ANAC - formerly DNAC)
Burkina Faso: Civil Aviation Authority (ANAC - Formerly DGACM)
Guinea: National Directorate of Civil Aviation (DNAC)

Cofinanciers and Other External Partners:

B. Key Dates

Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	12/18/2003	Effectiveness:	08/24/2006	08/24/2006
Appraisal:	11/01/2005	Restructuring(s):		06/16/2010 12/30/2011 06/14/2013
Approval:	04/27/2006	Mid-term Review:		06/15/2008
		Closing:	12/31/2009	06/30/2014

C. Ratings Summary

C.1 Performance Rating by ICR

Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	Substantial
Bank Performance:	Moderately Unsatisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Unsatisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Unsatisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes

	Original	**Actual**
Sector Code (as % of total Bank financing)		
Aviation	94	90
Central government administration	6	10
Theme Code (as % of total Bank financing)		
Infrastructure services for private sector development	17	60
Regional integration	33	5
Regulation and competition policy	17	25
Trade facilitation and market access	33	10

E. Bank Staff

Positions	**At ICR**	**At Approval**
Vice President:	Sri Mulyani Indrawati	Gobind T. Nankani
Country Director:	Colin Bruce	Mark D. Tomlinson
Practice Manager/Manager:	Supee Teravaninthorn	C. Sanjivi Rajasingham
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ICR Team Leader:	Marc Marie Francois Navelet Noualhier	
ICR Primary Author:	Marc Marie Francois Navelet Noualhier	

	Monica Sawyer	
	Celi Marie Dean	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document**)**
The Project development objectives are set as follows: (a) Improve Civil Aviation Authority's (CAA) compliance with ICAO's safety standards; (b) Improve CAA's compliance with ICAO's security standard; and (c) enhance main international airports' compliance with ICAO's security standards.

Revised Project Development Objectives (as approved by original approving authority)
The PDOs were not revised.

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Burkina Faso: Improve CAA's compliance rates with ICAO's safety standards			
Value quantitative or Qualitative)	67.00	75.00	70.00	70.00
Date achieved	04/27/2006	04/28/2006	06/21/2010	06/30/2013
Comments (incl. % achievement)	The indicator measures compliance with 2008 ICAO safety standards was changed using a new ICAO methodology called systemic audit. This means that the baseline was lowered due to the change in methodology. The revised target was achieved at 100%.			
Indicator 2 :	Cameroon: Improve CAA's compliance rates with ICAO's safety standards			
Value quantitative or Qualitative)	70.00	90.00	70.00	68.00
Date achieved	04/27/2006	04/28/2006	06/21/2010	06/30/2013
Comments (incl. % achievement)	The revised target (subsequent to change of methodology at ICAO level) was nearly achieved.			
Indicator 3 :	Guinea: Improve CAA's compliance rates with ICAO's safety standards			
Value quantitative or Qualitative)	53.00	75.00		70.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Target not fully achieved, but good improvement from the baseline level taking into account the period of political instability from 2009-2012. Note: Guinea was the only country in which ICAO could not perform systemic audit.			
Indicator 4 :	Mali: Improve CAA's compliance rates with ICAO's safety standards			

Value quantitative or Qualitative)	51.00	80.00	75.00	74.00
Date achieved	04/27/2006	04/28/2006	06/21/2010	06/30/2013
Comments (incl. % achievement)	Target nearly achieved and progress made from the base line is considerable. The revised baseline took into account change in the ICAO audit methodology which dropped the baseline to 28% compliance.			
Indicator 5 :	Burkina Faso: Improve CAA's compliance rates with IACO's security standards.			
Value quantitative or Qualitative)	54.00	75.00		75.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	The achievement of compliance rates with ICAO's security standards is significant with the difference in percentage points equal to 21 from baseline level.			
Indicator 6 :	Cameroon: Improve CAA's compliance rates with IACO's security standards.			
Value quantitative or Qualitative)	30.00	75.00		75.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target achieved.			
Indicator 7 :	Guinea: Improve CAA's compliance rates with IACO's security standards.			
Value quantitative or Qualitative)	1.00	35.00		25.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Despite the target not being achieved, noticeable progress has been made. More specifically, an extensive number of personnel were trained; enacted legislation and procedures were improved.			
Indicator 8 :	Mali: Improve CAA's compliance rates with IACO's security standards.			
Value quantitative or Qualitative)	8.00	75.00		86.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Progress made is impressive with a tenfold increase and surpassing both the baseline and target values.			
Indicator 9 :	Burkina Faso: Rate of illegal object seizures by International airports.			
Value quantitative or Qualitative)	>5.00	<2.00		0.50
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Strong improvement from the baseline value with a decrease rate of illegal object seizures.			
Indicator 10 :	Cameroon: Rate of illegal object seizures by International airports.			

Value quantitative or Qualitative)	n.a.	<3.00		5.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	The baseline of 10 was included under the ISR #14 archived on November 2011. Incremental improvement made but the target not achieved. In this case a change from 10 to 4 was a progress.			
Indicator 11 :	Guinea: Rate of illegal object seizures by International airports.			
Value quantitative or Qualitative)	n.a.	<3.00		5.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	This indicator was not monitored due to the fact that there was no baseline data available at beginning of Project. In November 2011 the target of 5 was provided and although the target was not achieved, progress was made.			
Indicator 12 :	Mali: Rate of illegal object seizures by International airports.			
Value quantitative or Qualitative)	<2.00	<0.50		0.52
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Not a significant change. However there was no increase in illegal seizures which is a good indicator of progress.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Burkina Faso: Technical personnel in compliance with ICAO safety standards.			
Value (quantitative or Qualitative)	40.00	>60.00		38.27
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target not achieved and performance declined from the baseline.			
Indicator 2 :	Cameroon: Technical personnel in compliance with ICAO safety standards.			
Value (quantitative or Qualitative)	45.00	100.00		100.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target achieved. Progress made is remarkable with 26 out of 26 personnel having all required specialization skills and inspectors designated in accordance of ICAO standards.			
Indicator 3 :	Guinea: Technical personnel in compliance with ICAO safety standards.			
Value	38.00	>60.00		75.00

(quantitative or Qualitative)				
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Target was surpassed with 9 out of 11 inspectors trained. This demonstrates an increased awareness of the importance of personnel compliance with ICAO standards.			
Indicator 4 :	Mali: Technical personnel in compliance with ICAO safety standards.			
Value (quantitative or Qualitative)	40.00	>90.00		100.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achievement with 10 out of 10 safety inspectors fully certified.			
Indicator 5 :	Burkina Faso: CAA's total budget (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	2.00		3.60
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved. Target was surpassed by US$1.6 million.			
Indicator 6 :	Cameroon: CAA's total budget (in US$ millions).			
Value (quantitative or Qualitative)	9.20	6.00		22.7
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	There seems to be an error between the baseline and target as provided in PAD. Nonetheless the country's CCAA budget is substantially higher than baseline figure.			
Indicator 7 :	Guinea: CAA's total budget (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	>0.70		0.70
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Target was not achieved since the CAA was not created. However the budget of US$700,000 was allocated to DNAC which continues to provide civil aviation safety oversight for the Government.			
Indicator 8 :	Mali: CAA's total budget (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	2.60		6.50
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target was surpassed by a factor of 2.5 times.			
Indicator 9 :	Burkina Faso: CAA's ICAO certified security inspectors trained during the last three years.			

Value (quantitative or Qualitative)	25.00	>75.00		90.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target significantly surpassed due to intensive training which led to an enhanced CAA capacity and safer airport operations.			
Indicator 10 :	Cameroon: CAA's ICAO certified security inspectors trained during the last three years.			
Value (quantitative or Qualitative)	25.00	>75.00		90.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target surpassed. Strong progress made with substantive number of inspectors trained and certified by ICAO since 2009.			
Indicator 11 :	Guinea: CAA's ICAO certified security inspectors trained during the last three years.			
Value (quantitative or Qualitative)	30.00	>70.00		80.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Target surpassed which has led to an overall improvement in security.			
Indicator 12 :	Mali: CAA's ICAO certified security inspectors trained during the last three years.			
Value (quantitative or Qualitative)	25.00	>75.00		90.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target surpassed. Strong progress made with substantive number of inspectors trained and certified by ICAO since 2009.			
Indicator 13 :	Burkina Faso: CAA's total budget dedicated to security (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	1.00		1.40
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved and target significantly surpassed.			
Indicator 14 :	Cameroon: CAA's total budget dedicated to security (in US$ millions).			
Value (quantitative or Qualitative)	0.60	0.90		3.60
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. %	Achieved and target value surpassed by a factor of 3.			

achievement)				
Indicator 15 :	Guinea: CAA's total budget dedicated to security (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	0.25		0.20
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Not achieved. As of the date of the ICR the CAA is not in place and operational. All activities related to air transport safety and securities are executed by DNAC under the Ministry of Transport.			
Indicator 16 :	Mali: CAA's total budget dedicated to security (in US$ millions).			
Value (quantitative or Qualitative)	n.a.	1.00		1.02
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Target Achieved.			
Indicator 17 :	Burkina Faso: Airport security personnel with three or more years of experience.			
Value (quantitative or Qualitative)	<20.00	>50.00		50.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved.			
Indicator 18 :	Cameroon: Airport security personnel with three or more years of experience.			
Value (quantitative or Qualitative)	<20.00	>60.00		70.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved and target surpassed.			
Indicator 19 :	Guinea: Airport security personnel with three or more years of experience.			
Value (quantitative or Qualitative)	<58.00	>65.00		85.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Achieved and target surpassed.			
Indicator 20 :	Mali: Airport security personnel with three or more years of experience.			
Value (quantitative or Qualitative)	<25.00	>75.00		90.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. %	Achieved and target surpassed.			

achievement)				
Indicator 21 :	Burkina Faso: Serious problem recorded during annual airport crisis exercises.			
Value (quantitative or Qualitative)	n.a.	<3.00		3.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved.			
Indicator 22 :	Cameroon: Serious problem recorded during annual airport crisis exercises.			
Value (quantitative or Qualitative)	n.a.	<3.00		3.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved.			
Indicator 23 :	Guinea: Serious problem recorded during annual airport crisis exercises.			
Value (quantitative or Qualitative)	n.a.	<5.00		0.00
Date achieved	04/27/2006	04/28/2006		06/30/2014
Comments (incl. % achievement)	Unable to access if target value was achieved as crisis exercise was not carried out due to periodic bouts of political instability from 2009-2012.			
Indicator 24 :	Mali: Serious problem recorded during annual airport crisis exercises.			
Value (quantitative or Qualitative)	n.a.	<3.00		2.00
Date achieved	04/27/2006	04/28/2006		06/30/2013
Comments (incl. % achievement)	Achieved. Data from the airport crisis exercise realized on November 22, 2012. Objective achieved or even surpassed as there are fewer problems than initially estimated.			

G. Ratings of Project Performance in ISRs

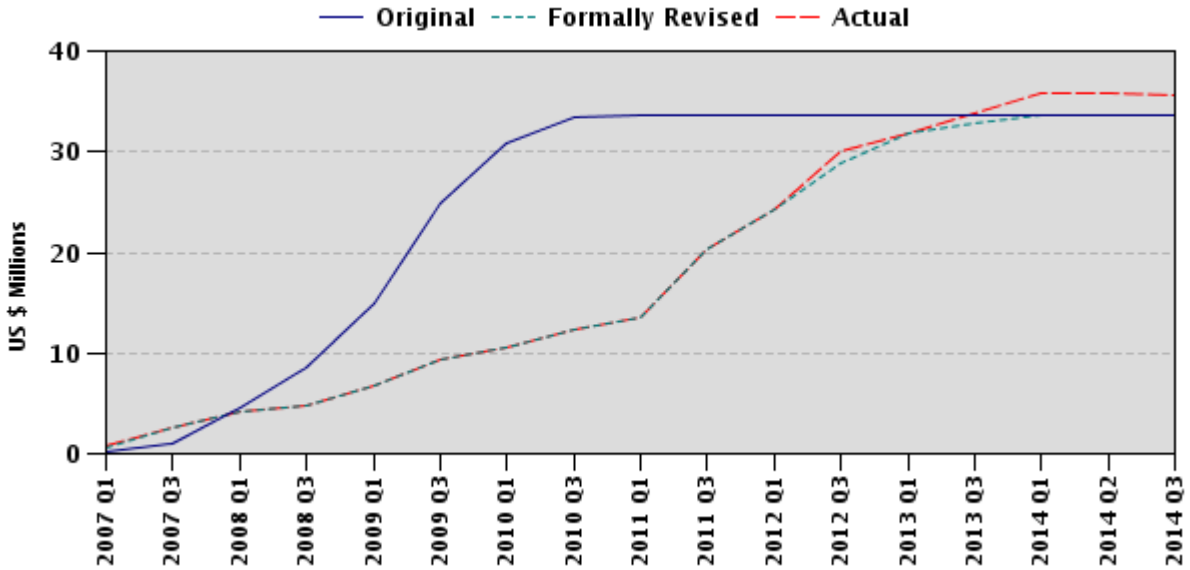
No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	06/01/2006	Satisfactory	Satisfactory	0.00
2	12/02/2006	Satisfactory	Moderately Satisfactory	0.70
3	06/14/2007	Moderately Satisfactory	Moderately Satisfactory	3.15
4	12/20/2007	Moderately Satisfactory	Moderately Satisfactory	4.60
5	05/29/2008	Moderately Satisfactory	Moderately Satisfactory	4.96
6	09/12/2008	Unsatisfactory	Moderately Unsatisfactory	6.81
7	02/21/2009	Moderately Unsatisfactory	Moderately Unsatisfactory	9.16
8	08/27/2009	Moderately Unsatisfactory	Moderately Unsatisfactory	10.48

9	01/30/2010	Moderately Satisfactory	Moderately Unsatisfactory	10.93
10	03/26/2010	Moderately Satisfactory	Moderately Satisfactory	12.26
11	11/02/2010	Moderately Satisfactory	Moderately Unsatisfactory	14.38
12	03/07/2011	Moderately Satisfactory	Moderately Satisfactory	20.31
13	09/24/2011	Moderately Satisfactory	Moderately Satisfactory	24.01
14	12/05/2011	Satisfactory	Moderately Satisfactory	26.46
15	03/03/2012	Satisfactory	Moderately Satisfactory	29.14
16	11/24/2012	Satisfactory	Moderately Satisfactory	32.40
17	06/17/2013	Satisfactory	Moderately Satisfactory	34.33
18	12/27/2013	Satisfactory	Satisfactory	35.79
19	06/18/2014	Satisfactory	Moderately Satisfactory	35.63

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
06/16/2010	N	MS	MS	12.88	Extension of closing date to December 31, 2011 and reallocation of Credit proceeds for all the Project components and countries involved. Revision of end of Project targets for Burkina Faso, Cameroon and Mali.
12/30/2011	N	S	MS	27.41	Extension of closing date for all the Project components and countries involved to June 30, 2013 and reallocation of Credit proceeds for the whole Project.
06/14/2013	N	S	MS	34.33	Selective extension of closing date to June 30, 2014 and reallocation of Credit proceeds for the Guinea component of Project.

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

1. **Regional air transport sector background.** At the time of appraisal, air transport accounted for up to 40 percent of world trade by value. 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. However, in 2006[1], air services in Africa, and especially in West and Central Africa (WCA), continued to be inefficient, expensive and unreliable.

2. In order to develop the air transport industry on the continent, the African Ministers responsible for civil aviation adopted, on November 14, 1999, the Yamoussoukro Decision (YD) on the liberalization of access to air transport markets in Africa. It is enforceable continent-wide as it was endorsed by the African Union Heads of State under the African Union treaty framework in 2000. However, since the YD is still not implemented at the continent level, some sub-regional organizations, are trying to promote liberalization among their country members. This is the case for the Economic Community of West African States (ECOWAS)[2] and the Central Africa Economic and Monetary Community (*Communauté Economique et Monétaire d'Afrique Centrale* - CEMAC)[3], with the signature of implementation memorandum of understanding creating Secretariat Units within those organizations.

3. Additionally, in 2003, the Region's Ministers of Transport agreed to support the following initiatives: (a) the revision and harmonization of air transport legal and institutional frameworks at each country level; (b) the development of a new mechanism for effective regional technical and safety regulation; (c) the creation of a regional economic regulatory framework to address competition, market access, and consumer protection; and (d) the upgrading of security standards and main airports for each country. Funding for these initiatives required the scale up of government and donor support.

4. Regarding aviation safety and security issues, the Convention on International Civil Aviation (also known as Chicago Convention), signed on December 7, 1944, and aiming for the development of the international civil aviation in a safe and orderly manner, contains the International Civil Aviation Organization (ICAO)'s Standards and Recommended Practices (SARPs) to guide Member States in their oversight duties. Therefore, the enforcement of the corresponding legislation and regulations remains a

[1] The Project Appraisal Document (PAD) is dated March 28, 2006.
[2] 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
[3] The CEMAC countries are Cameroon, Central African Republic, Chad, Gabon, Equatorial Guinea, and The Republic of Congo.

national endeavor, through their respective national Civil Aviation Authorities (CAAs). Accordingly, it remains critical that shortcomings affecting national CAAs are addressed.

5. In order to achieve this industry's development goal without compromising safety and security standards, the CAAs in the region were expected to be capable of individually and collectively reaching ICAO's SARPs which are embedded in the Annexes of the Chicago Convention.

6. The main safety[4] issues WCA's air transport sector was facing in 2006 included the lack of a compliant and enabling legal framework as well as a critical shortage in qualified inspection manpower. In WCA, fewer than six (6) countries out of twenty-three (23) were considered to have the required level of Civil Aviation Administration capacities. The situation at that time resulted in the presence of lower rated companies whose operations distorted the air transport market, prevented access to the world market for local African airlines and contributed largely to WCA high accident rates. According to ICAO's statistics, the WCA region air transport accident rate was thirty (30) times higher than that of United States (US) before 2006[5].

7. In terms of security[6], in 2006, fewer than five of WCA's numerous international airports were compliant with world standards. Indeed, most WCA international airports were lacking basic access control to runways and terminals as well as adequate security procedures. This situation endangered 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, WCA was isolated even further from main air trade flows.

8. **Domestic air transport background.** The domestic air transport market is nonexistent 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[7], has an extremely important domestic air transport industry.

9. In addition, the Agency for Aerial Navigation Safety in Africa and Madagascar (*Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar* – ASECNA), created in 1959, and now governed through the Dakar convention of 1974, manages, on behalf of its 18 African member States[8], the airspace covering their respective territories (more than 16 million km² of airspace). It provides assistance through aerodrome control, guidance of the aircraft on the ground, radio and visual assistance with approaches and the landings, weather forecasting and fire protection

[4] ICAO Definition of Air Transport Safety: A condition in which the risk of harm or damage is limited to an acceptable level.
[5] 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%.
[6] ICAO Definition Air Transport Security: A combination of measures and human and material resources intended to safeguard civil aviation against acts of unlawful interference.
[7] Sole recipient of the IDA-41640 credit as APL2a of the WCAATSSP (P100785)
[8] Benin, Burkina Faso, Cameroon, Chad, Central Africa Republic (CAR), Comoros, Ivory Coast, France, Gabon, Guinea Bissau, Equatorial Guinea, Madagascar, Mali, Mauritania, Niger, Democratic Republic of Congo (DRC), Senegal, Togo

services. ASECNA carries out its principal objectives and community activities in compliance with the Annex 2 of the Dakar convention and, on a purely subsidiary basis, manages the national activities for the benefit of its individual Member States as well as third party States and organizations. As such, the ASECNA is more a technical partner of the countries' CAAs and main international airports than a beneficiary agency of the Project.

Burkina Faso

10. The *Direction Générale de l'Aviation Civile et de la Météorologie* (DGACM) was responsible for sector oversight, and was the beneficiary agency of the Project. A host of issues affected day-to-day operations of the aviation sector in Burkina Faso. Among the most pressing ones were: (a) the capability of the DGACM to fulfill its missions at the most basic level; (b) the ability of the DGACM to certify pilots and crews of Air Burkina as well as deliver airworthiness certificates; and (c) the current location of Ouagadougou international airport viewed as less than adequate for growth, safety and security reasons as the airport is situated in the heart of downtown.

Cameroon

11. The Cameroon Civil Aviation Authority (CCAA) was set up as an operationally and financially autonomous authority when the new Civil Aviation Code was approved in 1998. It relied on two levies (Security and Civil Aviation taxes) paid by outgoing international passengers. The purpose of this levy was to allow financial stability to the CCAA, but this situation did not happen as Camair, the main carrier, never paid its airport dues. The financial situation of the Airport Authority of Cameroon (i.e. Aéroports du Cameroun – ADC) did not allow for any investment on the platforms or proper maintenance.

12. Daily operations of the aviation sector in Cameroon had many challenges, including: (a) the capability of CCAA to fulfill its missions; (b) the airport infrastructure condition in Douala were extremely weak; (c) the implementation of security procedures was not consistent with international standards; and (d) Douala and Yaoundé international airports were facing security investment shortfalls these airports lacked a secure access control system or CCTV surveillance system.

Guinea

13. The industry was supervised and regulated by the Direction Nationale de l'Aviation Civile (DNAC), which is now incorporated within the Ministry of Transport. As a consequence, there was no financial or operational autonomous Civil Aviation Authority established. Therefore, the DNAC: (a) lacked the financial resources to fulfill its national and international duties; (b) was unable to recruit for an extended period of time; (c) did not have sufficient capacity to supervise the safety and security issues; (d) had no means to plan and carry out trainings for its technical personnel; and (e) was not equipped with the basic materials to carryout daily tasks.

14. The international airport of Conakry, was concessioned to the Société de Gestion et d'Exploitation de l'Aéroport de Conakry (SOGEAC). With regard to airport equipment, SOGEAC is well equipped but its concerns are more related to: (a) the personnel's capacity to operate and maintain the sophisticated equipment at the airport; and (b) the political will of the Government to enforce the law in protecting the airport from illegal entries, especially by the population living around the airport perimeters.

Mali

15. The Civil Aviation Directorate (i.e. Direction Nationale de l'Aviation Civile - DNAC), whose mission was to oversee the aviation sector, was in charge of certifying and delivering operational licenses to airline operators and pilots. It also ensured that existing aviation rules, regulations, as well as airport operations, are in compliance with the ICAO's guidelines on safety and security. The Malian Government transformed the DNAC into an administratively and financially autonomous ANAC (Agence Nationale de l'Aviation Civile) by the law No. 05-066, dated December 26, 2005 in compliance with WAEMU and IACO's directives so as to strengthen its capacity.

16. Attempts to concession the international airport of Bamako to a private concessionaire failed repeatedly, thus leaving to the State the responsibility of financing any future investment at the airport. As such, the Airport Authority of Mali (i.e. Aéroports du Mali – ADM) retained its managing responsibility over the airport system.

17. A host of issues affected day-to-day operations of the aviation sector in Mali. Among the most pressing ones were: (a) the capability of the DNAC(future ANAC) to fulfill its missions; (b) a weak national aviation code which was not in line with ICAO's standards; (c) limited personnel and financial resources; (d) weakness of the airport site (infrastructure, direct access to the premises); (e) sharing of the airport premises between military and civilian personnel; (f) lack of proper training and skills to make full use of safety and security equipment; (g) absence of electronic monitoring of personnel access to the airport; and (h) the inefficient coordination of law enforcement agencies which operates at the airport, therefore weakening the overall impact on airport security.

18. **Rationale for Bank assistance.** In 2000, the Bank was instrumental in the adoption of the YD and supported through successive regional International Development Fund (IDF) Grants the adoption of common policies in safety and air transport regulations in WCA. The Bank, regional institutions and International Financing Institutions (IFIs) acknowledge that most WCA States did not 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. Even when a State proves its ability to comply with ICAO's requirements, maintaining compliance and retaining qualified personnel remained questionable. This was illustrated, 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 IFIs adopted a comprehensive approach to globally support WCA States by: (a) establishing regional

mechanisms to oversee safety and security standards in member countries; and (b) financing national safety and security programs to enhance local CAA's ability to comply with ICAO's standards. This approach was 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. In 2006, the Bank adopted the Africa Action Plan promoting regional integration, regional exchanges and economic growth. Therefore, the WCAATSSP was executed under the regional integration umbrella.

19. These COSCAP projects whose implementation (2005-2012) was initially delayed due to financing issues were in the process of being executed following the award of grants from the African Development Bank (AfDB) and the French Government. ECOWAS and CEMAC member countries would benefit, at no cost to them, from technical assistance in the area of aviation safety. This assistance, however, was restricted to specific training and technical advisory services as COSCAP projects' resources are limited (i.e. each project's budget was less than United States Dollar (US$) 4 million) and their scope excluded aviation and airport security. Nevertheless, the COSCAP projects represented an important first step towards the creation, within WAEMU, ECOWAS and CEMAC, of regional aviation security and safety agencies to ensure that each country CAAs achieved and maintained minimal compliance with ICAO's standards.

20. The achievements of the COSCAP projects were recognized by all three economic communities (CEMAC, ECOWAS, WAEMU) in their founding texts, including the respective entities' orgranizational charts. The COSCAP Programme results were also marked by the effective financial participation of all the States, as well as the substantial contribution of the three economic communities and their involvement gave the program credibility.

21. Finally, CEMAC and ECOWAS accorded permanent status to their respective Air Safety Oversight Agencies (ASOA). The WAEMU ASOA could not be created within the timeframe of the Programme, but the WAEMU Commmission texts providing such a status already exist, and the additional instrument creating the agency was validated by the Union Council of Ministers.

Table 1: Passenger traffic in 2004 at selected APL1 Airports

Country	Airport	Share of total passenger traffic		Total Passengers
		National	International and Regional	
Burkina Faso	Ouagadougou	2%	98%	256,000
Cameroon	Douala	7%	93%	525,000
	Yaounde	21%	79%	190,000
Guinea	Conakry	9%	91%	284,000
Mali	Bamako	8%	92%	450,000

World Bank, 2006

22. **Contribution to higher level objectives.** This Project, was the first financing under the WCAATSSP umbrella, focused on creating a safe and secure environment for air transport in WCA that will allow African airlines to competitively access regional and worldwide markets with the expected result to support sustainable economic growth region-wide. This higher objective was consistent with the New Partnership for Africa's Development (NEPAD), Infrastructure Short Term Action Plan, the YD, the Bank's Africa Action Plan, the Global Aviation Safety Roadmap, and – in fewer words – an overarching air transport safety and security context in a post 9/11 environment.

23. **Lending instrument.** At appraisal, since the readiness and needs of the 23 WCA countries that were to receive support from the WCAATSSP varied significantly, it was decided to select a horizontal Adaptable Program Loan (APL) instrument to allow for a phased long-term development program. Countries were to join the program under three successive phases using similar eligibility criteria. These criteria were: (a) the creation of an administratively and financially autonomous national civil aviation agency; (b) the use of aviation security and/or safety taxes for the purpose of financing its civil aviation agency; and (c) 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.

24. Phase I of the Project, which is the focus of this Implementation Completion and Results Report (ICR), was 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. At Board's approval, Cameroon and Mali were the only two countries to have established an operationally and financially autonomous authority, while the air transport oversight was still ensured by the DGACM in Burkina Faso, and the DNAC in Guinea.

1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved*)

As per the Project Appraisal Document (PAD), the overarching Project Development Objectives (PDOs) are, within each participating country, 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.

25. In order to measure attainment of these PDOs, the following key outcome indicators were used for each country participating in the Project:

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[9].

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.

26. The PAD proposed additional indicators, when applicable, that could be used to evaluate the long term outcome of the Project's impact. However these were not included in the Results Framework and were not consistently monitored. These additional indicators were:

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

The outcome indicators at appraisal can be summarized as follows:

Table 2: Original PDOs and Key Indicators

PDO	Outcome Indicators	Use of Outcome Information
1) Improve CAAs' compliance rates with ICAO's safety standards	• Compliance rate with ICAO's safety standards • Percentage of technical personnel in compliance with ICAO's safety standards • Total CAA's budget level	Measure improvements in: 1) CAAs' compliance rates with ICAO's security and safety standards, 2) targeted airports security levels, and 3) sustainability of these improvements.
2) Improve CAAs' compliance rates with ICAO's security	• Compliance rate with ICAO's security standards • Percentage of CAA's ICAO's	

[9] There is no indicator attached to that outcome, and it then does not formally appear in the results monitoring framework. However, the national security plan is included in the ICAO Annex 17 and, as such, is part of the calculation of the compliance rate with ICAO's aggregate security standards based on ICAO's audit. Monitoring that specific outcome can be considered as redundant with the monitoring of the security compliance rate.

standards	certified security inspectors trained during the last three years • Level of CAA's budget dedicated to security	
3) 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 • Percentage of embarking passengers stopped in possession of illegal objects as defined by the ICAO by private airlines security personnel.	

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

27. The PDOs have not been revised and outcome indicators remained unchanged.

28. The target values for the nine outcome indicators were revised downward to reflect the new evaluation method for safety compliance instituted by the ICAO in late 2007. More specifically, during the Project preparation phase, ICAO's methodology was based on three annexes of the Chicago Convention (Annexes 1, 6 and 8), while starting from 2008, the assessment covered 18 annexes. Consequently, the baseline values associated with safety rating would have been lower had they been evaluated in line with this new approach. Annex 1, the results indicator, elaborates on the revised targets for the outcome indicators.

29. The primary target group was the CAAs for each participating countries to increase their safety and security oversight. To this end, CAAs' staff would benefit from extensive capacity building program, technical assistance to help them update their legal and regulatory framework, and accompanying measures to make them financially and administratively autonomous. In parallel, staff working at the selected international airports airport (including customs and police agents; airport operators and air carriers' staff) would benefit from training in the basics of airport security, as well as in the operations of newly acquired equipment. Therefore, the ultimate beneficiaries of the project would be the users of the airport services (i.e. the air carriers, passengers, and freight forwarders) through enhanced service quality provided by the new infrastructure and equipment, as well as more professionally trained staff. This was expected to lead to increase in air traffic (passengers, freight, aircraft movement, flight frequencies and new air services) which would have a positive direct and indirect economic impact on the countries involved in the Project.

Table 3: WCAATSSP/APL1 "Primary target groups" and other potential beneficiaries

	Burkina Faso	Cameroon	Guinea	Mali
Primary Target group				
CAAs	DGACM	CCAA	DNAC	DNAC (future ANAC)
Users of Airport Services	Ouagadougou international airport Passengers and freight forwarders	Douala and Yaoundé-Nsimalen international airports Passengers and freight forwarders	Conakry-Gbessia international airport Passengers and freight forwarders	Bamako-Senou international airport Passengers and freight forwarders
Any other individuals or organizations expected to benefit from the Project				
Air transport sector		ADC	SOGEAC	ADM
Others	Police, Customs, Air carriers, Transit support services providers			

1.5 Original Components (as approved)

30. As per the PAD, the original components of the Project were the following:

Component 1: Strengthening of CAAs safety and security oversight capacities (US$ 7.20 million)

31. The Project intended to finance each country's CAA technical assistance necessary mainly for:

a) The adoption and utilization of harmonized aviation code and regulations and the creation of autonomous civil aviation agencies [10] through the provision of consulting services;
b) The training of civil aviation staff in the areas of civil aviation security and safety oversights;
c) The acquisition of basic communications and inspections equipment (e.g. two-way radios, inspection vehicle, computers, etc.); and
d) The procurement of library equipment (e.g. relevant ICAO's manuals, directives, online library, training materials, etc.).

[10] These new agencies were to be created by no later than January 1st 2007 in Burkina Faso, and Guinea. Cameroon Civil Aviation Agency is already autonomous both financially and administratively. Mali Civil Aviation Agency was created by Decree in December 2005 but is not yet functional. Creation of these agencies are at the same time a COSCAP project legal covenant at the regional level, and a legal covenant of the World Bank IDA Credits.

Component 2: Improvements in airport security and safety standards (US$ 23.25 million)

32. This activity involved establishing appropriate aviation security legislation, development of security programs (national, airports and airlines programs), provision of security equipment at the main international airports, replacement of navigational aids at the primary airports and capacity building. The main areas of focus of this component were to be:

a) Implementation of measures to reinforce security at the various airport access (identification equipment, security cameras, patrol vehicles, communications systems and reorganization of passenger flows);
b) Rehabilitation of existing airport fences and security patrol routes;
c) Rehabilitation and/or construction within existing airport building premises of crisis centers, including acquisition of necessary communication and surveillance tools to equip these centers;
d) Training of airport security personnel;
e) Development of airport security through the acquisition of passengers and cargo X-ray machines;
f) Acquisition and rehabilitation of navigational aids and communications systems; and
g) Development of financial means to finance airport security improvements (i.e., airport security fees).

Component 3: Others (US$4.62 million)

33. Potentially adverse social impacts to be induced by the implementation of more stringent airport premises access rules were identified in social assessments. The impacts were contained within the fenced security perimeter of the airport property and limited to three types: (a) impacts on illicit income generating activities (growing of vegetables within the airport perimeter); (b) impacts on prohibited access to tarmac (crossing by unauthorized civilians of runways); and (c) impacts on a couple of housing structures within the airport perimeters. These impacts were identified at Conakry, Douala and Yaoundé international airports in Guinea and Cameroon, respectively.

34. This activity would then cover mostly:

a) Implementation of Resettlement Action Plans (RAPs) in conjunction with the rehabilitation of security fences at these facilities;
b) Financing of Project operating costs covering inter alia annual financing audits and day-to-day management; and
c) Money set-aside as non-allocated to cover any uncertainties regarding planned Project activities.

35. Table 4 below summarizes the overall anticipated – and per component - cost of the Project:

Table 4: Indicative Project Costs (in US$ millions)

	Project activities components			Total	Financing sources	
	CAA oversight capacities strengthening	Airport security & safety improvements	Others		World Bank	National
Burkina Faso	2.05	2.90	1.51	6.46	6.46	0.00
Cameroon	1.90	12.25	1.85	16.00	14.50	1.50
Guinea	1.05	5.25	0.80	7.10	7.10	0.00
Mali	2.20	2.85	0.46	5.51	5.51	0.00
Total	**7.20**	**23.25**	**4.62**	**35.07**	**33.57**	**1.50**

World Bank, 2006

36. As per the Financing Agreements (FA), the objective of the Project was to support the Borrowers in improving compliance of their civil aviation authorities and international airports with ICAO safety and security standards. Even though the wordings may be more or less slightly different, each FA signed with individual countries had the same PDOs, i.e.:

Strengthening of safety and security oversight capacity of Project Implementing Entities through:

(a) Implementation of corrective action plans relating to ICAO safety and security audit reports through provision of training to staff;
(b) Improvement of technical library; and
(c) Provision of support for purposes of workload management and supervisory capacity through acquisition of communications and information technology equipment.

Strengthening of international airports security standards through:

(a) Acquisition and installation of security equipment;
(b) Carrying out of training programs for safety and security personnel;
(c) Establishment of airport crisis center;
(d) Carrying out of annual airport-crisis simulation exercises; and
(e) Provision of support to rehabilitation of airport infrastructure - specifically, fencing, security-zone access control and patrol roads - through acquisition of equipment.

37. Notwithstanding the above, the Cameroon and Guinea FAs also specifically focused on Environmental and Social Protection:

Cameroon:

(a) Implementation of the Resettlement Action Plans relating to the carrying out of some infrastructure activities[11] of the Project;
(b) Support to carrying out of an environmental and social impact study relating to the same infrastructure activities through provision of technical advisory services.

Guinea:

(a) Carrying out of Resettlement Action Plans for Affected Persons.

1.6 Revised Components

38. None of the project component was revised during the Project implementation.

1.7 Other significant changes

39. The Project was restructured three times, and what follows are the details of the restructurings:

40. The first restructuring was processed at the request of Burkina Faso, Cameroon and Mali to allow for: (a) a twenty-four months extension of closing date from December 31, 2009 to December 31, 2011; (b) reallocation of Credit/Grant proceeds; and (c) a revision of end of Project targets to reflect the new evaluation method for safety compliance instituted by the ICAO in late 2007, to replace the previous Universal Safety Oversight Audit Program (USOAP) approach which referred to only 3 annexes (1, 6, and 8), to the systemic method based on 18 Annexes. As a result, the baseline indicators for the three CAAs' compliance with ICAO safety standards needed to be lowered, and the corresponding target values were downgraded. The level two restructuring for the three countries was approved on June 8, 2010.

41. The second restructuring consisted of: (a) an eighteen months extension of the Project's closing date from December 31, 2011 to June 30, 2013 for the Burkina Faso, Cameroon, Mali and Guinea components of the project, to allow for the completion of on-going activities; and (b) a reallocation of Credit/Grant proceeds for Burkina Faso, the Republic of Cameroon, and Guinea. This level two restructuring was approved on December 29, 2011.

42. The third restructuring was triggered by the request by the GoG and allowed for: (a) a 12 months extension of the Project's closing date from June 30, 2013 to June 30, 2014; and (b) a reallocation of Grant proceeds. This was to allow the completion of on-going activities disrupted by two years of cumulative suspensions from 2009 to 2011 of World Bank activities in Guinea due to the political crisis. This level two restructuring to selectively extend the closing date for the Guinea component of the project for 12 month was approved on June 20, 2013 and brought the cumulative Project extension to 54

[11] Rehabilitation of airport infrastructure, including: (i) the construction of an airport fence in Douala and Yaoundé; (ii) a patrol road in Douala; and (iii) an alternative access road for use by neighboring population of Yaoundé international airport.

months, making the Project eight years old at the time of this final closing date. Activities for Burkina Faso, Cameroon and Mali closed on June 30, 2013 after a cumulative Project extension of 42 months for those three countries.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

43. **Project preparation:** At the time of preparation, two World Bank Institutional Development Funds (IDF) Grants (P079736 & P077772) were financing the technical committee for the oversight and the implementation of the Yamoussoukro Decision (YD), through technical departments in ECOWAS and CEMAC. These two departments were expected to serve as PIUs for the program at the regional leve, supported by three regional Cooperative Development of Operational Safety and Continued Airworthiness Projects (COSCAP). The WCAATSSP program was designed to improve safety and security in the WCA region by building on the IDF Grants, and was expected to include 23 countries (at least 31 airports[12]) members of the West African Economic and Monetary Union (WAEMU[13]), the Banjul Accord[14], and the CEMAC[15].

44. Given the complexity of the Program[16], which included a regional and national dimension, the combination of regional and national components was considered as key for a successful outcome. More specifically, the regional dimension of the Program was considered key to fully achive the outcomes of the Program. It was expected that the regional components/activities would be financed by other development partners (AfDB, AFD, EU), while the national components would be financed by the World Bank[17]. The primary reason for this design is that at the time the World Bank could not finance with regional IDA allocations activities being implemented by Regional Economic Communities (RECs).

45. As a consequence the regional dimension of the WCAATSSP program could not be covered by the World Bank financing, and no explicit linkage/bridge between the regional and the national components was defined in the Project.

46. Ultimately, only 7 countries were included in the Project, due to a combination of factors ranging from a shortage of IDA regional funding, changed IDA priorities and changed Government priorities of the countries involved. The countries involved in the program were added in a phased manner covering three APLs in order to take into account the different levels of readiness of the countries.

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[12] PAD – Annex 16 – Table 1
[13] 9 countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Mauritania, Niger, Senegal, Togo.
[14] 7 countries: Cape Verde, Ghana, Guinea, Liberia, Nigeria, Sierra Leone, The Gambia.
[15] 7 countries: Cameroon, Central African Republic, Chad, Equatorial Guinea, Congo, Gabon, Sao Tome & Principe
[16] Air transport safety and security embraces both regional and national aspects.
[17] PAD – Page 10 – Figure 1: Project institutional and financial relationships

47. **Project Design and Quality at Entry:** APL 1 (Phase 1 of the WCAATSSP program) was supposed to include the countries considered to be the most ready, and included Burkina Faso, Mali, Guinea, and Cameroon[18]. One of the readiness eligibility criteria was the existence of an administratively and financially autonomous national CAA. However, at the time of appraisal, Guinea did not have a CAA, and the country's capacity to implement the Project was also considered as Low against Medium for the other three countries[19]. Despite this, Guinea was included under APL 1 (Project) due to the following reasons:

a) the Government was more proactive in demonstrating their interest in participating into the program by being fully committed during the project's preparation;
b) it was also the only country of the Banjul Accord group willing to be part of the Project at that time.

48. The inclusion of Guinea in the Project had the consequence that the project activities in the four countries involved could not be completed within the stipulated time frame. This is because the Guinea component had to be selectively extended beyond the closing date of the Malian, Burkinabe and Cameroonian components of the Project.

49. The WCAATSSP design envisioned the regional coordination of the first four countries covered by the Project and, later, the rest of the 19 countries through one or several regional/"sovereign" overarching entity/ies, supported by the COSCAP Projects.

50. However, the RECs involved (WAEMU and CEMAC), had no authority to execute the Project as aviation regulation remains a sovereign activity. Furthermore, they had very limited capability in the sector. This meant that the actual implementation (and related responsibility) of the WCAATSSP was done at the country level.

51. This means that at the end, the **Project design was more like a multiple-country rather than a true regional integration project**. As a consequence of this, causal-effect linkages between the national activities and the regional integration benefits of the Project were not clearly stated and have been difficult to assess in the ICR.

52. The overly optimistic implementation time frame, lack of technical and engineering studies and different readiness and capacity levels amongst the countries involved in the project, meant that the Quality at Entry for Phase I of the APL was very low.

[18] PAD – Annex 16 – Table 1
[19] PAD – Annex 16 – Table 1

2.2 Implementation

53. The initial implementation period of the Project of three years[20], was optimistic considering that the standard project period in the region was 5 years[21]. Unforeseen externalities, such as suspension of World Bank-Guinea engagement as a result of political turmoil in that country[22], and four countries with different level of implementation readiness contributed to implementation delays.

54. As a result of the above cited key factors, the project was implemented within seven years for the Burkina Faso, Cameroon, and Mali components, and eight years for Guinea due to the two year suspension in World Bank activities in the country. However, the major delays in the planned implementation timeframe did not substantially jeopardize the achievement of the PDOs, even if it is clear that they would not have been fully achieved without the exensions.

55. Implementation was disrupted by the introduction in 2008 of the ICAO systemic approach[23] regarding safety compliance. This led to a revision of the PDOs' safety indicators baseline and target values for Burkina Faso, Cameroon, and Mali. As a result of this revision, the PAD target values for some of the safety indicators dropped.

56. The implementation of the Project was not satisfactory during the first two years. The Mid-Term Review (MTR) carried out in June 2008, rated all four countries' PDOs as Unsatisfactory, and the Implementation Progress (IP) as Moderately Unsatisfactory[24]. The MTR reports highlight the following: (a) low disbursement rates; (b) lack of procurement capacity; (c) absence of key technical studies before effectiveness for most of the civil works (crisis management centers, works within the airport premises such as fences, security patrol routes, etc.) funded under the project; and (d) implementation arrangements which needed modification to ensure greater coordination between the PITs and other implementing/beneficiary agencies.

57. Finally, inadequate resources provided by the World Bank during the implementation phase to adequately finance supervision for what was in essence four projects, and cumbersome World Bank-country specific procurement procedures, further compounded the delayed of several components/sub-components of the Project.

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[20] Expected effectiveness date: September 30, 2006; closing date: December 31, 2009

[21] Five years used as a standard - but not always sufficient – benchmark for transport projects.

[22] January-February 2007: the country is on strike, and it is violently repressed: 137 people die; December 23, 2008: military coup after President Lansana Conté passed away; September 28, 2009: more than 150 people died as the result of the repression of a demonstration at the Conakry stadium.

[23] Based on all ICAO's annexes (and except Annex 9 - Facilitation, and Annex 17 - Security) and opposed to ICAO Universal Safety Oversight Audit Programme (USOAP) based on ICAO's Annexes 1, 6 and 8 only.

[24] Except Mali rated Moderately Satisfactory

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

58. **M&E design:** Designing the M&E framework was based on internationally accepted ICAO indicators, which provided a common ground of comparison between the countries. The indicators were measurable and meaningful. The national authorities were clear on what was being measured and how they should carry out such measurements. As the project was implemented at national level, the results framework did not refer to regional outcomes that could be attributable to the Project. Furthermore, the project included too many indicators which were the accepted norm when the project was prepared.

59. **M&E implementation:** Only the CAA's compliance rates with ICAO safety standards needed to be revised during project implementation for the Burkina Faso, Cameroon, and Mali components to comply with ICAO new systemic methodology introduced in 2008. This change in audit approach implied the revision of the baseline and target values for this specific indicator. Guinea remained the only country to be evaluated under ICAO/USOAP methodology until the project's closure.

60. It is worth noting that the ICAO safety audits based on the systemic approach only started in 2008, and security audits in 2010, whereas the baseline indicators were respectively based on ICAO's safety audits of 2004 (Universal Safety Oversight Audit Programme - USOAP approach), and security audits of 2006. The lack of interim data (and actual values of the indicators) within that timeframe did not allow the appropriate monitoring of the PDOs during the first years of the implementation of the Project.

61. **M&E framework utilization:** Throughout the implementation, subsequent ICAO audits were carried out to follow up on the progress of the indicators. These follow-up allowed the audited CAA to acknowledge the progress made and most importantly, to fine-tune the next steps, i.e. the corrective action plans to make sure that most of the weaknesses and/or remaining problems are adequately addressed within agreed time frame with ICAO.

2.4 Safeguard and Fiduciary Compliance

62. Table 5 below summarizes the ratings of the Project regarding Safeguard and Fiduciary Compliance:

Table 5: Safeguards and Fiduciary Compliance Ratings Summary

	Environmental & Social Issues	Financial Management	Procurement
Burkina Faso	Satisfactory	Satisfactory	Satisfactory
Cameroon	Satisfactory	Satisfactory	Moderately Unsatisfactory
Guinea	Satisfactory	Satisfactory	Satisfactory
Mali	Satisfactory	Satisfactory	Satisfactory
Overall Project	**Satisfactory**	**Satisfactory**	**Moderately Satisfactory**

(a) Environmental and Social Issues

63. The Project was classified as Category B. It triggered Environmental Assessment OP/BP 4.01, Cultural Property (OP 4.11), and Involuntary Resettlement (OP/BP 4.12) due to the following activities funded under the project such as: (a) construction of fencing around security perimeter to reduce trespassing; (b) removal of vegetable gardens within the airport security perimeter; and (c) removal a few structures that had been built within the airport security perimeter. These impacts were identified at Conakry, Douala and Yaoundé international airports in Guinea and Cameroon, respectively. Resettlement Action Plans (RAP) for these three airports were prepared and disclosed originally in November 2005 and re-disclosed on February 22, 2006.

64. The implementation of the RAPs was initially slow due to a lack of proper understanding of the World Bank Environmental & Safeguards policies by the Project Implementation Teams (PIT). However, thanks to sensitization, all three RAPs and other environmental mitigation measures were fully and successfully implemented.

65. Finally, no sensitive environmental and social issues have been raised during the project implementation as construction activities were subjected to mitigation plans to reduce the adverse impacts:

a) ***Burkina Faso:*** Plant sellers along "Patte d'Oie" roundabout in the airport security perimeter were satisfactorily relocated, and supported by a compensation process executed in compliance with The World Bank safeguards.
b) ***Cameroon:*** (i) During the construction of the Douala airport fence and patrol road, appropriate mitigation measures for wildlife preservation were employed as works were partially executed in a swamp area; and (ii) The relocation of a religious

shrine[25] 1 km from Yaoundé airport fencing flagged in the RAP study did not occur. It was by-passed thanks to the construction of a new access road financed by the Governement.

c) ***Guinea:*** All farming activities have been satisfactorily relocated. This was supported by a compensation process executed in a transparent manner, and in compliance with the RAP designed by the Government and approved by the World Bank team.
d) ***Mali:*** There were no environmental and social issues.

(b) Financial Management (FM)

66. Each PIT carried out all financial management functions including reconciliation of accounts, external audits of project accounts, and the necessary actions were taken to address FM weaknesses pointed out by the World Bank. Quarterly reports by each PIT provided details on the financial aspects of each activity funded by the Project. Throughout the implementation, external audits were provided in a timely fashion and all were unqualified. What follows is a table with the final disbursements broken down by country and Credit/Grant agreement:

Table 6: Final Disbursements Rates (in US$ millions)

	IDA Credit/Grant Amounts (as per the PAD)		**Disbursement Rate (%)**	**Financing sources (as per the PAD)**	
	SDR (million)	**US$ equivalent (million)**	**(end of project)**	**IDA**	**National**
Burkina Faso Credit 4163-BUR	4.5	6.46	99.99	6.46	0.00
Cameroon Grant H214-CM	10.2	14.50	98.15	14.50	1.50
Guinea Grant H215-GUI	4.9	7.10	99.68	7.10	0.00
Mali Credit 4164-MLI	3.8	5.51	97.13	5.51	0.00
Total	**23.4**	**33.57**	**98.66**	**33.57**	**1.50**

[25] The shrine was initially located in the security perimeter of the airport.

(c) Procurement

67. At Project appraisal/negotiations, all procurement arrangements including procurement plan and procurement methods were discussed and agreed consistent with the World Bank's guidelines. However, during implementation, procurement was a major source of delays in all four countries involved in the project. More specifically, all four countries involved in the project were plagued by the following procurement related issues: (a) lack of capacity within the implementing agencies; (b) weak knowledge of the World Bank procurement guidelines by the PITs; (c) difficulties in preparing terms of references and technical specifications of key Project activities; and (d) significant delays beyond the control of the implementation units. However, there were no cases of mis-procurement under this project.

68. Cameroon had the most difficulty with procurement. The major works contracts were signed more than two years after the date of effectiveness. Execution of contracts was slow, and required several modifications/changes. This is bestillustrated by the implementation of the airport fence and patrol road contract which took thirty-one (31) months instead of eleven (11) and needed five (5) contract modifications. This single contract consumed more than 40 percent of the IDA grant.

2.5 Post-completion Operation/Next Phase

69. The positive aspects of the Project are noticeable in the civil aviation sector in each country. As a result of extensive training and capacity building program of the staff in each benefitting civil aviation agency and beneficiary airports have improved the industries performance from albeit low levels. Technical knowledge of sector personnel has been significantly improved, which has enhanced the ability of each civil aviation agency to perform their functions thereby improving the industry's safety and security. Moreover, some of these personnel are now ICAO certified security inspectors, and can train other people to ensure knowledge sharing. Some of them are even being used by sub-regional organizations as regional experts. This has resulted in each country covered by the project to improve their compliance rate with ICAO, which has contributed to the improvement of the regions compliance's rate.

70. The momentum generated by building staff capacity together with increased financial resources dedicated to safety and security within the CAAs, will help with sustaining the Project's achievements.

71. Despite those achievements and despite eager interests shown by the beneficiary countries to benefit from a second-phase project (especially for domestic airports safety and security improvement) there is – at the time of this ICR - no next phase envisaged by the World Bank.

72. However, in order to ensure that the progress made is sustained in the countries included in the Project (especially Guinea), further Technical Assistance (TA) to these countries should be considered to consolidate the momentum created upon the Project's

achievements and the general awareness on air transport safety and security. The TAcould also support specific air transport policy dialogue at both national and regional levels by: (a) strengthening dialogue, knowledge sharing and collaboration between countries at a regional level; (b) support CAAs in their planning, regulatory, and safety and security monitoring efforts; (c) support countries and their respectives CAAs in their USTSA and USFAA certification processes; and (d) support Guinea to make the CAA fully operational.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

73. **Relevance of the PDO remains High**. The overall objective to improve air transport safety and security in West and Central Africa remains relevant as air transport safety and security were and remain major concerns for the countries involved and international community. That's because WCA still ranks poorly by international air transport safety and security standards.

74. Furthermore, the Project raised awareness about air transport safety and security concerns/needs in the beneficiary countries, and all of them were very satisfied with the design and, moreover, the outputs of the Project[26]. This is because it improved the level of air transpot safety and security in the countries involved.

75. Finally, air transport safety and security remains an important tool for economic development. As such, the Project indirectely supported the ultimate objective of poverty reduction through both national and regional economic development.

76. **Relevance of Design is Substantial**. The Project design was relevant to the country's development priorities and their air transport safety and security needs. The Project objectives were appropriate to improve regulatory oversight, strengthen institutional management and financial autonomy of CAAs. The Project components were directly linked to the Project objectives. Project design included an effective and measurable (directly comparable between the countries involved) results framework. Although there were far too many indicators, they were well designed and relevant. The results framework remained relevant when considering national outputs and industry standards for monitoring civil aviation safety and security, even if the regional outcomes are difficult to measure. This is why the Project design is more multi country rather than regional (see also Section 2.1 - Project Preparation, Design and Quality at Entry).

77. Finally, seven countries (including Burkina Faso, Cameroon, Guinea, and Mali) out of the anticipated twenty-three benefited from the WCAATSSP Program and could improve their air transport and security environement based on a similar strategies and regulatory frameworks, as well as common and internationally recognized results indicators. Even if the air transport safety and security regional environement did not

[26] This can also be assessed in each countries ICRs presented in Annex 7.

improve in a coordinated manner, it did partially improve through each national component inprovements. In the meantime, countries like Mauritania[27], and Cabo-Verde[28] which did not benefited from that World Bank's Project, improved their air transport safety and security environment based on a similar approach proposed by the Project.

78. **Relevance of Project Implementation is considered Substantial**. The overall implementation pace was significantly slower than expected due to capacity weakness during the initial phases of the Project. However, even with the slow pace of implementation of the civil works activities, the following occured: (a) CAAs' agents acquired knowledge regarding the execution of World Bank projects; (b) beneficiaries agencies' technical personnel followed ICAO certification trainings in safety and security; and (c) the Project supported the Borrowers in improving their legal and regulatory air transport frameworks. Therefore, improved beneficiary agencies capacity and increased familiarity with World Bank modus operandi, steady institutional strengthening, as well as an enhanced project supervision effort, enabled better project implementation during the later phases. Furthermore, the involved Governments' commitment to the Project, were evident throughout project implementation as some used their own resources to implement a portion of the previously agreed investments.

3.2 Achievement of Project Development Objectives

Rating: **Moderately Satisfactory**

79. The Project substantially achieved its PDOs for the following reasons: (a) use of project extensions to allow the completion of project activities and achievement of objectives; (b) improved implementation capacity; and (c) enhanced supervision during the later phases of project implementation. The substantial completion of the Project activities resulted in the creation or the strengthening of financially and administrative autonomous CAAs (except for Guinea). Thanks to better trained staff, fencing of airport perimeters, procurement of new luggage scanning equipment, installation of CCTV, and electronic badges, the safety and security of the targeted airports has substantially improved.

80. Compliance with the ICAO safety and security standards improved for all participating countries. Appropriate and updated legal and procedural instruments are now in place and support enhancement of safety and security at the targeted airports. Apart from Guinea which was not able to set up an autonomous CAA by the end of the project despite the adoption of the pertinent law and decrees, all the other Project targets have been substantially reached.

81. The international airports of the countries involved in the project now possess appropriate equipment to enhance operations safety and security (acquisition of x-rays machines, CCTV devices, magnetic badges, fingerprints scanners, etc.) within the airport perimeter, all along the human and luggage/freight checking loop to the whole airports'

[27] 2005 coup
[28] More advance level of readiness

extended area (fencing, patrolling and access roads, taxiway and aprons, air navigation aids equipment, etc.). Human resources were specifically trained for the use of the newly acquired equipment, and some inspectors are now ICAO certified inspectors.

82. The percentage of: (a) technical personnel in compliance with ICAO's safety standards; (b) CAA's ICAO's certified security inspectors trained during the last three years; and (c) airport security personnel with three or more years of experience are equal or above expectations.

83. The objective of decrease of the rate of illegal object seizure was partially met. Burkina Faso surpassed its target while Mali substantially reached its target. Cameroon made noticeable achievement thanks to the implementation of an appropriate communication plan it decreased from 10 percent[29] to 4 percent but did not reach the 2 percent target. Guinea ended up with a rate of 5 percent, a bit short of the 3 percent target even though there was no available baseline at the time of appraisal.

84. In the meantime, the project had further positive impacts beyond its specific results framework[30]: (a) new air companies started to serve the different airports of the Project, and be able to extend the span of direct reachable destinations from/to those airports; (b) air flights frequency (for a same company) as well as passengers, freight, mail air traffic increased. These outputs advocate for air transport safety and security improvement in Burkina Faso, Cameroon, Guinea, and Mali based on enhancement of the countries' main international airports' compliance with ICAO's safety and security standards.

85. In Mali, improvements are noteworthy despite political crisis and conflict situation in 2012-2013, the achievement of the PDOs in that country were not impacted. For Guinea, periodic bouts of instability (2007-2012) coupled with weak institutional capacity did not allow the country to fully meet the PDOs targets even though considerable progress was made, especially in updating the legal and regulatory framework, and in enhancing flights safety with the acquisition of new console for the control tower, air navigation equipment, and meteorological equipment. Without those enhancements, the airport was at risk of being rated as unsafe. The main problem in Guinea remains the delay in setting-up an autonomous CAA despite the project's contribution in making the required law and regulations adopted. In Burkina Faso, the project successfully accompanied the creation of an autonomous CAA, and in Mali, the project helped in strengthening the existing autonomous CAA through a revision of its organization and, as in all CAAs, the training of their technical staff.

[29] Updated baseline value as of May 31, 2011 (cf. Supervision Aide-Memoire – June, 2011 & ISR #14) whereas the status baseline for that indicator was "n.a." at the time of appraisal. The update of that baseline was anticipated in the ISR #13.
[30] As an example, in Burkina Faso, from 2006 to 2012: (i) increase of passengers transportation of 62.07%; (ii) increase of freight transportation of 65%; (iii) 12 new air carriers operating on the Ouagadougou international airport platform.

3.3 Efficiency

Rating: **Moderately Unsatisfactory**

86. The PAD recognized that measuring the economic benefits of the Project (and the regional program as a whole) would require forecast data about the quantitative impact of putting in place measures that would strengthen safety and security of air transport in the country (and the region as a whole). However, no such information was available and no cost-related data could be obtained to make relevant computations in the PAD.

87. 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. The PAD therefore highlighted the impact, at the time of appraisal, of the Project on the aviation sector globally in Sub-Saharan Africa (SSA) based on available studies and surveys. More specifically, the PAD highlighted the major impacts the Project would have on tourism, travel fares, trade and investment in Africa through lower air fare, greater air service frequency, creation of investment-attractive conditions for international companies, growth in the volume of manufactured goods transported by air, etc.

88. The ICR confirms the assessment of the Project's direct economic impacts is complex. In furtherance of the PAD, the assumption is that the Project's focus on safety and security would support the development of transport and travel sectors in Burkina Faso, Cameroon, Guinea, and Mali, thus contribute to their related economic developement.

89. Based on the above, the ICR's assessment of efficiency is therefore primarily based on a review of how air transport has performed in recent years in Burkina Faso, Cameroon, Guinea, and Mali and how the Project contributed to this[31]. More specifically, **the Project**:

a) **Supported the development of the air transport sector** through the increase (and related economic benefits) of the number of passengers, flight frequencies, volumes of freight and mail[32].

b) **Contributed to achieve significant institutional strengthening** through improvement of the legal and regulatory civil aviation frameworks in Burkina Faso, Cameroon, Guinea, and Mali.

c) **Improved efficiency of airport safety and security monitoring operations** in Bamako, Conakry, Douala, Ouagadougou, and Yaoundé using equipment financed by the Project, as per the following table:

[31] Cf. Annexe 3 – Economic & Financial Analysis
[32] Cf. Annexe 3 – Economic & Financial Analysis

Table 7: Percentage of Embarking Passengers Stopped in Possession of Illegal Objects

	End of project target	*End of project value*
Burkina Faso	*< 2%*	*0.5%*
Cameroon	*< 2%*	*4%*[33]
Guinea	*< 3%*	*< 1.5%*[34]
Mali	*< 0.5%*	*0.52%*

d) Allowed financial strengthening and autonomy of the CAAs (with the exception of Guinea) as per the following tables:

Table 8: Total CAA's Budget Amount (US$ millions)

	End of project target	*End of project value*
Burkina Faso	*2.0*	*3.6*
Cameroon	*6.0*	*> 22.7*
Guinea	*> 0.7*	*n. a.*
Mali	*2.6*	*6.54*

Table 9: CAA's Total Budget Dedicated to Security (US$ millions)

	End of project target	*End of project value*
Burkina Faso	*1.0*	*1.4*
Cameroon	*0.9*	*1.8*
Guinea	*0.25*	*n. a.*
Mali	*1.0*	*1.025*

e) Improved awareness of stakeholders, beneficiaries, airport agents, etc. on air transport safety and security. The substantial training program implemented by the Project was a key factor for that.

90. An attempt at doing a quantitative analysis economic analysis is presented in Annexe 3 – Economic & Financial Analysis regarding Trade & Tourism Economic Impact related to Direct Contributions to GDP, to employment as well as to Capital Investment. The Economic Internal Rates of Return (EIRR) are also presented based on an impact of air transport safety and security on the growth of tourism numbers of 10% (conservative case) in 2015. This gives some EIRR of 26 percent, 32 percent, 22 percent, and 39 percent for Burkina Faso, Cameroon, Guinea and Mali respectively. The

[33] There is slight disconnect here between the value of 4% specified in the last three ISRs (#17 – June, 2013; #18 – December, 2013; #19 (and final) – June, 2014) including the final one), and the value of "<4%" specified in the last supervision mission aide-memoire (March, 2013).

[34] There is a disconnect here between the last ISR #19 (< 3%) and the last Supervision Mission Aide-mémoire - December. 2013 & March, 2014 (< 1.5%). Nonetheless, the end of project value is reached, and the PDO achieved

consolidated NPV (Net Present Value) for the project is US$144.71 million (global), and US$14.81 million, US$67.08 million, US$10.42 million, and US$41.10 million for Burkina Faso, Cameroon, Guinea and Mali respectively.

91. Implementation of the project was substantially delayed, and several project extensions were needed to substantially achieve the PDOs. Therefore, the overall efficiency of implementing the Project can be questioned due to the much higher than expected supervision costs for the project, major delays in implementing major components and major delays in achieving the Project objectives.

3.4 Justification of Overall Outcome Rating

Rating: **Moderately Satisfactory**

92. Based on the combination of the above assessment of the Project outcomes, the **Overall Outcome Rating is considered as Moderately Satisfactory** for the following reasons.

93. First, all the beneficiary countries covered by the Project have committed significant efforts and resources to improve their safety and security oversight capacity as Member States of ICAO and signatories of international conventions. The corresponding achievements have been partly undermined by Guinea's failure to set up an autonomous CAA to better ensure the sustainability of the project's outputs and outcomes.

94. Secondly, the capacity building efforts and the step-by-step appropriation of the Project by the beneficiary countries, as well as the strengthening of CAAs' oversight and financial capacity in the borrowing countries had a positive influence on the overall outcome of the Project.

95. Thirdly, partly as result of the project, air transport security and safety standards have objectively improved during implementation of the Project.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

96. The Project had no specific poverty, gender or social development related objectives.

(b) Institutional strengthening

97. Institutional strengthening can be observed in each beneficiary country. More specifically, each country now has its own set of updated and appropriate legal and regulatory framework (codes, regulations, laws, procedures) as well as more qualified staff to enhance air transport safety and security within its air space and major airports. Excluding Guinea, the three other countries have now in place fully autonomous CAA, with significantly strengthens their oversight of the air transport industry.

98. By definition, international air transport is a cross-border activity, and countries needed to be in line with regional standards set up by ICAO and sub-regional organizations as overarching entities. Therefore, regional dimension gains were knowledge sharing, coordination, and subsequent standardization of some safety regulations. The Project encouraged beneficiary countries to collaborate among them, as well as with (other) neighboring countries that are also member of sub-regional organization[35].

99. In order to ensure that the respective actions of the involved Governments were leading to the same objective of strengthening air transport safety oversight at the regional level, the Project worked with the COSCAP – WAEMU. The latter has been involved in the harmonization of some procedures, and has helped Guinea in designing an autonomous (but still not yet effective) CAA. This was made possible thanks to the integrative and advocacy effect of the Project.

(c) Other Unintended Outcomes and Impacts (positive or negative)

100. Beyond sensitizing countries to air transport safety and security, the Project offered the opportunity for participating countries to be used as a platform to share knowledge, experience, outputs, etc. Two workshops with all the national coordinators were held in March 2010 and November 2013 in which they pledged to continue working to improve air transport and security beyond the project's life.

101. Furthermore, in light of the increased awareness by the respective Governments involved in the project of the importance and relevance of air transport safety and security: (a) Guinea, Mali, and Cameroon want to develop and strengthen their secondary airports; (b) Burkina Faso intends to replicate a crisis exercise in the Bobo-Dioulasso airport based on the success of the two exercises executed in Ouagadougou during the Project; and (c) Burkina Faso and Cameroon want their international airports to be certified for direct flights to the United States by the US Transport Security Administration (TSA)[36].

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

102. No beneficiary surveys or stakeholder workshops were conducted.

103. However, national ICR review workshops were held in Burkina Faso (June 2013) and Cameroon (March 2014)[37], as well as two national Project coordinators meetings (March 2010 and November 2013). In all those events, all the beneficiary countries

[35] Such as the COSCAP-WAEMU and the Banjul Accord Group (in the case of Guinea)
[36] None of the CAAs supported by the Project are certified as Category 1 by the United States Federal Aviation Administration (USFAA). Likewise, none of the airports supported by the Project are certified by the United States Transport Security Administration (TSA) for operating direct flight from/to the United States.
[37] Guinea and Mali did not hold National ICR review workshops.

recognized the positive impacts of the Project and acknowledged that without the Project the improvements in air transport safety and security may have not have been achieved.

4. Assessment of Risk to Development Outcome

Rating: **Significant**

104. Based on the ICAO Implementation Plan for Aviation Safety in Africa (AFI plan), the Effective Implementation (EI) of ICAO recommendations under its USOAP (Universal Safety Oversight Audit Programme) is presented in Table 10 below. The results are based on the State's Safety Oversight System eight critical elements [38] identified by ICAO.

Table 10: EI[39] of ICAO Recommendations (Source: ICAO)

State	Initial CSA Audit		ICVM or Off-site validation	
	Date	EI (%)	Date	EI (%)
Guinea	May 2013	7.57	September 2014	17.97
Cameroon	September 2006	44.12	December 2013	52.13
Burkina Faso	November 2007	53.98	May 2014	61.62
Mali	January 2008	25.13	October 2011	46.3

CSA: Comprehensive System Approach
ICVM: ICAO Coordinated Validation Mission
EI: Effective Implementation

105. These results are clearly representative of the Project's safety achievements even if the Project's value was limited to CCAA and contributed to six critical elements out of eight[40]. However, it also means that ***despite the Civil Aviation Systems of the Project countries have improved, they are still not fully compliant with ICAO standards,*** thus raising the risk to development outcome – especially if the progresses achieved so far partially thanks to the Project are not sustained.

106. **Capacity building risk.** Extensive training programs for civil aviation staff in safety and security yielded positive results and helped to improve the overall compliance rate with respect to ICAO standards. Beneficiary agencies staffs have also been duly trained to operate sophisticated equipment acquired during the Project. Therefore, capacity has been built at the beneficiary level, leading to higher levels of expertise, especially in safety and security supervision. However, there is a **Significant** risk this achievement may not be sustained after project closing without strong follow-up within

[38] Primary aviation regulation; Specific operating regulations; State civil aviation system and safety oversight functions; Technical personnel qualification and training; Technical guidance, tools and the provision of safety-critical information; Licensing, certification, authorization and approval obligations; Surveillance obligations; Resolution of safety concerns

[39] The Effective Implementation (EI) of each critical element is rated from 0% to 100%, with 0% being "Not Implemented" and 100% being "Fully Implemented". The EI score represents the percentage of satisfactory USOAP protocol questions applicable for a given State. A significant safety concern (SSC) does not necessarily indicate a particular safety deficiency in the air navigation service providers, airlines (air operators), aircraft or aerodrome; but, rather, indicates that the State is not providing sufficient safety oversight to ensure the effective implementation of applicable ICAO Standards.

[40] The eight critical elements minus: Technical guidance, tools and the provision of safety-critical information; Licensing, certification, authorization and approval obligations.

weaker financial and institutional environment such as the one for Guinea[41]. This also means that adequate human and financial resources must be respectively identified and secured.

107. **Institutional risk (Governments' ownership/commitment) remains Significant.** Governments would need continuous and deliberate efforts to sustain and build upon the achievements of the project. Frequent government changes as in Guinea did not help to reach and maintain some momentum in the required reform process. Regulations (Civil Aviation) have been updated with resources allocated to safety and security significantly increased during the project. Guinea aside, this means the CAAs need to be enshrined[42] in their financial autonomy and capacity. As a consequence, attention has to be paid to the utilization of CAAs' funds to ensure they are directed to air transport safety and security needs.

108. **The risk to development outcome is considered as Very High for Guinea**. To date, any autonomous CAA has not been set up yet, and the National Civil Aviation Directorate (*Direction Nationale de l'Aviation Civile* – DNAC), that implemented the Guinean component of the Project, remains under the umbrella of the Ministry of Transport with a lack of financial resources and qualified experts, especially in the safety area. Without any strong financial and institutional support to set up that CAA, benefits from the Project are likely to be compromised, and so the related development outcome. Furthermore, the current Ebola epdimic in the country may lead to even further resources in supporting DNAC and in eventually creating a CAA.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance[43]

(a) Bank Performance in Ensuring Quality at Entry
Rating: **Unsatisfactory**

109. **World Bank performance is rated Unsatisfactory** for the following reasons:

110. First, the PAD describes a comprehensive program to support up to 23 SSA countries to enhance air travel safety and security in the region through a series of three horizontal APLs. APL1 was supposed to include the countries considered as to be the most implementation rated, namely Burkina Faso, Cameroon and Mali. Guinea was

[41] As an example: Sophisticated equipment equired maintenance costs coupled with lack of adequate technical and human resources for updates may alter the sustainability of these investments.
[42] Burkina Faso, Cameroon, and Mali have committed budgets to CAAs beyond the expectations of the Project, which had specific line items allocated to Security.
[43] *"Bank Performance is rated by assessing* ***two dimensions****: (i) Bank performance in ensuring quality at entry; and (ii) quality of Bank supervision. Bank performance in ensuring Quality at Entry refers to the extent to which the Bank identified, facilitated preparation of, and appraised the operation such that it was most likely to achieve planned development outcomes and was consistent with the Bank's fiduciary role. The quality of Bank supervision refers to the extent to which the Bank proactively identified and resolved threats to the achievement of relevant development outcomes and the Bank's fiduciary role."* - Implementation Completion and Results Report – Guidelines – OPCS – August 2006 (updated July 22, 2014) – i. e. the assessment of the Bank performance is not the assessment of a task team per se but of the Bank as a whole..

included as part of the financing for APL1, despite not fully complying with the defined criteria as its Government displayed strong interest in participating in the program and quickly prepared their national component to be included in phase I of the APL series[44]. However, a more thorough and systematic evaluation of the real capacity of Guinea to implement the project activities should have led to their exclusion in phase I of the APL series. That's because of all the issues that Guinea faced during the implementation of the Project.

111. Secondly, considering the low level of implementation readiness for the civil works part of the Projet, the implementation timeframe was not at all realistic. The customary time implementation framework for a single country investment lending projects is 5 to 6 years. Therefore, the decision to adopt a 3-year implementation timeframe for a complex regional operation (4 countries under APL1; 23 in a long run), provided to very optimistic.

112. Thirdly, the Project had 12 effectiveness conditions (above standard ones as specified in the General Conditions)[45] and 35 critical legal covenants[46] spread over four borrowing countries with different readiness status. This was a clear indication that the Project was not ready for implementation.

113. Fourthly, The PAD provided estimates of the costs necessary to implement the Project activities components based on the number of airports to be covered under the Project. However, the technical studies (Detailed Project Reports and Bidding Documents) related to major investments were not available for the civil works (airport fences, airport perimeter patrol roads, crisis management centers, etc.) at the time of appraisal. This meant the initial implementation of the project was extremely slow due to the need to finalize technical studies and launch the procurement process.

114. Fifthly, the overall program scope was overly ambitious. More specifically, it was supposed to cover 23 countries, and more than 30 airports. Although at the end only 7 countries signed up to the program, if all 23 had signed up, the implementation of the program would have been extremely difficult with the business model and resources that the World Bank could have mobilized. This means that the program scope exceeded the capacity of the World Bank and countries involved to actually implement it within a reasonable (5-7 years) time frame.

115. Sixthly, the use of a three series horizontal APL to address the issue of different levels of readiness by participating countries, may have not been the most appropriate instrument due to the cumbersome requirements of preparing and implementing concurrently three different APLs. Considering the number of countries that ultimately joined the program, a SIL type of operation[47] may have been more appropriate.

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[44] See also Section 2.1 - Project Preparation, Design and Quality at Entry.
[45] Cf. PAD – Section 6.3 – Table 4
[46] Cf. ISR #1
[47]Either global, or for each country with common objectives.

(b) Quality of Supervision
Rating: **Moderately Satisfactory**

116. **The Quality of Supervision rating is rated Moderately Satisfactory** for the following reasons.

117. First, despite chronic supervision funding constraints, the World Bank project team was: (a) proactive in supporting all the countries, especially Guinea; and (b) able to mobilize adequate expertise regarding the scheduled activities and components of the Project. Supervision missions in the field were carried out on a regular basis at least two times each year. When necessary, the on the ground supervision effort was complemented by the use of video/audio conference working sessions. The fact of having Environment and Social Safeguards, Financial and Procurement Specialists based in the Country Offices (CO) facilitated the implementation of the Project. Under that context, the level of effort of the Supervision team has counterbalanced the unsatisfactory quality at entry of the Project, thus allowed the substantial achievement of the Project.

118. Secondly, the World Bank project team responded in a timely fashion to procurement requests, including no-objections. Nonetheless, there were substantial procurement delay (more than 5 months) with some procurement activities (construction of the fence and the patrol road of the Douala airport, Cameroon)[48]. Furthermore, the lack of completed studies and bidding documents slowed down the overall implementation of project activities.

119. Thirdly, the World Bank project team was able to face significant implementation challenges issues through: (a) restructuring of closing dates to take into account delays; and (b) change of indicators' baseline and targets.

120. Fourthly, the World Bank project team was able to strike a fair balance between providing more resources to support Guinea who was lagging in terms of implementation while at the same time providing support to the three other countries (Burkina Faso, Cameroon, and Mali) who were involved in the Project. One option that should have been seriously considered was to drop the Guinea component, and restructure the Project such a way Guinea could be either fully dropped or re-included in a later APL. As a result, despite strong support in the supervision and an improved situation on the ground in Guinea, a key objective of creating an autonomous CAA was not achieved.

121. Finally, even if the PDOs were substantially achived, the efficiency of implementing the Project is questionable, due to the appropriateness of specific decision made during supervision and/or the level of human and financial resources made available for supervision purposes.

[48]The no objection for the contract award was requested in April, 2010 and issued in September, 2010.

(c) Justification of Rating for Overall Bank Performance
Rating: **Moderately Unsatisfactory**

122. Based on the combination of the above assessment of the World Bank performance, the Overall Bank Performance Rating is **Moderately Unsatisfactory.**

5.2 Borrower Performance

(a) Government Performance
Rating: **Moderately Satisfactory**

123. Apart from Guinea[49] all three other countries were not able to make the project effective within the stipulated 120 days[50]. Two project extensions (42-month equivalent)[51] for Burkina Faso, Cameroon, Mali and three project extensions (54-month equivalent)[52] for Guinea were needed to substantially complete the scheduled activities and substantially achieve the PDOs of the Project. By the extended Project closing date, Burkina Faso, Cameroon, Mali had financially autonomous and effective CAAs while Guinea's CAAs is still note effective.

Burkina Faso
Rating: **Satisfactory**

124. Throughout Project implementation, Burkina Faso made significant progress in improving oversight, safety and security in air transport. More specifically, GoBF created an autonomous CAA out of the former Civil Aviation and Meteorology General Directorate (*Direction Générale de l'Aviation Civile et de la Météorologie* – DGACM). By the end of the project, the GoBF had also applied for the US Transport Security Agency (TSA)'s certification of the Ouagadougou international airport. So far, the process is ongoing.

Cameroon
Rating: **Moderately Satisfactory**

125. GoC's support in implementing the project was consistent over the project's life. However, it took time to adopt the Civil Aviation bill which was submitted in 2007 but was only adopted by GoC in 2013. Therefore, the adoption of the Civil Aviation bill could not be considered in the 2012 ICAO safety audit, which undermined country's overall performance in one of the critical elements considered in the audit.

[49] August 24, 2006.
[50] Cf. respective countries Financial Agreements
[51] To be considered and added to an anticipated Project Implementation Period of 39 months (based on an expected effectiveness date as of September 30, 2006 – as per the PAD data sheet).
[52] Same as above.

126. The GoC was able to finance complementary activities to the Project, such as the construction of an access road for the people living in the vicinity of the Yaounde airport after it was fenced in by the Project.

127. As a result of its commitment to the project, the GoC finally provided a total of US$12.3 million of counterpart funds, which is well above its funding obligation (through the CCAA) of US$1.5 million considered during appraisal. The additional counterpart funding of US$10.8 million helped cover CCAA's increased operating costs due to the Project extension[53], project costs overruns due to the underestimations of project activities and the omission of taxes and customs excise[54] at the time of appraisal.

Guinea
Rating: **Unsatisfactory**

128. The PAD identified Guinea as high risk for Project implementation due to periodic bouts of political instability and weak institutional capacity in the country. The frequent changes in the Government negatively impacted the project's performance as the successive Ministers in charge of air transport had different perception regarding the project's priorities. There was clearly a lack of leadership at the ministerial level, and a lack of continuous commitment to complete the process to make their CAA autonomous. As a result, Guinea remains among the very few countries in the WCA region without an effective autonomous CAA. At the project's closure, the law setting up the CAA was ratified, but the decrees were yet to be signed to make the new CAA effective.

129. Despite these challenges, Guinea was able to make noticeable improvements in the achievement of the key indicators targets[55]. In parallel, the GoG significantly improved its service quality through the provision of new safety equipment acquired with the Project's support (air navigation, landing and take-off assistance equipment, meteorological equipment, revamped infrastructure within the airport), and during its April 2014 mission in Guinea – two months prior to Project's closing – ICAO flagged the global improvement of the situation on the ground, the current updates in the regulations and procedures, and the number of trained staff, inspectors and instructors within the DNAC and at the airport.

130. However, ICAO once again reiterated the country's continued needs in aviation safety improvement, and highlighted that the CAA-to-be would need strong and continuous support in order to catch up with their neighbors.

[53] The operating costs of the PIT increased from US$1.5 million to US$3.2 million because of the two project closing date extensions.
[54] Waived tax and duties of the Project activities represent a total amount of US$3.5 million
[55] Safety and security compliance with ICAO standards and subsequent indicators (number of staff with ICAO certification, etc.)

Mali
Rating: **Satisfactory**

131. Mali's performance is commendable, especially if we consider the political turmoil which affected the country starting from March 2012 until early 2013. Prior to effectiveness, the Government of Mali (GoM) had already set up an autonomous CAA called National Civil Aviation Authority (*Agence Nationale de l'Aviation Civile* – ANAC). Its operating budget was not available at appraisal[56] but was expected to reach US$2.6 million at the end of the Project. As of March 2013, ANAC's operation budget was confirmed at US$6.54 million providing adequate resources to fulfill its duties.

(b) Implementing Agency or Agencies Performance
Rating: **Moderately Unsatisfactory**

132. The overall performance of Implementing Agencies is rated **Moderately Unsatisfactory** based on the following ratings:

Burkina Faso
Rating: **Moderately Satisfactory**

133. The activities of the Project were initially implemented by the DGACM, then by the autonomous CAA (*Agence Nationale de l'Aviation Civile* – ANAC). The CAA's compliance rate with ICAO safety standards rose from 49 percent to 70 percent[57] - target achieved, and security standards increased from 54 percent to 67 percent[58] - behind target. Some procurement processes suffered delays because of the absence of sufficient procurement capacity within the CAA.

134. At Project closing, the CAA is capable to: (a) cover the operating costs that were previously funded by the Project; (b) keep trained police officers working at the Ouagadougou airport thanks to specific agreement signed with the Police; and (c) develop an internal quality insurance process to reach ISO 9001/2008 standards (since 2013).

135. The PIT was in charge of the financial management, the supervision of the procurement process, the monitoring and evaluation, and the overall coordination of the Project. The PIT properly executed its due diligence role by setting up or following up: (a) the monitoring and evaluation tools; (b) technical, and steering committee meetings on a regular basis; and (c) the Project management tools (accounting software, manual of procedures, internal audit, etc.).

[56] Cf. PAD baseline, and ISR #1
[57] Cf. Supervision Aide-mémoire – March. 2013. There is a disconnect here as the last ISR (#19) mentions a value of 70%.
[58] Cf. Supervision Aide-mémoire – March. 2013. There is a disconnect here as the last ISR (#19) mentions a value of 75% - as an anticipation of an ICAO audit supposed to confirm that value (Annex 4 of the earlier mentioned Aide-mémoire).

Cameroon
Rating: **Moderately Satisfactory**

136. The Project was implemented by the CCAA through a PIT that included part of its own staff and newly recruited staff. Due to initial staffing and coordination challenges that the PIT faced, the implementation of project activities in Cameroon was delayed by almost two years. Nonetheless, Cameroon demonstrated that with a well-established and autonomous CAA endowed with good technical and financial standing, the CCAA was capable of sustaining the results achieved by the Project.

137. During the project, the CCAA's compliance rate with ICAO standards increased from 46 percent[59] to 68 percent - slightly below target - for safety, and most significantly, from 30 percent to (above) 75 percent - target achieved - for security.

Guinea
Rating: **Moderately Unsatisfactory**

138. The implementing agency, DNAC, was able to improve based on the Project's indicators: The safety compliance rate increased from 53 percent to 77 percent[60], based on the USOAP approach, while the security compliance rate improved from 1 percent to 55 percent[61].

139. However, further to the ICAO CSA (Comprehensive System Approah) audit of April-May 2013, the Guinea EI rate was of 7.57 percent (cf Table 10) against a world average EI of 61 percent, and that very poor performance raised the crucial need of reinforcement/strengthening of the DNAC/CAA-to-be regarding air transport safety supervision.

140. Regrettably, during the last ICVM (ICAO Coordinated Validation Mission)/Off-site validation mission of September 2014, the Guinea EI rate (of 17.97 percent) was still significantly below 61 percent confirming once again the above mentioned ICAO evaluation's findings.

Mali
Rating: **Satisfactory**

141. The ANAC's compliance rate with ICAO safety standards, initially rated 51 percent based on USOAP approach, was expected to reach 80 percent at the Project's closing date. With the change in ICAO's methodology shifting to the systemic audit approach, this compliance rate dropped to 24 percent[62] while the target results at the Project's closing date was revised at 75 percent. Notwithstanding that adjustment, the

[59]Cf. Restructuring Paper #1. There is a disconnect here as the last ISR (#19) mentions a value of 35%.
[60] Cf. Supervision Mission Aide-Memoire - December. 2013 & March, 2014.
[61] Cf. Supervision Mission Aide-Memoire - December. 2013 & March, 2014. It is worth to notice that the 55% output is not properly reflected in the PDO Indicators Table of the last ISR of the Project (ISR #19 – Archived – June, 2014).
[62]Cf. Restructuring Paper #1. There is a disconnect here as the last ISR (#19) mentions a value of 28%.

value reached at the end of the Project was of percent which is an impressive progress, even if slightly behind the target.

142. In terms of security, Mali also showed substantial progress jumping from 8 percent to 86 percent compliance rate with ICAO security standards.

143. The ANAC committed an additional amount of US$400,000 to complete the works of the crisis management center and of some secured gates and fences on the airport platform.

(c) Justification of Rating for Overall Borrower Performance
Rating: **Moderately Satisfactory**

144. Based on the combination of each Borrower's overall performance, the Overall Borrower Performance is rated as Moderately Satisfactory. The breakdown of the combined score by country is as follows:

Table 11: Overall Borrower Performance Ratings Summary

	Government	**Implementing Agency/ies**	**Overall**
Burkina Faso	Satisfactory	Moderately Satisfactory	Moderately Satisfactory
Cameroon	Moderately Satisfactory	Moderately Satisfactory	Moderately Satisfactory
Guinea	Unsatisfactory	Moderately Unsatisfactory	Unsatisfactory
Mali	Satisfactory	Satisfactory	Satisfactory
Overall Borrower Performance	**Moderately Satisfactory**	**Moderately Satisfactory**	**Moderately Satisfactory**

6. Lessons Learned

145. The preparation and implementation of the this Project has provided several lessons for future operations:

146. ***Need to simplify project design in a complex and challenging implementation environment.*** The scope and objective of the project were extremely ambitious. More specifically, the WCAATSSP Program was supposed to largely address the air transport oversight safety and security issues in 23 countries and more than 30 airports in SSA. If all 23 countries had signed to the program, irrespective of the lending instrument, it would have meant that the World Bank would have had to mobilize substantial additional human and financial resources, not readily available, to adequately supervise and coordinate the implementation of the project. The mobilization of such resources would have been extremely difficult in a human resource and budget constrained environment in

which the World Bank has been operating since the late 1990's. Thus, considering the constraints of implementing a program with potentially up to 23 participating countries, it is clear that implementing such a regional project would have required a more realistic design/scope (including a number of beneficiaries cap), customized supervision provisions, as well as a strong commitment of the World Bank in terms of (human and financial) resources allocation.

147. ***Participating countries should be grouped by capacity.*** The performance of one country (Guinea) during implementation negatively impacted the overall performance of the Project in terms of timeline and achievement of objectives. This means that a much more rigorous assessment process should have been done to ensure that all countries in the Project were roughly at the same level of readiness, when the project started. The lack of readiness homogeneity in the APL1 countries prevented a synchronized pace of implementation and, diverted scarce supervision resources during implementation. This means that Guinea should have possible be included in a later APL[63].

148. ***Appropriate common grounds (geographic proximity, same regional entities) should also be considered.*** In order to strengthen the regionality of the Project and, in furtherance, better support regional integration purposes, the readiness eligibility criteria could be complemented by criteria related to:

a) geographical area (common borders): Cameroon does not have common borders with Burkina Faso, and Guinea, and Mali; and/or
b) institutional/economical pattern: Cameroon is part of CEMAC, whereas Burkina Faso, Guinea, and Mali are part of ECOWAS; and/or
c) technical aspects: Guinea is not part of ASECNA, whereas Burkina Faso, Mali, and Cameroon are part of it.

149. ***Project readiness is essential to ensure timely implementation.*** When the project was presented to the World Bank Board it had a very low level of implementation readiness. More specifically, the project was presented to the World Bank Board with almost none of the technical studies and bidding documents ready for the civil works components to the funded under the project. This translated in a very slow implementation and low disbursement rate during the first 2 to 3 years of implementation. Furthermore, the project was presented to the World Bank board with 12 effectiveness conditions (above standard ones as specified in the General Conditions)[64] and 35 critical legal covenants. This was another clear sign that the project was not ready for implementation and the sheer number of conditions/covenants was overwhelming for the weak capacity in the PIT causing implementation delay. Therefore, before the project was presented to the World Bank board, key studies and bidding documents for at least 33% by value of the civil works components should have been ready, and the number of covenants should have been substantially reduced.

[63] Either with other countries or as a stand-alone like for Nigeria
[64] Cf. PAD – Section 6.3 – Table 4

150. ***Realistic implementation time frame should be used for multi country complex regional project.*** The Project was expected to be completed in 3 years but it took about 8 years to complete the implementation of all project components. Therefore, the implementation time frame for such a type of project needs to be more commensurate to the norm for regional projects which is 6 to 8 years.

151. ***Performance indicators should be limited to what is key to monitor outcomes and outputs.*** At the time of appraisal, the indicators were designed based on ICAO's safety and security audits results. Safety indicators targets were revised in late 2007 and this revision applied to Burkina Faso, Cameroon, and Mali, but not for Guinea whose safety indicators remained calculated based on the ante-revision definition. However, as it remained complex to establish a causal linkage between these data/indicators and the Project, future projects will have to define a set of indicators that can measure direct and/or indirect economic impacts/contributions[65].

152. ***M&E framework should include regional dimension.*** As the indicators were focused on ICAO's safety and security compliance rates at the country level, it was difficult to assess causal linkage[66] between the national components outputs and the regional outcomes of the Project. The lack of causal linkage between outputs and results is reinforced by the absence of a regional results framework in the design of the Project. Such a framework should have been included at the overarching/coordinating regional entity[67] level in order to attempt to aggregate national component outputs for analytical data analysis at the regional level.

153. ***Project design should be more regionally integrated.*** Because the project was designed more like a multiple-country project, linkages between countries and regional integration was not adequately captured and addressed, and no regional results monitoring and evaluation framework was designed.

154. ***Complementarity and coordinated actions are key to promote broader air transport regional activities***. All along the Project, the World Bank team and the beneficiary countries/CAAs worked with ICAO and sub-regional organizations to ensure synergies and complementarities of their respective activities. As a result, and thanks to the Project:

a) Countries respectively dealt with international and sub-regional organizations allowing for some direct collaboration as required during the project's implementation (COSCAP-WAEMU support to some countries; joint missions between the World Bank and ICAO teams);
b) The follow-up of corrective actions suggested by ICAO was facilitated. Each beneficiary country coordinated their respective actions with ICAO, as the key indicators values were derived from ICAO audits results. ICAO informed each

[65] i.e.: Monitoring and evaluation of such potential future operations should include indicators to be based on industry/economic-standard indicators with a clear and agreed methodology for data collection and reporting
[66] As well as to carry out a proper economic and financial analysis to assess the outcomes of the project
[67] Provided it exists, and is functional

other about updates of the status of their respective actions, in order to make sure that the Projects common goals were achieved[68].

155. Therefore, national components underpinned by common outputs within a regional integration framework should be strengthened at the regional level by existing overarching entities. Regional strengthening would be focused on institutional support, coordination, and follow-up/analytic work on indicators. Depending on the nature of the operations/programs, this may extensively benefit from strong partnerships the World Bank has with appropriate stakeholders (ICAO) and/or lessons learned of other World Bank projects (Central America, Pacific).

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

The Executive Summaries of the countries' ICRs are presented as annexes to this ICR.

(b) Cofinanciers

Not applicable

(c) Other partners and stakeholders

Not applicable

[68] As an example, in December 2013, the Bank team and ICAO safety and security teams carried out a joint mission in Guinea, in order to reinforce their cooperation and support specifically Guinea to make further progress and see how to further enhance their support, as well as present a joint action plan to its Government. At that time, as the project was close to ending, it was necessary to make sure that a close follow up of the common interests would be ensured beyond the project's closing date, especially regarding the finalization of the institutional reforms.

Annex 1. Project Costs

(a) Project Cost by Component (in XDR equivalent)

Components	Appraisal Estimate (XDR)	Actual/Latest Estimate (XDR)	Percentage of Appraisal
BURKINA			
Goods	1,450,000	1,497,273	103%
Works	1,250,000	1,127,522	90%
Consulting Services	550,000	772,601	140%
Training	300,000	715,058	238%
Operation Costs	100,000	387,274	387%
Unallocated	850,000	0	0%
Sub-Total	*4,500,000*	*4,499,728*	*99.99%*
CAMEROON			
Goods	2,200,000	2,151,532	98%
Works	3,850,000	5,380,577	140%
Consulting Services	2,950,000	2,150,746	73%
Training	500,000	329,427	66%
Operation Costs	0	0	
Unallocated	700,000	0	0%
Sub-Total	*10,200,000*	*10,012,282*	*98.15%*
GUINEA			
Goods	1,650,000	2,366,283	143%
Works	1,900,000	1,188,736	63%
Consulting Services	700,000	580,814	83%
Training	350,000	252,673	72%
Operation Costs	150,000	495,777	331%
Unallocated	150,000	0	0%
Sub-Total	*4,900,000*	*4,884,283*	*99.68%*
MALI			
Goods	1,350,000	860,401	64%
Works	1,400,000	1,696,291	121%
Consulting Services	700,000	819,749	117%
Training	75,000	107,425	143%
Operation Costs	125,000	207,107	166%
Unallocated	150,000	0	0%
Sub-Total	*3,800,000*	*3,690,974*	*97.13%*

Total IDA Cost in XDR			
Goods	6,650,000	6,875,489	103%
Works	8,400,000	9,393,126	112%
Consulting Services	4,900,000	4,323,910	88%
Training	1,225,000	1,404,583	115%
Operation Costs	375,000	1,090,158	291%
Unallocated	1,700,000	0	0%
Total	***23,250,000***	***23,087,266***	***99%***

(b) Total Project Cost

Source of Funds	Counterpart Actual* (USD millions)	IDA Actual (USD millions)	Total
Burkina Faso	0.0	6.7	6.7
Cameroon	12.3	14.9	27.2
Guinea	0.0	7.3	7.3
Mali	0.4	5.5	5.9
Total Project Cost	***12.7***	***34.4***	***47.1***

**including CAAs*

Annex 2. Outputs by Component

Table 2.1: Project Development Objective (PDO) Indicators

	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***	***Total CAA's budget amount (US$ million)***
Burkina Faso	Country airports now possess appropriate equipment to enhance their own safety within the airport platform, all along the human and luggage/freight checking loop, as well as during aircrafts landing and take-off.	Staff benefitted from intensive training and can now share and transfer that knowledge either to national or sub-regional counterparts.	Financial strengthening and autonomy of the CAA End of Project value: US$3.6 million against End of Project target: US$2.0 million
Cameroon			Financial strengthening and autonomy of the CAA End of Project value: > US$22.7 million against End of Project target: US$6.0 million
Guinea			CAA not yet effective End of Project value: n. a. against End of Project target: US$0.7 million
Mali			Financial strengthening and autonomy of the CAA End of Project value: US$6.54 million against End of Project target: US$2.6 million

	PDO 2 –Improve CAA's compliance with ICAO's security standards			
	Compliance rate with ICAO 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 (US$ million)***	***National Security Plan compliance with ICAO's standards***
Burkina Faso	Appropriate instruments are now in place and support enhancement of security. Increase in security standards, positive impact on airports image and 12 new airlines attracted since project's implementation.	Staff benefitted from intensive training and can now share and transfer that knowledge either to national or sub-regional counterparts.	Due to increase of budget going toward security, an increase in overall airport security was achieved and new air companies started to serve the different airports of this Project.	There is no indicator attached to that outcome, and it then does not formally appear in the results monitoring framework. The national security plan is included in the ICAO Annex 17 and, as such, is part of the calculation of the compliance rate with ICAO's aggregate security standards based on ICAO's audit. Monitoring that specific outcome can be considered as redundant with the monitoring of the security compliance rate.
Cameroon	Appropriate instruments are now in place and support enhancement of security.			
Guinea	Appropriate instruments are now in place and support enhancement of security. Updated instruments are now in place and support enhancement of security with an improvement in compliance rate from 1% to 55%.			
Mali	Appropriate instruments are now in place and support enhancement of security. Appropriate instruments are now in place and support enhancement of security with an improvement in compliance rate from 1% to 86%.			

	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***	***Percentage of embarking passengers stopped in possession of illegal objects, as defined by the ICAO, by airlines security personnel***
Burkina Faso	Staff benefitted from intensive training and can now share and transfer that knowledge either to national or sub-regional counterparts.	Two airport crisis exercises were satisfactorily carried out. Based on this achievement, the GoB intends to carry out such an exercise in Bobo-Dioulasso (Burkina Faso's 2nd international airport)	The objective of decrease of the rate of illegal object seizures was partially met and targets substantially met.
Cameroon		Airport crisis exercises satisfactorily carried out in Yaoundé and Nsimalen: safety and crisis management plans are effective	An appropriate communication plan was implemented leading to a decrease in the rate of illegal object seizures made.
Guinea		Airport crisis exercise not yet carried out	The objective of decrease of the rate of illegal object seizures was partially met despite no initial baseline value at the time of appraisal.
Mali		Airport crisis exercise carried out: a) National regulation to be updated b) Sectoral plans to be set up	The objective of decrease of the rate of illegal object seizures was partially met and targets substantially met.

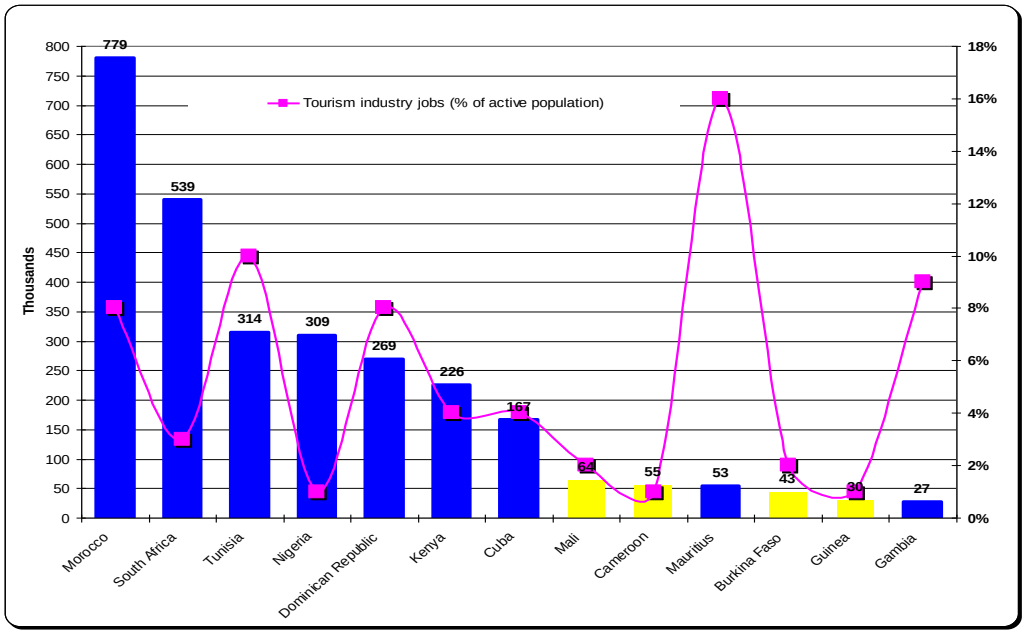
Annex 3. Economic and Financial Analysis
(including assumptions in the analysis)

1. The need for expanding and improving air services and markets in Africa, to which this project has contributed, 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 had an indirect impact on the long term macro-economic growth prospects of African economies by: a) promoting the sustainability of the sector (e.g., investment in airport facilities expansion, regulation), b) supporting tourism activities and exports trade.

Situation before the Project

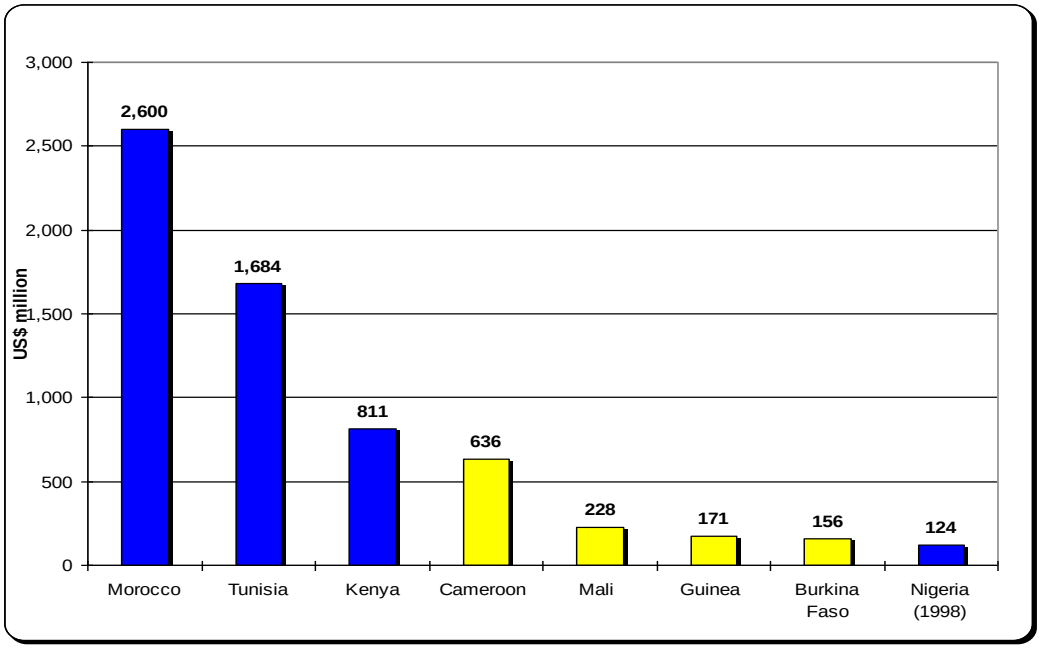
2. It is necessary to underscore that among all of the world's regions, Africa was the most dependent on aviation services when it comes to tourism activities with, according to the World Travel Tourism Council (WTTC), almost three (3) million direct and indirect tourism jobs supported by air services at the time of appraisal. At the time of appraisal, and in the initial four countries covered by the project, 192,000 jobs and US$ 1.2 billion in annual tourism revenues were linked to the safe and secure operations of air carriers (see Figures 1 and 2 below). Additionally, anywhere from 5.1 to 8.0% of these four countries' total capital investment depended on tourism activities (see Figure 3 below). Likewise inward investment levels as well as international market access to WCA countries high value perishable agricultural goods could be highly affected by the level of security and safety of airlines operations to/from and within WCA. As such, the project could be considered as an important building stone in the overall economic development strategy of the WCA countries.

Figure 1: Tourism industry direct employment in 2004



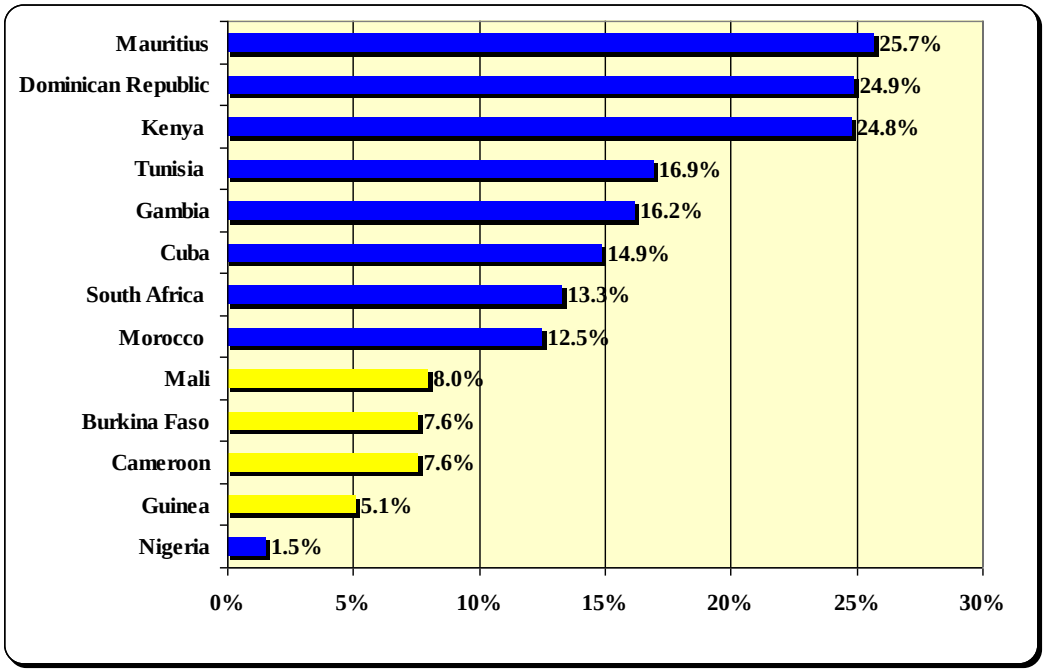
Source: WTTC, 2004

Figure 2: Annual tourism revenues (2004)



Source: WTTC, 2004

Figure 3: Tourism capital investment as a percentage of total investment (2004)



Source: WTTC 2004

Current African air transport background & prospects

3. Nowadays, including the tourism impacts, Africa accounts for 12% of the jobs and 3% of the GDP supported by the air transport industry[69]. In 2012, African airports witnessed a 7% growth in passengers handled, compared with 2011. Of the passengers carried on airlines in Africa, 42% are intercontinental, 31% domestic and the remaining 27% are flying within the region[70]. The expansion in air travel, at an expected rate of around 5.1% per annum is likely to continue generating significant economic impacts. Oxford Economics forecasts that the number of jobs supported by aviation and tourism impacts will grow to 10.5 million by 2032, a 51% increase from 2012. Meanwhile, the contribution to GDP is forecast to grow to $168.7 billion by 2032, a 109% increase on 2012 figures.

4. Africa accounts for a small share (2%) of the global air traffic flow[71]. While there are a number of renowned world-class carriers in the region (such as South African Airways, Ethiopian Airlines[72], Kenya Airways[73], and Egyptair), the majority of African countries also significantly depend foreign airlines for air service. In 2010, 65% of the air traffic to and from Africa was carried by foreign airlines. Even if, the dominance of foreign airlines is also a reflection of African airlines'sever capacity constraint, it is more than likely that renowned European air carriers would not fly to countries without acceptable safety and security conditions. In 2013, Lufthansa was flying to 35 African destinations, Air France to 35, Brussels Airlines to 28, etc. Intercontinental passenger flow (42%) constitutes far more than intra-African flow (27%)[74]. This traffic shows that the continent trades much more with the rest of the world than with itself[75], which would not be possible if, at some point, air transport safety and security had not been enhanced.

5. Even if the performance of the African aviation industry is still lagging behind those of the rest of the world, the prospects of the African air transport industry are relatively promising[76]. Demand for air transport has increased steadily over the past years with passenger numbers and freight traffic growing by 45% and 80%, respectively. Over the period 2010-2015, Africa will be the third fastest growing region in the world in terms of international traffic with an average growth rate of 6.1% compared to the global average of 5.8%, and 7.9% and 6.9% for the Middle East and Asia Pacific, respectively, while Europe, Latin America and North America are projected to record lower international passenger growth of 5.0%, 5.8% and 4.9%, respectively[77].

6. This trend is expected to continue in the coming years due to a number of factors, notably robust economic growth, demographic boom, increasing urbanization, and emergence of the middle class. Air transportation plays a vital role in the country's growth process by accelerating convergence of goods and persons. The contribution of air transport far exceeds that of road transportation sevenfold. Growth in air transportation has directly maps into economic growth due to spillover effects through creation of direct and indirect jobs in the industry and other auxiliary sectors such as tourism and other service sectors. Expansion in air transportation creates market opportunities for local entrepreneurs by creating regional and global economic centers. In 2010, the aviation industry in Africa supported about 7 million jobs (including 257,000 direct jobs) through the

[69] Aviation: benefits beyond borders report - Air Transport Action Group (ATAG) – 2014
[70] AFRAA Secretary General's presentation to the 2013 AFRAA Assembly: http://tinyurl. com/q6z88ec
[71] Economic Effects of Air Transport Liberalization in Africa, Megersa A. Abate (Ph.D), Swedish National Road and Transport Research Institute, October, 2013
[72]Flies to Burkina Faso, Cameroon (Douala), and Mali
[73]Flies to Burkina Faso, Cameroon (both Yaoundé and Douala), and Mali
[74] African Airlines Association (AFRAA) – Annual General Assembly, report of the Secretary General – November, 2013
[75] Only 11.3% of Africa's trade is within the continent (UNCTAD, 2013)
[76] Africa's Aviation Industry: Challenges and Opportunities – African Development Bank – November, 2012
[77] According to Boeing's estimates, a robust international passenger annual growth rate of 6.6% is expected in the 2011 to 2031 period in Africa, well above the previous long-term industry average rate of 5 % (Boeing, 2012).

impact on travel and tourism which translated into USD67.8 billion of the continent's GDP[78]. Forecasts indicate that the aviation industry's impact on African economies is set to grow. Over the next 20 years, implied job creation by the industry is projected at 879,000.

Current African air transport outcomes/trends[79]

Passengers carried

7. Passenger numbers has grown consistently year on year since 2004 except in 2011 where the numbers dropped as a result of the Arab Spring and political instability in parts of North Africa. From less than 40 million passengers carried in 2004 by African airlines, passenger numbers have increased to 62.9 million in 2012; a cumulative growth of 61.5% (average annual growth 7.8%), up from the 2011 figure of 56.4 million. The high GDP growth experienced in 2012 coupled with the attractiveness of Africa as a source for mineral resources and an increasingly attractive investment destination continue to attract foreign investments. African airlines therefore continued their aggressive network expansion, new markets development and further penetration of their domestic and intra-Africa markets. As a result, passenger numbers increased on domestic, intra-Africa and intercontinental routes. The total number of intercontinental passengers carried increased to 26.7 million from 23.6 million in 2011.

Domestic and Intra-Africa Passengers

8. Domestic passenger numbers increased by over 8% to 19.4 million due an increase in access to air travel, lower fares and new routes launched in 2012. The growing competition in many domestic markets and the resultant improvement in service quality and lower fares continue to stimulate demand. Low Costs Airlines, particularly in South Africa, Kenya, Egypt, Kingdom of Morocco and lately Tanzania continue to aggressively promote and attract more passengers, some of whom had never flown by air before.

9. Intra-Africa passenger numbers went up 12.75% to 16.8 million, up from 14.9 million in 2011. This growth was driven largely by the rapidly growing business and trade between African countries and the growing middle class, some of whom now prefer air travel. With a population of over 1.07 billion, spread across the vast the continent of 54 countries, there is huge potential for growth in intra-Africa air travel.

Intercontinental Passengers

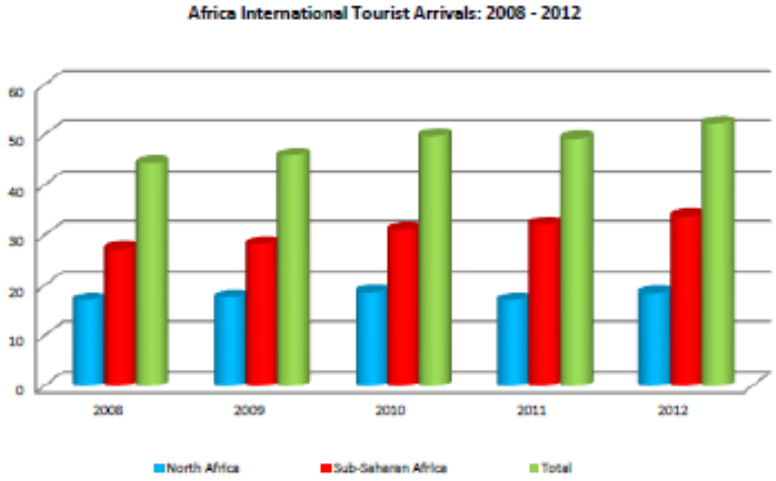
10. Intercontinental passenger numbers in 2012 increased by 12.9% over 2011. African airlines share of this was 5.1% in the year under review, bringing total passengers carried on intercontinental routes to 26.7 million. Non-African airlines carried 7.8% more passengers. The continued economic slowdown in the Eurozone reduced the traffic flow from that market, especially leisure traffic. The political crisis in somem countries in North Africa also shied away tourists to the region in the year under review. This was however compensated for by an increase in the number of passengers from Asia, the Middle East and the Americas to sub-Sahara Africa. Non-African airlines still carry the bulk of traffic to/from Africa, accounting for 78.4% of all passengers carried on intercontinental routes in 2012.

Passenger Distribution

11. Intercontinental passenger market segment remains the biggest with 42% of all passengers travelling between Africa and other regions of the world. The domestic market segment represents 31% while the intra-Africa market is 27%.

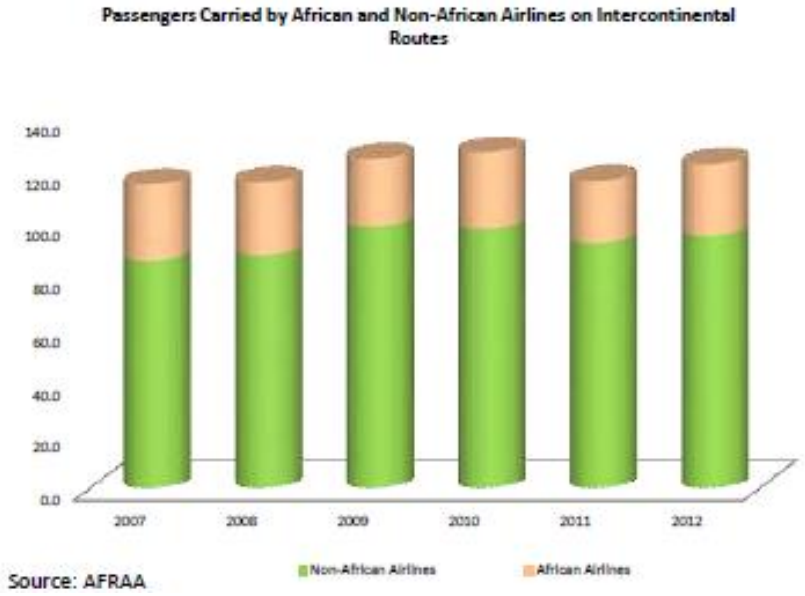
[78] Africa's Aviation Industry: Challenges and Opportunities – African Development Bank – November, 2012
[79] African Airlines Association (AFRAA) – Annual General Assembly, report of the Secretary General – November, 2013

Figure 4



Source: UNWTO

Figure 5



Source: AFRAA

Figure 6

Source: AFRAA

Freight Carried and Traffic

12. Air freight shipment in Africa is still very low. In 2012 the continent airlines carried about 788,500 tonnes of total global freight carried, representing 1.8% of total air freight shipment. AFRAA member airlines in 2012 carried a total of over 710,800 tonnes. In Freight Tonne Kilometres (FTK), this represents a growth of 11.7% compared to 2.7% in 2011. The Middle East and Africa recorded the highest year-on-year air freight growth of12.8% and 11.0% respectively.

Freight Traffic Forecast

13. IATA survey showed that airlines on average expect air freight tonnes to grow by 3% annually over the next 2 years to 2016 on international markets. The manufacturers in their long term forecast expect air freight demand (FTKs) growth to average 4.9 – 5.2% over the next 18 years. IATA maintains its long term forecast of 5% average growth.

Figure 7

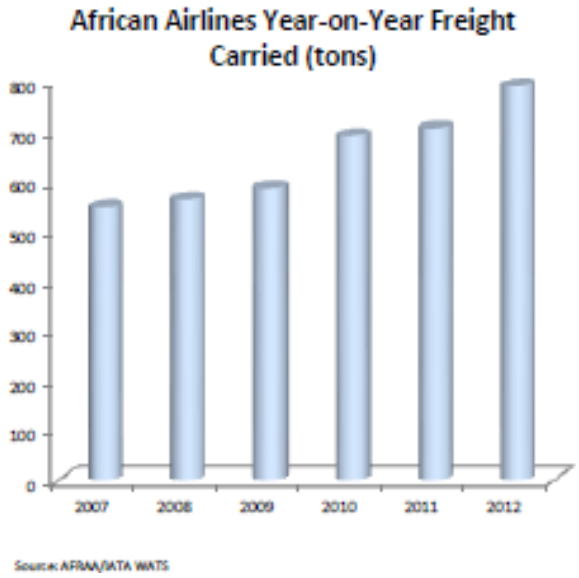
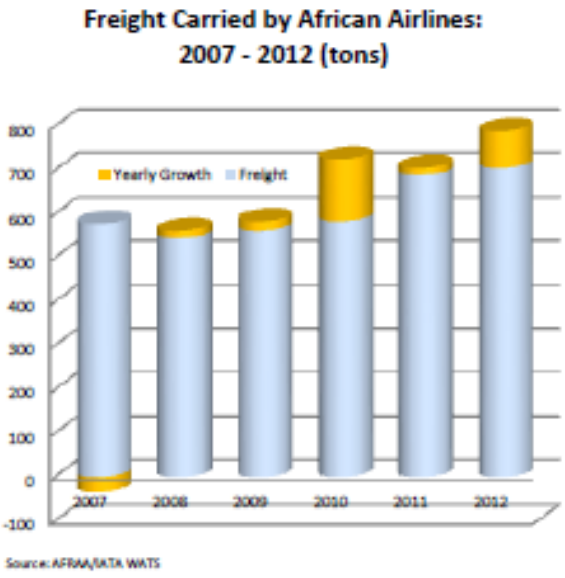


Figure 8



Travel & Tourism Specific Economic Impacts

14. More specifically, according to the World Travel & Tourism Council Impact Reports 2014, the economic contributions of Travel & Tourism are as follows for the countries of the APL 1 of the Project:

Direct Contribution to GDP (in constant 2013 local currency billions): this primarily reflects the economic activity generated by industries such as hotels, travel agents, airlines and other passenger transportation services, etc.

	2006 ***(PAD)***	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014** ***(forecast)***
Burkina Faso (XOF)	~ 60	~ 70	69.7	70.5 *(+ 1.15%)*	68.2 *(- 3.26%)*	74.6 *(+ 9.38%)*	79.8 *(+ 6.97%)*	83.8 *(+ 5.01%)*	87.7 *(+ 4.65%)*
Cameroon (XAF)	~ 310	~ 310	282.9	330.9 *(+ 16.97%)*	322.6 *(- 2.51%)*	347.4 *(+ 7.69%)*	348.5 *(+ 0.32%)*	357.0 *(+ 2.44%)*	378.6 *(+ 6.05%)*
Guinea (GNF)	~ 760	~ 920	960.3	913.0 *(- 4.92%)*	952.6 *(+ 4.34%)*	899.8 *(- 5.541%)*	924.4 *(+ 2.74%)*	952.7 *(+ 3.06%)*	998.8 *(+ 4.84%)*
Mali (XOF)	~ 195	~ 180	223.1	192.9 *(- 13.54%)*	221.2 *(+ 14.67%)*	250.1 *(+ 13.02%)*	246.0 *(- 1.64%)*	202.1 *(- 17.84%)*	208.3 *(+ 3.07%)*

Direct Contribution to Employement (in `000 jobs): this includes employement by hotels, travel agents, airlines and other passenger transportation services, etc.

	2006 ***(PAD)***	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014** ***(forecast)***
Burkina Faso	~ 56	~ 63	62.3	63.6 *(+ 2.09%)*	52.7 *(- 17.14%)*	62.5 *(+ 18.60%)*	60.4 *(- 3.36%)*	60.7 *(+ 0.50%)*	61.1 *(+ 0.66%)*
Cameroon	~ 92	~ 91	82.4	104.2 *(+ 26.46%)*	102.5 *(- 1.63%)*	101.0 *(- 1.46%)*	100.3 *(- 0.69%)*	100.5 *(+ 0.20%)*	103.9 *(+ 3.38%)*
Guinea	~ 32	~ 40	39.7	40.3 *(+ 1.51%)*	43.0 *(+ 6.70%)*	36.4 *(- 15.35%)*	36.8 *(+ 1.10%)*	38.5 *(+ 4.62%)*	40.1 *(+ 4.16%)*
Mali	~ 75	~ 68	83.8	71.7 *(- 14.44%)*	71.5 *(- 0.28%)*	78.9 *(+ 10.35%)*	80.0 *(+ 1.39%)*	58.2 *(- 27.25%)*	57.2 *(- 1.72%)*

Capital Investment (in constant 2013 local currency billions)

	2006 ***(PAD)***	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014** ***(forecast)***
Burkina Faso (XOF)	~ 13	~ 18	18.6	16.2 *(- 12.90%)*	17.3 *(+ 6.79%)*	15.8 *(- 8.67%)*	16.4 *(+ 3.80%)*	17.2 *(+ 4.88%)*	19.0 *(+ 10.47%)*
Cameroon (XAF)	~ 75	~ 74	74.4	62.5 *(- 15.99%)*	57.3 *(- 8.32%)*	60.5 *(+ 5.58%)*	64.5 *(+ 6.61%)*	66.5 *(+ 3.10%)*	71.5 *(+ 7.52%)*
Guinea (GNF)	~ 95	~ 80	107.3	113.6 *(+ 5.87%)*	105.6 *(- 7.04%)*	106.7 *(+ 1.04%)*	121.2 *(+ 13.59%)*	121.6 *(+ 0.33%)*	137.4 *(+ 12.99%)*
Mali (XOF)	~ 32	~ 43	42.9	49.8 *(+ 16.08%)*	59.2 *(+ 18.88%)*	61.7 *(+ 4.22%)*	56.9 *(- 7.78%)*	43.1 *(- 24.25%)*	43.4 *(+ 0.70%)*

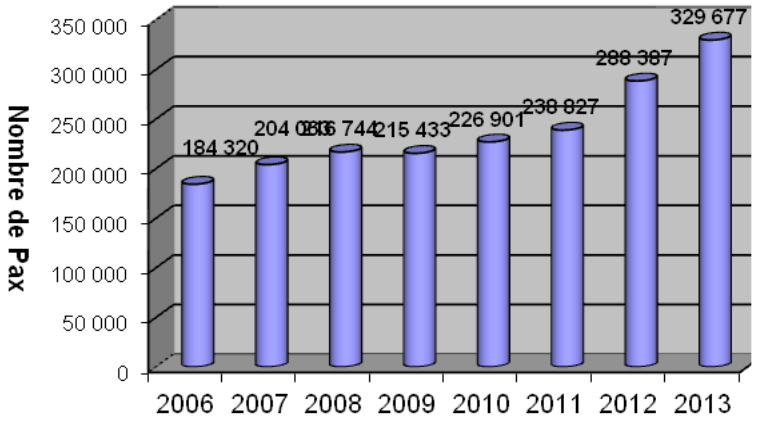
15. From 2006 to 2014, Travel & Tourism have participated in the economic development of APL 1 beneficiary countries. As these growth-lever sectors are Safety-and-Security sensitive, one can reasonably assess that they benefited from a safer and more secure air transport sector environement, thus confirming this Project would have had an indirect impact on the long term macro-economic growth prospects of African economies.

16. In the next pages are some data regarding number of passengers and planes, volumes of freight and mail, going through the international airports of Burkina Faso (Ouagadougou), Cameroon (Douala and Yaoundé-Nsimalen), and Mali (Bamako-Sénou). The global increase of these numbers and volumes also supports the travel and tourism sectors improvements during the execution timeframe of the Project, thus the reasonable assumption that these sectors (and the countries) would – and did - economically benefit from the Project.

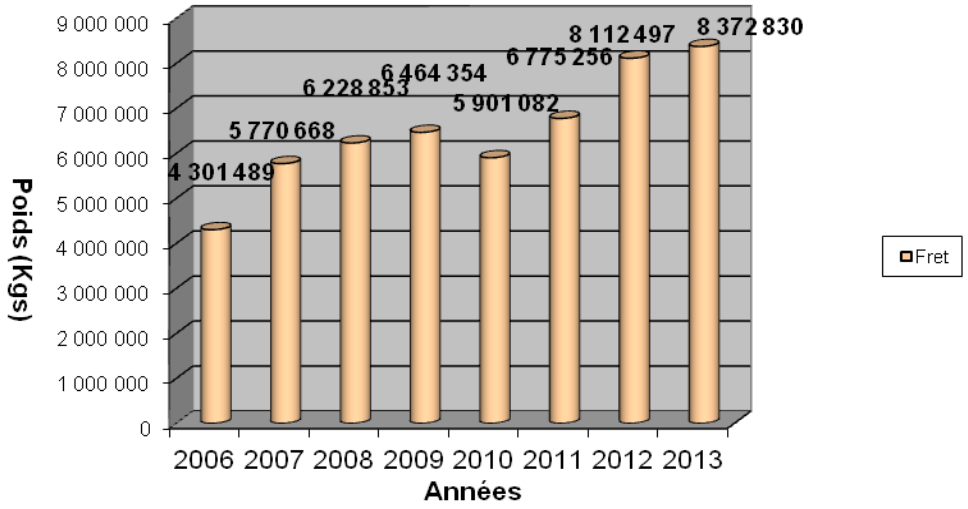
APL 1 Beneficiary Countries' Air Transport Data

Burkina Faso (Source: ANAC – Burkina Faso)

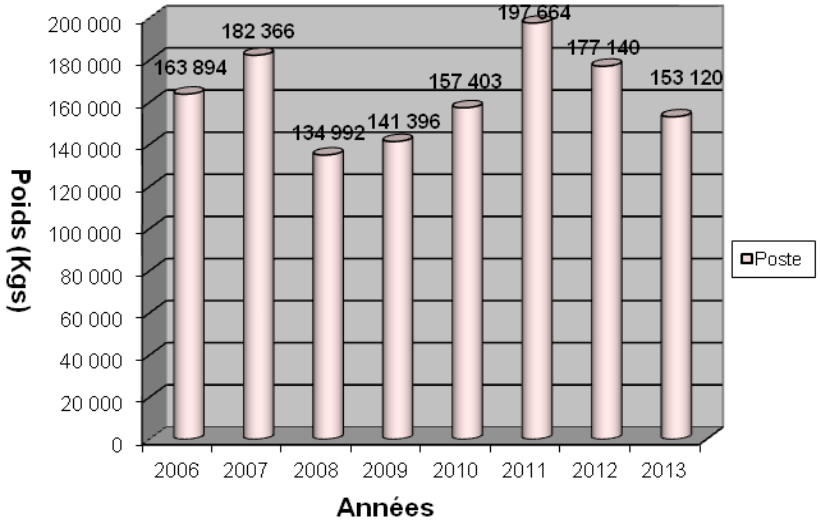
Passengers traffic **2006 to 2013 : + 44 ,09%**



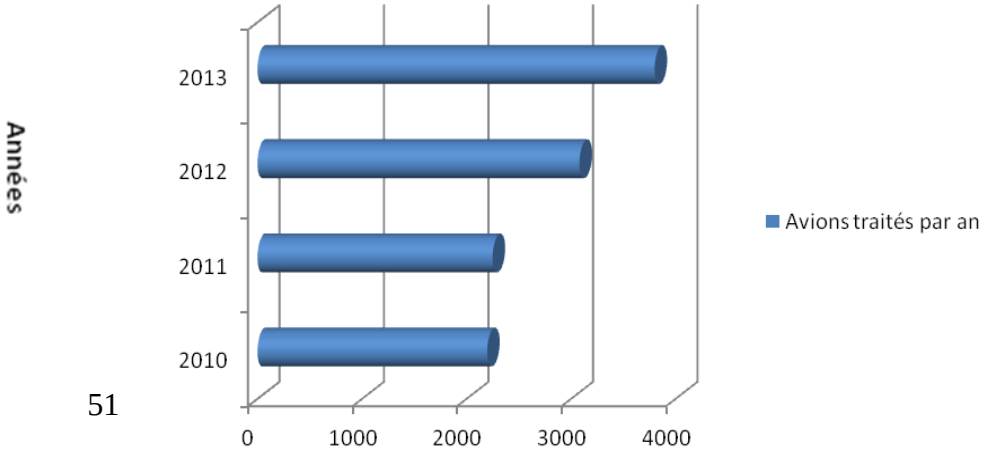
Freight traffic **2006 to 2013 : + 48 ,63%**



Mail traffic **2006 to 2013 : - 5 ,57%**



Planes Traffic



Cameroon (Source: CCAA)

Planes Traffic

Airport	Route		2011	2012	2013	Evol° 2012/13
	CEMAC		5571	5439	5448	0,2%
	INTERNATIONAL		5334	5524	6894	24,8%
Douala	NATIONAL		4989	3275	4384	33,9%
			10905	11978	13358	
Total Douala			**15894**	**15253**	**17742**	16,3%
	CEMAC		673	175	327	86,9%
	INTERNATIONAL		2706	2335	3172	35,8%
Yaoundé	NATIONAL		2835	2443	3035	24,2%
Total Yaoundé			**6214**	**4953**	**6534**	31,9%

Passengers Traffic

	Year	2011				2012				2013				Evolution 2012/13 (%)		
Airport	Route	ARR	DEP	Total	Transit	ARR	DEP	Total	Transit	ARR	DEP	Total	Transit	DEP	TOTAL (arr+ dép)	Transit
	CEMAC	77491	79701	157192	31541	80775	77958	158733	24330	69074	76502	145576	35134	-2%	-8%	44%
	INT	175462	207472	382934	71214	203215	223423	426638	88629	223871	241853	465724	81069	8%	9%	-9%
Douala	NAT	38329	39407	77736	25475	45104	58685	103789	25140	61973	72013	133986	46839	23%	29%	86%
Total Douala		**291282**	**326580**	**617862**	**128230**	**329094**	**360066**	**689160**	**138099**	**354918**	**390368**	**745286**	**163042**	8%	8%	18%
	CEMAC	3173	2395	5568	298	3893	2137	6030	2844	4719	1449	6168	4196	-32%	2%	48%
	INT	88907	95186	184093	35429	88492	92848	181340	9562	109097	111736	220833	34085	20%	22%	256%
Yaoundé	NAT	34761	33852	68613	30166	58176	60094	118270	20091	56778	60917	117695	32244	1%	0%	60%
Total Yaoundé		**126841**	**131433**	**258274**	**65893**	**150561**	**155079**	**305640**	**32497**	**170594**	**174102**	**344696**	**70525**	12%	13%	117%

Freight and Mail Traffic

Airport	Route	2011			2012			2013		
		ARR	**DEP**	**Total**	**ARR**	**DEP**	**Total**	**ARR**	**DEP**	**Total**
	CEM	120,55	202,2	322,76	290,59	1634,5	1925,1	257,67	498,45	756,12
	INT	6688,7	5660,6	12349	3745,4	4086,2	7831,6	4449,3	6141,2	10590
Douala	NAT	251,68	79,524	331,2	144,85	296,2	441,04	0	9,47	9,47
Total Douala		**7060,9**	**5942,4**	**13003**	**4180,8**	**6016,9**	**10198**	**4706,97**	**6649,1**	**11356**
	CEM	300,67	0,331	301	8,265	5,669	13,934	1,537	19,003	20,54
	INT	2622,1	2071,7	4693,8	1950,3	2271,2	4221,5	1480,35	2196,1	3676,4
Yaoundé	NAT	43,873	129,08	172,95	50,521	27,623	78,144	17,326	49,311	66,637
Total Yaoundé		**2966,6**	**2201,1**	**5167,7**	**2009,1**	**2304,5**	**4313,5**	**1499,22**	**2264,4**	**3763,6**

Mali

Bamako Airport Traffic (Source: ANAC – Mali)

2008 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)
Ouagadougou (Burkina Faso)	7,381	9,445	16,826
Conakry (Guinea)	2,557	4,230	6,787

2009 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)	% vs. T previous year
Ouagadougou (Burkina Faso)	8,336	9,132	17,468	+3.82%
Conakry (Guinea)	3,128	4,055	7,183	+5.83%

2010 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)	% vs. T previous year
Ouagadougou (Burkina Faso)	9,881	11,189	21,070	+20.62%
Conakry (Guinée)	2,907	5,371	8,278	+15.24%

2011 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)	% vs. T previous year
Ouagadougou (Burkina Faso)	7,659	11,695	19,354	-8.14%
Conakry (Guinea)	2,585	8,117	10,702	+29.28%

2012 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)	% vs. T previous year
Ouagadougou (Burkina Faso)	7,726	20,426	28,152	+45.46%
Conakry (Guinea)	4,721	5,167	9,888	-7.61%

2013 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)	% vs. T previous year
Ouagadougou (Burkina Faso)	8,773	9,096	17,869	-36.53%
Conakry (Guinea)	4,877	4,737	9,614	-2.77%

2006-2013 ***Passengers***

(to/from) Airport	Arrival	Departure	Total (T)
Ouagadougou (Burkina Faso)	49,756	70,983	120,739
Conakry (Guinea)	20,775	31,677	52,452

Economic & Financial Analysis – Burkina Faso

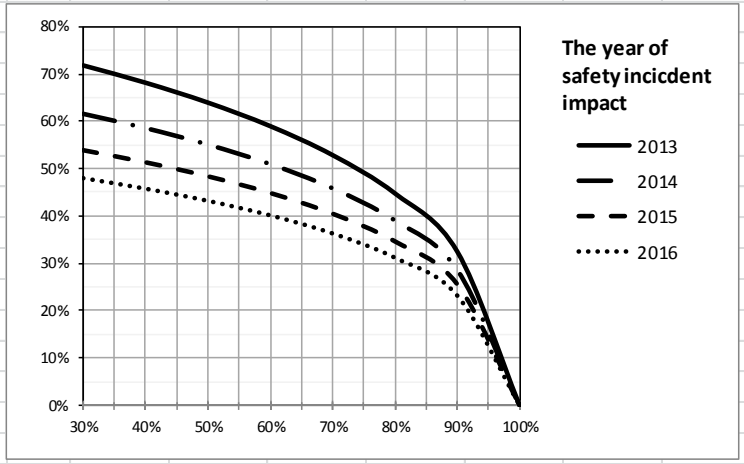
Source: The Worldbank (C. Manopiniwes – GTIDR – November, 2014)

% of Tourism reduced due to safety issue				10.0%		
% of Tourism retained without AF				90.0%	in	2015

Base Total contribution of Travel & Tourism to GDP

	With AF		Without AF		Diff
	Cost	Benefit	Cost	Benefit	
2006	-6.46	285.00	0.00	285.00	-6.46
2007	0.00	348.00	0.00	348.00	0.00
2008	0.00	346.00	0.00	346.00	0.00
2009	0.00	350.00	0.00	350.00	0.00
2010	0.00	328.00	0.00	328.00	0.00
2011	0.00	356.00	0.00	356.00	0.00
2012	0.00	375.00	0.00	375.00	0.00
2013	0.00	398.00	0.00	398.00	0.00
2014	0.00	419.00	0.00	419.00	0.00
2015	0.00	437.00	-6.46	393.30	50.16
2016	0.00	455.00	0.00	455.00	0.00
2017	0.00	479.00	0.00	479.00	0.00
2018	0.00	501.00	0.00	501.00	0.00
2019	0.00	521.00	0.00	521.00	0.00
2020	0.00	543.00	0.00	543.00	0.00
				NPV	14.81
				IRR	26%

IRR	26%	Year				
		2012	2013	2014	2015	2016
% of Tourism retained without AF	30%	86%	72%	62%	54%	48%
	40%	82%	68%	59%	51%	46%
	50%	76%	64%	55%	48%	43%
	60%	70%	59%	51%	45%	40%
	70%	63%	53%	46%	40%	36%
	80%	53%	45%	39%	35%	31%
	90%	38%	32%	29%	26%	23%
	100%	0%	0%	0%	0%	0%



Economic & Financial Analysis – Cameroon

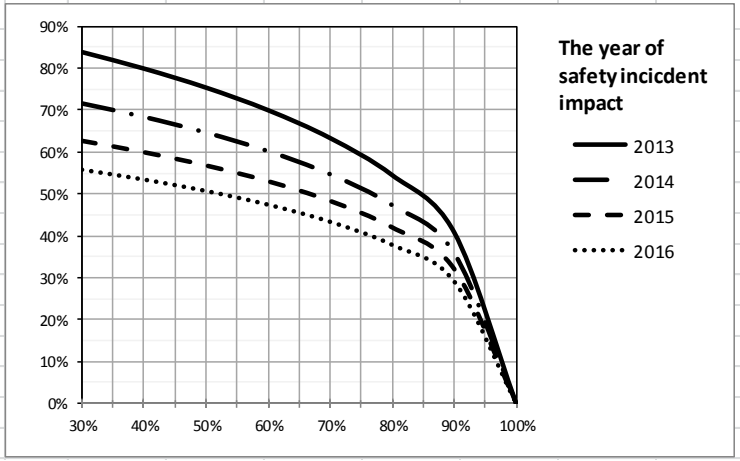
Source: The Worldbank (C. Manopiniwes – GTIDR – November, 2014)

% of Tourism reduced due to safety issue	10.0%
% of Tourism retained without AF	90.0% in 2015

Base Total contribution of Travel & Tourism to GDP

	With AF		Without AF		Diff
	Cost	Benefit	Cost	Benefit	
2006	-16.00	1,429.00	0.00	1,429.00	-16.00
2007	0.00	1,409.00	0.00	1,409.00	0.00
2008	0.00	1,289.00	0.00	1,289.00	0.00
2009	0.00	1,505.00	0.00	1,505.00	0.00
2010	0.00	1,457.00	0.00	1,457.00	0.00
2011	0.00	1,560.00	0.00	1,560.00	0.00
2012	0.00	1,556.00	0.00	1,556.00	0.00
2013	0.00	1,600.00	0.00	1,600.00	0.00
2014	0.00	1,695.00	0.00	1,695.00	0.00
2015	0.00	1,799.00	-16.00	1,619.10	195.90
2016	0.00	1,899.00	0.00	1,899.00	0.00
2017	0.00	2,012.00	0.00	2,012.00	0.00
2018	0.00	2,147.00	0.00	2,147.00	0.00
2019	0.00	2,283.00	0.00	2,283.00	0.00
2020	0.00	2,424.00	0.00	2,424.00	0.00
			NPV		67.08
			IRR		32%

IRR	32%	Year				
		2012	2013	2014	2015	2016
% of Tourism retained without AF	30%	103%	84%	72%	63%	56%
	40%	98%	80%	68%	60%	53%
	50%	92%	75%	65%	57%	51%
	60%	85%	70%	60%	53%	47%
	70%	76%	63%	55%	48%	43%
	80%	65%	54%	47%	42%	38%
	90%	49%	41%	36%	32%	29%
	100%	0%	0%	0%	0%	0%



Economic & Financial Analysis – Guinea

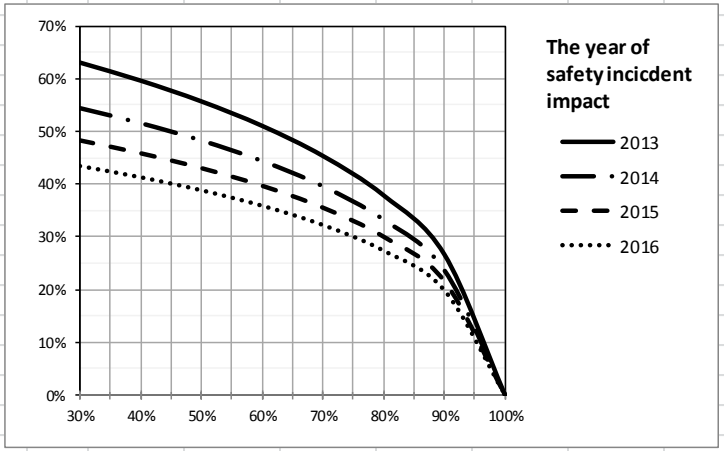
Source: The Worldbank (C. Manopiniwes – GTIDR – November, 2014)

% of Tourism reduced due to safety issue				10.0%		
% of Tourism retained without AF				90.0%	in	2015

Base | Total contribution of Travel & Tourism to GDP

	With AF		Without AF		Diff
	Cost	Benefit	Cost	Benefit	
2006	-7.10	236.00	0.00	236.00	-7.10
2007	0.00	281.00	0.00	281.00	0.00
2008	0.00	299.00	0.00	299.00	0.00
2009	0.00	297.00	0.00	297.00	0.00
2010	0.00	310.00	0.00	310.00	0.00
2011	0.00	282.00	0.00	282.00	0.00
2012	0.00	292.00	0.00	292.00	0.00
2013	0.00	301.00	0.00	301.00	0.00
2014	0.00	318.00	0.00	318.00	0.00
2015	0.00	342.00	-7.10	307.80	41.30
2016	0.00	364.00	0.00	364.00	0.00
2017	0.00	387.00	0.00	387.00	0.00
2018	0.00	410.00	0.00	410.00	0.00
2019	0.00	433.00	0.00	433.00	0.00
2020	0.00	458.00	0.00	458.00	0.00
			NPV		10.42
			IRR		22%

IRR	22%	Year				
		2012	2013	2014	2015	2016
% of Tourism retained without AF	30%	76%	63%	54%	48%	43%
	40%	72%	60%	52%	46%	41%
	50%	67%	56%	48%	43%	39%
	60%	61%	51%	44%	40%	36%
	70%	54%	45%	40%	36%	32%
	80%	45%	38%	33%	30%	27%
	90%	31%	27%	24%	22%	20%
	100%	0%	0%	0%	0%	0%



Economic & Financial Analysis – Mali

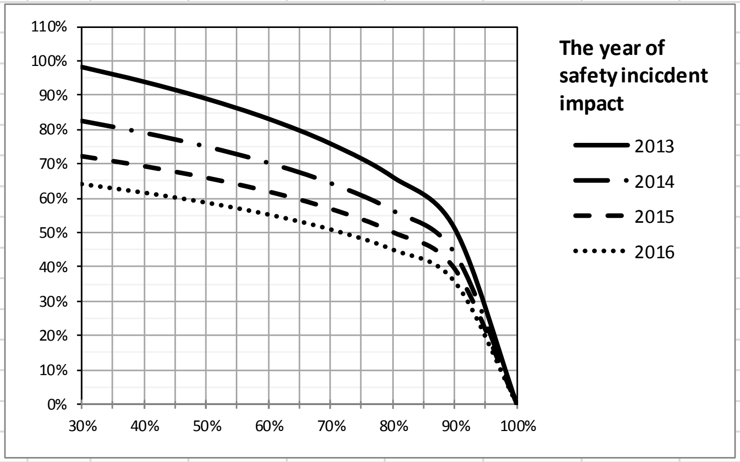
Source: The Worldbank (C. Manopiniwes – GTIDR – November, 2014)

% of Tourism reduced due to safety issue	10.0%		
% of Tourism retained without project	90.0%	in	2015

Base Total contribution of Travel & Tourism to GDP

	With AF		Without AF		Diff
	Cost	Benefit	Cost	Benefit	
2006	-5.51	882.00	0.00	882.00	-5.51
2007	0.00	834.00	0.00	834.00	0.00
2008	0.00	1,002.00	0.00	1,002.00	0.00
2009	0.00	908.00	0.00	908.00	0.00
2010	0.00	1,039.00	0.00	1,039.00	0.00
2011	0.00	1,170.00	0.00	1,170.00	0.00
2012	0.00	1,146.00	0.00	1,146.00	0.00
2013	0.00	940.00	0.00	940.00	0.00
2014	0.00	963.00	0.00	963.00	0.00
2015	0.00	1,044.00	-5.51	939.60	109.91
2016	0.00	1,110.00	0.00	1,110.00	0.00
2017	0.00	1,175.00	0.00	1,175.00	0.00
2018	0.00	1,240.00	0.00	1,240.00	0.00
2019	0.00	1,304.00	0.00	1,304.00	0.00
2020	0.00	1,370.00	0.00	1,370.00	0.00
				NPV	**41.10**
				IRR	**39%**

		Year				
IRR	39%	**2012**	**2013**	**2014**	**2015**	**2016**
% of Tourism retained without project	**30%**	130%	98%	83%	72%	64%
	40%	124%	94%	79%	69%	62%
	50%	117%	89%	75%	66%	59%
	60%	109%	83%	70%	62%	55%
	70%	100%	76%	64%	57%	51%
	80%	87%	66%	56%	50%	45%
	90%	67%	51%	44%	39%	36%
	100%	0%	0%	0%	0%	0%



Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Christopher Cozzone	Temporary	AFTTR	
Linda Carole Glassiognon Tiemoko	Senior Program Assistant	AFCCD	
Sariette Jene M. C. Jippe	Temporary	AFTTR	
Jean-Francois Marteau	Country Sector Coordinator	ECSSD	
Pierre A. Pozzo di Borgo	Program Coordinator	AFTTR	
Noroarisoa Rabefaniraka	Sr Transport. Spec.	AFTTR	
Supervision/ICR			
Marouane Ameziane	Temporary	AFTTR	
Kingson Khan Apara	Sr Transport. Specialist	AFTTR	
Bhanoumatee Ayoung	Lead Procurement Specialist	OPCPR	
Elisabeth Marie Bambara	Program Assistant	AFMBF	
Racky Dia Camara	Program Assistant	AFMGN	
Nestor Coffi	Country Manager	AFMNE	
Christopher Cozzone	Temporary	AFTTR	
William Dakpo	Procurement Specialist	AFTPC	
Bella Lelouma Diallo	Sr Financial Management Specialist	AFTFM	
Mahine Diop	Senior Municipal Engineer	AFTUW	
Roukaya El Houda	Temporary	AFTTR	
Papa Mamadou Fall	Transport Specialist	AFTTR	
Maimouna Mbow Fam	Sr Financial Management Specialist	AFTFM	
Emile Louis Rene Finateu	Consultant	AFTFM	
Karine Guillot Measson	Consultant	LCSTR	
Sariette Jene M. C. Jippe	Temporary	AFTTR	
Jean-Francois Marteau	Country Sector Coordinator	ECSSD	
Kolie Ousmane Maurice Megnan	Financial Management Specialist	AFTFM	
Gnoleba Mathieu Meguhe	Consultant	AFTFM	
Kouami Hounsinou Messan	Senior Procurement Specialist	AFTPC	
Fridolin Ondobo	Financial Management Specialist	AFTFM	
Noroarisoa Rabefaniraka	Sr Transport. Specialist	AFTTR	
Rokhayatou Sarr Samb	Procurement Specialist	AFTPC	
Aguiratou Savadogo-Tinto	Sr Transport. Specialist	AFTTR	
Aoua Toure Sow	Program Assistant	AFCW3	
Cheick Traore	Senior Procurement Specialist	AFTPC	
Rafael Treibich	Temporary	AFTTR	
Lydie Yangouot	Language Program Assistant	AFMCM - HIS	
Mamadou Yaro	Sr Financial Management Specialist	AFTFM	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY04	19.29	124.79
FY05	24.99	145.31
FY06	54.70	242.54
FY07	4.60	14.16
FY08	0.00	0.00
FY09	0.00	0.00
FY10	0.00	0.00
FY11	0.00	0.00
FY12	0.00	0.00
FY13	0.00	0.00
FY14	0.00	0.00
FY15	0.00	0.00
Total:	103.58	526.80
Supervision/ICR		
FY04	0.00	0.00
FY05	0.00	0.00
FY06	0.00	0.00
FY07	36.45	133.26
FY08	43.58	187.25
FY09	29.26	118.97
FY10	16.83	57.90
FY11	31.36	95.68
FY12	33.97	73.38
FY13	24.66	55.78
FY14	16.54	71.11
FY15	4.53	18.67
Total:	237.18	812.00

Annex 5. Beneficiary Survey Results

(if any)

Not available

Annex 6. Stakeholder Workshop Report and Results

- Burkina Faso: (Burkina Faso) ICR restitution workshop held in June, 2013

- Cameroon: (Cameroon) ICR restitution workshop held in March, 2014

- Guinea: no ICR restitution workshop held

- Mali: no ICR restitution workshop held

- Regional workshops: two national project coordinators meetings held in March, 2010 and November, 2013 in order for each country to respectively share its Project's results, outcomes, lessons learned, etc.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

Burkina Faso

La composante nationale pour le Burkina Faso, contenue dans la première Phase du Projet Régional de Sécurité et de Sûreté du Transport Aérien en Afrique de l'Ouest et du Centre (PSSTAAOC) est un projet d'appui de la Banque Mondiale au Deuxième Programme Sectoriel des Transports (PST-2). Il s'inscrit dans un double contexte à savoir d'une part, la Stratégie d'Assistance Pays de la Banque Mondiale au Burkina Faso et d'autre part, le Cadre Stratégique de Lutte contre la Pauvreté (CSLP).
Le projet devrait soutenir les efforts du Gouvernement et des acteurs opérationnels aéroportuaires pour l'amélioration de la conformité de son aviation civile et de l'aéroport international de Ouagadougou avec les normes de sécurité et sûreté de l'Organisation de l'Aviation Civile Internationale (OACI).

Le PSSTAAOC comprend deux parties:

- **la 1ère Partie** : Renforcement des capacités de surveillance de la DGACM en matière de sûreté et sécurité, vise le renforcement des capacités de surveillance de la DGACM en matière de sûreté et de sécurité,
- **la 2ème Partie** : Normes de sécurité et de sûreté de l'Aéroport pour un montant de 2.020.000 DTS. vise l'amélioration des normes de sûreté.

A ces deux parties, un non alloué a été prévu pour couvrir les imprévus. Le Crédit total alloué à la composante nationale du Burkina Faso couvre la période initiale de 2006 à 2009, puis prorogée à juin 2013.

Les activités du projet ont effectivement démarré le 15 novembre 2006 et prendront fin en juin 2013. Au total pendant les 7 ans de vie du PSSTAAOC, toutes les activités prévues ont été exécutées grâce à deux prorogations. Ces reports intervenus au cours de la vie du projet, ont permis de réajuster la planification initiale afin de disposer de délais complémentaires pour l'achèvement des travaux.

Au titre de la 1ère Partie, les activités programmées sont pour l'essentiel déjà achevées. En termes de réalisations physiques, on note la formation de plus de 365 acteurs du secteur du transport aérien (DGACM, Police, Gendarmerie, Douanes, DAAN, etc.) dans les domaines de la sûreté et de la sécurité aérienne et l'assistance apportée à l'ANAC en vue de la réalisation de certaines études institutionnelles.

Au titre de la 2ème partie, deux volets sont à considérer :

- pour le volet fournitures, la majeure partie des fournitures initialement programmées a été acquise et est fonctionnelle.
- les activités du ***volet travaux*** du projet *sont* ***dans l'ensemble terminées.***

Le montant total des dépenses décaissées sur compte spécial au 30 juin 2013, s'élève à trois milliards trois cent soixante sept millions huit cent quarante deux mille huit cent cinq (3 367 842 805) F CFA soit un taux de **99,64 %** F CFA. A cette date, les dépenses en instance de remboursement s'élèvent à 88 378 776 F CFA alors que le cumul des engagements s'élève à **3 380 140 487** F CFA soit un taux d'engagement de **99,98%.**

Au 30 novembre 2013, les dépenses en instance de remboursement au s'élèvent à 11 959 645 F CFA alors que le cumul des engagements s'élève à **3 379 802 450** F CFA soit un taux d'engagement de **99,99%.**

De l'analyse des résultats au terme de l'évaluation à la clôture du projet, il ressort que le projet était très pertinent et doté d'une bonne conception de départ. Le projet a été exécuté de manière efficiente et les objectifs poursuivis ont été largement atteints. Le tableau ci-dessus présente les scores du projet tels qu'ils résultent des travaux d'évaluation.

L'évaluation étant basée essentiellement sur une analyse des paramètres clés permettant de mesurer les performances d'un projet :

Tableau 1 - Notation des performances du Projet.

Paramètres	Score	Appréciation	Critères de notation utilisés
Pertinence du projet	100% (5)	Très bonne	5 = Très bonne / Très satisfaisant / Élevé (75-100 pour cent d'atteinte des objectifs) 4= Bonne / Satisfaisant / Substantiel (50-74 pour cent) 3 = Faible / Peu satisfaisant / Modeste / Fragile (25-49 pour cent) 1 = Très faible / Non satisfaisant / Très fragile (0-24 pour cent)
Cohérence de la démarche	90% (5)	Très bonne	
Efficience du projet	60% (4)	Satisfaisant	
Efficacité du projet (niveau de réalisation)	50% (3)	Moyennement Satisfaisant	
Mobilisation des ressources financières	80% (5)	Très bonne	
Viabilité économique	80% (5)	Très bonne	
Durabilité des résultats	90% (5)	Très bonne	
Effets possibles à moyen terme / Impact	90% (5)	Élevé	

Sur la base de l'analyse des acquis majeurs du projet et de l'appréciation qui en est faite, y compris par les bénéficiaires, les leçons suivantes peuvent être tirées :

- la lenteur dans la satisfaction des conditions de prêt par le Gouvernement a entraîné un décalage dans le calendrier de mise en œuvre du projet ;
- l'approche de mise en œuvre, à travers le faire faire, le renforcement des capacités des structures opérationnelles et une légère coordination administrative et de gestion, s'est révélée efficace ;
- le projet a permis d'éclairer l'ensemble des acteurs du secteur sur l'importance de la problématique en matière de sécurité et de sûreté aéroportuaires dans la croissance économique du pays ;
- le projet a été d'un intérêt capital en ce sens qu'il a permis de renouveler le matériel vétuste, d'apporter une avancée technologique très significative à l'aéroport et de se conformer aux normes de sécurité et de sûreté de l'OACI grâce à l'appui de la Banque Mondiale. Cette avancée a été confirmée par l'audit réalisé en mai 2013 qui montre une nette amélioration en matière de sûreté et de sécurité en conformité avec les normes de l'OACI.

Le projet a permis d'insuffler une nouvelle vision en matière de sécurité et de sûreté et a suscité un regain d'intérêt en matière de formation continue du personnel opérationnel et administratif à travers le renforcement des capacités des agents effectué par la banque. Avec l'opérationnalisation de l'ANAC, le Burkina Faso se conforme désormais à la Directive N° 01/2004/CM de l'UEMOA portant statut des Administrations de l'Aviation Civile (AAC) des États-Membres de l'UEMOA, avec l'appui du projet actuel. Suite à la nomination du Directeur Général en octobre 2011, et à l'adoption de l'organigramme et les fiches de poste en avril 2012, ainsi qu'au recrutement et à la sélection du personnel finalisés à la fin de l'année 2012, à l'adoption du budget préliminaire de l'ANAC lors du dernier Conseil d'Administration le 04/01/2013 à Bobo Dioulasso , et au début de la perception direct des redevances qui lui reviennent, la mission note que l'ANAC est désormais opérationnelle. Elle a convenu avec le Ministre des Infrastructures, du Désenclavement et des Transports, ainsi qu'avec le Directeur Général, que la répartition des redevances actuellement perçues par la DAAN pour allouer ses parts à l'ANAC en permettant à celle-ci la capacité de percevoir directement ses redevances, doit être accélérée et être effective avant la fin du mois de mai 2013. La mission note, dans tous les cas, que la perception et la répartition des redevances aéronautiques ne se fait que par le biais du Comité de Gestion des Activités Aéronautiques Nationales.

Au regard des leçons ci-dessus énumérées, les recommandations suivantes ont été formulées pour contribuer à renforcer la qualité de la conception et de la mise en œuvre des interventions futures en matière de sécurité et de sûreté du transport aérien au Burkina Faso :

1. la poursuite des efforts de mobilisation de ressources financières par l'ANAC, en vue de l'accroissement de sa contribution à la sûreté et lui permettre d'être plus opérationnelle ;

2. la poursuite du renforcement des capacités techniques des cadres techniques de l'ANAC, des agents de la Gendarmerie, de la police spéciale de l'aéroport et de la DAAN à travers l'élaboration d'un plan de formation à court et à moyen termes ;
3. envisager la formulation d'une deuxième phase d'un projet PSSTAAOC, afin de contribuer à la durabilité des acquis de la première phase du projet. Il faut envisager un autre projet car des actions menées ont connu du succès, mais il faut un accompagnement pendant une période afin de garantir la réussite totale. En plus, il faut prendre en compte l'aéroport de Bobo-Dioulasso qui est devenu international et à ce niveau les besoins d'amélioration de sécurité, de sûreté et de mise en conformité avec les normes de l'OACI existent ;
4. au regard du volume des marchés publics et de la spécificité du domaine de l'Aviation Civile, il est important d'étoffer le Bureau de Coordination en Spécialiste à la Passation des Marchés pour une plus grande efficacité.

Cameroon

En 2006 la Banque Mondiale a approuvé un don de 14,5 millions de dollars en faveur du Cameroun dans le cadre d'une première phase d'un vaste programme de renforcement de la sécurité et de la sûreté du transport Aérien en Afrique de l'Ouest et du Centre. Le volet camerounais de cette phase pionnière qui regroupait également le Burkina Faso, la Guinée et le mali, s'est achevé le 30 juin 2013, ayant enregistré la quasi totalité des résultats qui lui étaient assignés.

Le présent rapport d'achèvement entrepris sur financement de la CCAA par un consultant indépendant a révélé qu'en dépit desdits résultats l'aviation civile camerounaise reste largement non conforme aux normes internationales, notamment aux plans législatif, réglementaire, organisationnel et infrastructurel.

Ceci s'explique essentiellement par l'approche minimaliste suivie lors de la conception du projet, une approche qui au fonds était dictée par trois facteurs essentiels, à savoir:
(i) Le scepticisme du bailleur de fonds sur la capacité des pays à entreprendre les réformes institutionnelles appropriées;
(ii) L'insuffisance des ressources de l'IDA notamment pour un programme aussi vaste qui visait 22 pays d'Afrique de l'Ouest et du Centre; et
(iii) Le peu d'ambition exprimé par le Cameroun en matière de sécurité aérienne à travers son cadre stratégique, le Document de Stratégie de Réduction de la Pauvreté (DRSP) adopté en 2004.

Aussi, l'évaluation de l'opération arrive-t-elle à la conclusion que cette première phase du programme aurait mieux profité au Cameroun si sa conception lui avait assigné des objectifs suffisamment ambitieux à la taille des atouts qui lui étaient reconnus au départ par le bailleur de fonds lui même, à savoir:

- une autorité de l'aviation civile qui existait depuis 1998;
- une loi sur l'aviation civile largement calée sur la Déclaration de Yamoussoukro,
- un système de financement direct des opérations de supervision de la sécurité et de la sûreté aériennes basé sur les ressources garanties par la loi sus visée;
- un personnel technique relativement qualifié et répondant à 45% aux normes de l'Organisation de l'Aviation Civile Internationale (OACI); et
- l'expérience des audits de l'OACI (exemple celui de la sûreté réalisé en 2004).

Une conséquence de cette approche limitative fut que les objectifs du projet ne visaient que partiellement la conformité de la CCAA et des aéroports internationaux de Douala et de Nsimalen aux normes de l'OACI, laissant de côté les autres aéroports internationaux, certains éléments cruciaux de supervision, les aérodromes nationaux, et les exigences des pays à grande influence commerciale tels que les Etats Unis d'Amérique et l'Union Européenne.

Cette approche contraignante et parcellaire est désormais en déphasage total avec la Vision du Chef de l'Etat pour un Cameroun Emergent, Démocratique, et Unis Dans sa Diversité, à l'horizon 2035. De ce fait, elle ne saurait permettre au transport aérien camerounais de contribuer de manière optimale aux objectifs et hypothèses qui lui sont prescrits dans le Document de Stratégie de la Croissance et de l'Emploi (DSCE), notamment la croissance minimum annuelle moyenne de 6% .

En outre, force est de constater que ce projet a permis l'achat des équipements et la réhabilitation des infrastructures aéroportuaires, alors que leur conception n'a pas prévu la mise en place des mesures appropriées pour garantir leur pérennisation.

Au-delà de ces considérations d'ordre conceptuel, le contexte camerounais actuel s'illustre particulièrement par trois événements nouveaux qui sont : (i) des incidents d'enlèvement et de destruction des biens et de pertes en vies humaines orchestrés par le mouvement extrémiste Boko Haram notamment dans la Région de l'Extrême Nord, (ii) la dégradation de la situation socio-sécuritaire en République Centrafricaine par l'émergence de mouvements insurrectionnels dont les actions débordent de temps en temps en sol camerounais et (iii) la décision ministérielle d'avril 2014 érigeant l'aéroport de Maroua-Salak à un statut international.

L'érection de l'aéroport de Maroua-Salak au rang d'aéroport international porte donc le nombre d'aéroports internationaux camerounais à quatre, à savoir Douala, Yaoundé-Nsimalen, Garoua et Maroua-Salak. Seuls les deux premiers cités ont été couverts par le PRSSAC.

C'est pourquoi les acteurs du secteur réunis à Douala le 26 mars 2014 dans le cadre de la restitution du présent rapport d'achèvement du projet ont réaffirmé la nécessité et l'urgence de mettre sur pied un programme de maitrise de la sécurité aérienne capable de répondre aux exigences et aux attentes du Cameroun Emergent. Ils estiment qu'une approche programme visant des objectifs de long terme, assise sur un cadre de suivi national institutionnalisé, à son tour assorti des repères et des déclencheurs, serait plus adaptée à la problématique du transport aérien de l'heure et aux ambitions du gouvernement pour le secteur. C'est pour cela qu'ils souhaitent qu'une deuxième phase du PRSSAC soit mise en place urgemment pour pallier à ces insuffisances.

Pour ce faire, les participants ont souhaité qu'une plateforme nationale soit mise en place pour permettre que le deuxième projet connaisse une préparation inclusive de tous les acteurs du secteur de l'aviation civile.

RESULTATS DE L'ANALYSE DE LA PERFORMANCE DU PROJET

Le présent résumé exécutif présente les résultats de l'analyse effectuée sur le PRSSAC qui s'achève, dans le but de souligner le bien fondé du projet, ses résultats ainsi que les leçons qui découlent de sa conception et de sa mise en œuvre. Elle présente également les résultats de l'évaluation qui est faite concernant la performance du projet, celle du gouvernement, de son agence d'exécution qui est la CCAA, et de la Banque Mondiale.

NOTATION DE LA PERFORMANCE DU PROJET ET DE SES ACTEURS

Les éléments et la méthodologie suivis pour la notation de la performance du projet et de ses acteurs sont clarifiés et définis dans la partie IV du présent rapport. Ils comprennent les facteurs et les critères qui permettent de porter un jugement sur le projet dans toute sa dimension.

Les facteurs concernent les paramètres sur lesquels l'évaluation du projet doit être basée. ll s'agit notamment des objectifs du projet, de ses composantes, des facteurs qui ont influencé sa mise en œuvre, de l'efficacité avec laquelle les solutions et les dispositions institutionnelles du projet ont été développées et réalisées, ainsi que le déroulement du projet dans le temps (sa durée).

Chacun des facteurs est analysé en termes de quatre critères qui sont l'adéquation, la pertinence, l'effectivité, et l'efficience.

Sur la base de ces éléments l'évaluation de **la performance du PRSSAC et de ses acteurs est présentée en détail dans la Partie VI du présent rapport**. Cette évaluation est résumée ici comme suit:

Sur le Plan de la pertinence

Le PRSSAC fut utile pour le Cameroun au regard du contexte qui prévalait à sa conception qui était marqué notamment par la recrudescence de l'insécurité aérienne à travers le monde, illustrée par les terribles attentats terroristes du 11 septembre 2001 aux Etats-Unis et sur les bâtiments et lieux publics en Afrique de l'Est.

En outre, il répondait à une préoccupation formulée par les pays d'Afrique de l'Ouest et du Centre, dont le Cameroun, à travers la Décision de Yamoussoukro en 1998 qui appelait à une augmentation de la part africaine dans le marché mondial de l'aviation civile notamment à travers la restructuration du secteur et le renforcement de la sécurité et de la sûreté aériennes.

Le projet fût également cohérent avec les prescriptions sur la sécurité aérienne du Document de Stratégie de Réduction de la Pauvreté (DSRP) du gouvernement adopté en 2004 qui mettait l'accent sur le renforcement de la sécurité de l'aéroport international de Douala par la construction d'une clôture le long de son périmètre. Cette problématique de la clôture à l'aéroport international de Douala était d'ailleurs le seul point que le DSRP abordait en matière de sécurité aérienne.

Au plan sectoriel, la Stratégie Sectorielle de Transport (SST) mise en place en 1994 dans un contexte d'ajustement structurel était devenue obsolète et méritait d'être revisitée pour mieux situer la problématique du transport aérien face aux défis d'insécurité supra évoqués. C'est pour cette raison qu'une des activités du présent projet fut la réalisation d'une étude sectorielle de transport aérien qui devait jeter les jalons d'une nouvelle politique sectorielle.

En conclusion, les objectifs du projet étaient globalement pertinents dans la mesure où la conception du projet a bien pris en compte les priorités de développement qui restent valables au moment de la présente évaluation. De ce point de vue le projet est jugé satisfaisant sur le plan de la pertinence de ses objectifs. Cependant le projet est modérément non satisfaisant sur le plan de l'adéquation de ses objectifs pour les raisons évoquées dans la Conclusion Générale ci-dessus.

Quant aux composantes, celles-ci étaient globalement pertinentes par rapport à la problématique des bénéficiaires telle que définie dans le document du projet. Néanmoins la conception du projet n'a pas bien établi les liens de cause à effet entre les livrables du projet et les résultats attendus. De ce point de vue le projet est jugé modérément satisfaisant sur le plan de la pertinence de ses composantes.

Sur le Plan de l'effectivité

Le cadre logique du projet comportait les trois objectifs de développement suivants :
(i) L'amélioration de la conformité de la Cameroon Civil Aviation Authority (CCAA) aux normes de sûreté de l'OACI;
(ii) L'augmentation de la conformité de la CCAA aux normes de sécurité de l'OACI, et
(iii) Le renforcement de la conformité des aéroports internationaux de Douala et de Yaoundé-Nsimalen aux normes de sécurité de l'OACI.

A chacun de ces trois objectifs étaient associés trois indicateurs de suivi, soit neuf indicateurs au total. Les trois objectifs de développement assignés au PRSSAC sont quasiment atteints comme le témoignent les données du tableau ci-dessous.

Résumé des résultats du Projet

No	OBJECTIFS DE DEVELOPPEMENT	VALEUR DE REFERENCE (2006)	VALEUR RELLE EN FIN DU PROJET (2013)	CIBLE EN FIN DU PROJET
Objectif 1: L'amélioration de la conformité de la CCAA aux normes de sûreté de l'OACI				
1	Taux global de conformité de la CCAA aux normes de sûreté de l'OACI[80]	70	80	70
2	% personnel technique conformes aux normes de sûreté de l'OACI	45	100	100
3	Budget Annuel de la CCAA (million de dollars)	9.2	22.7	22.7

[80] Valeurs de référence et Cible révisées à la baisse de70% à 46% et de 90 % à 70% respectivement en 2009 suite à l'introduction en 2008 de l'approche systémique de l'OACI dans l'évaluation de la conformité aux normes de sûreté.

Objectif 2: L'augmentation de la conformité de la CCAA aux normes de sécurité de l'OACI				
4	Taux global de conformité de la CCAA aux normes de sécurité de l'OACI	30	76	>75
5	% inspecteurs de la sécurité de la CCAA certifiés par l'OACI	25	90	>75
6	Budget total de la CCAAA dédié à la sécurité (million de dollars)	0.6	1.8	0.9
Objectif 3: Le renforcement de la conformité des aéroports internationaux de Douala et de Yaoundé-Nsimalen aux normes de sécurité de l'OACI				
7	Pourcentage des passagers à l'embarquement refoulés en possession des objets illégaux	n.a	2	<2
8	% du personnel de sécurité des aéroports avec une expérience d'au moins trois ans	20	50	70
9	Nombre de problèmes sérieux enregistrés pendant les exercices de crise annuels	n.a	3	<3

n.a. = Non Disponible

Pour ce qui est des livrables, sur 16 sous-composantes du projet 13 ont été achevées conformément aux spécifications souhaitées. Les treize sous composantes achevées sont: (i) équipement de la bibliothèque; (ii) équipements généraux de formation en sécurité; (iii) réglementation et mesures de sécurité aéroportuaire; (iv) formation; (v) Construction et équipement du CDOU à l'aéroport de Douala; (vi) équipement de sécurité; (vii) véhicules, motos et bus de patrouilles; (viii) systèmes d'identification; (ix) système de surveillance; (x) système de contrôle d'accès; (xi) Formation en sûreté; (xii) Construction de la clôture et des routes d'enceinte aux aéroports de Douala et de Yaoundé-Nsimalen et (xiii) Réhabilitation des infrastructures aéroportuaires.

La non réalisation des trois autres sous-composantes est attribuée à l'insuffisance du financement suite à un dépassement des couts du projet. Les trois-sous composantes non réalisées concernent l'étude sectorielle du transport aérien, la construction des approches GNSS et la construction et l'équipement d'un centre directeur des opérations d'urgence à l'aéroport international de Yaoundé-Nsimalen.

Néanmoins, et compte tenu de la définition des trois opérations et du niveau des résultats atteints, leur non réalisation n'a pas influencé les objectifs assignés à ce projet. Il faut tout de même relever que la non réalisation de l'étude sectorielle du transport aérien et du système GNSS, bien que n'ayant pas d'impact sur les objectifs du projet, constitue un handicap majeur dans la mesure où le secteur ne dispose pas d'un cadre de planification lui permettant de répondre aux prescriptions du DSCE.

Au vue de ce qui précède on peut conclure que le projet a été modérément satisfaisant sur le plan de ses résultats, ceci grâce aux différentes mesures prises lors de a mise en œuvre pour notamment proroger sa durée et combler le déficit de son financement due au dépassement des coûts.

Sur le plan financier

Le coût du projet est passé de 16 millions de dollars dans le Document d'Evaluation du Projet (PAD) à 26,80 millions de dollars à la fin de sa mise en œuvre, soit une augmentation de 67%. Les raisons de ce dépassement sont essentiellement de quatre ordres, à savoir: (i) **l**a non prise en compte dans le PAD de la Taxe sur la Valeur Ajoutée (TVA) et des droits de douanes dont la liquidation dans le cadre des projets de développement est une obligation au Cameroun; (ii) le doublement de la durée du projet dont la clôture a été reportée deux fois du 31 décembre 2009 au 31 décembre 2011 et au 30 juin 2013; (iii) l'estimation des coûts qui était sur des bases forfaitaires; et (iv) les prix issus des appels d'offres qui se sont avérés plus élevés que ceux estimés lors de la conception du projet.

La TVA sur les contrats du projet a été financée en cours du projet à concurrence de 1,115 milliards de francs CFA et les taxes douanières pour un montant de 646,5 millions de francs CFA, soit 22% du coût initial du projet.

L'estimation du coût du projet était également sur des bases purement forfaitaires et non fondées, du fait de l'absence des études préalables. En outre elle ne comportait pas la Taxe sur la Valeur Ajoutée (TVA) et les droits de douane alors que leur liquidation dans les projets de développement est obligatoire au Cameroun. Pour le PRSSAC ces charges représentent environs 22% pourcent des coûts directs (soit 19,25% de TVA et 3,75% de droits de Douanes). ***Ceci est une leçon de taille à considérer pour les projets futurs.***

Aussi, les aléas financiers et physiques furent estimés à 7,3% du coût direct du projet ce qui est à peine la moitié des 15% généralement pratiqués pour les projets d'investissement financés par la Banque Mondiale.

Dès lors que les aléas financiers et physiques sont fonction de la durée de mise en œuvre d'un projet, Il fallait donc s'attendre à ce que l'optimisme affiché sur la durée du PRSSAC impacte de manière inversement proportionnelle sur son coût.

Au vu de ces considérations et en prenant la durée minimum de 5 ans observée pour les projets similaires récents au Cameroun, on peut conclure que le cout du projet et par conséquent sont financement ont été sous estimés dès le départ d'au moins 40%.

Le report de la date de clôture par deux fois a occasionné à son tour le doublement du coût de fonctionnement du projet qui est passé de 1,5 millions de dollars à 3,2 millions de dollars.

En outre, les dispositions de mise en œuvre des mesures sociales n'ont pas été réglées avant le démarrage du projet bien que le Plan d'Action de Recasement (PAR) y relatif ait été préparé depuis 2005.

Les prix issus des appels d'offres ont été supérieurs aux estimations initiales. Les membres de l'UGP attribuent ce dépassement des coûts essentiellement à l'inflation, au manque d'études de base lors de la phase préparatoire du projet et au retard pris dans la réalisation des travaux.

Sur le plan financier, il est donc claire que ce projet n'aurait pas atteint les résultats qu'il a enregistrés n'eut été le déblocage des fonds supplémentaires par la CCAA et l'Etat, les gains de changes sur le don IDA et les deux prorogations de sa date de clôture.

Sur le plan de la mise en œuvre

Initialement prévue sur une durée de trois ans la mise en œuvre du projet a finalement pris 7 ans depuis la signature des accords de financement le 2 juin 2006 à sa clôture le 30 juin 2013. La raison principale est que la durée fixée à la conception du projet était optimiste. En effet, pratiquement tous les projets d'infrastructures similaires réalisés au Cameroun dans le cadre des financements de la Banque Mondiale ont duré plus de trois ans. Une analyse des projets antérieurs (qui est bien recommandée dans la conception des projets en général) aurait permis d'être moins optimiste quant à cette durée de trois ans.

L'analyse de la passation et de l'exécution des marchés permet de confirmer que les problèmes liés à la passation et à l'exécution des marchés étaient d'envergure et partagés entre la Banque Mondiale qui accusait parfois des retards importants dans la formulation des non objections, l'agence d'exécution qui manquait la maitrise des procédures et la rigueur dans ses analyses et aux entreprises dont certaines n'avaient pas la capacité souhaitée ou déclaraient de fausses informations.

Sur le plan de la performance du projet

La Banque Mondiale donne une classification globalement satisfaisante tant aux résultats du projet qu'en ce qui concerne la gestion et la maitrise des aspects de sauvegarde environnementale et sociale. Le présent rapport partage largement cette classification sauf sur les aspects indiqués dans le tableau 32 à la Page 86.

Sur le plan de l'efficacité de la mise en œuvre, y compris la réalisation des conditions d'atteinte des objectifs de développement, le gouvernement et son agence d'exécution ont montré une performance modérément satisfaisante.

La performance de la Banque Mondiale dans la conception et la qualité à l'entrée est modérément non satisfaisant sur le plan de sa conception et de la qualité à l'entrée. De même la performance de la Banque Mondiale est modérément non satisfaisante sur le plan de l'assurance de la qualité à l'entrée. Sa performance **dans la supervision du projet** a été satisfaisante.

Une analyse détaillée qui aboutit à cette classification est présentée dans la Partie VI du présent rapport.

Sur le plan de la durabilité du PRSSAC
Le projet a permis de financer les audits de conformité qui ont donné lieu à la préparation des Plans d'Actions Correctrices (PAC). Les PAC ont été préparés par le Gouvernement et ont été validés par l'OACI. La mise en place des PAC a été d'un apport important au PRSSAC dans la mesure où le Gouvernement et la CCAA peuvent dorénavant les utiliser de manière permanente et systématique pour suivre la performance du secteur en matière de sécurité et de sûreté aérienne sans forcément faire appel à l'aide extérieure.

Aussi, la conformité recherchée à travers le projet repose dans une large mesure sur les PAC dont la réalisation doit être permanente. Ceci exige des moyens financiers et humains supplémentaires qu'il faudra prendre en compte dans la programmation budgétaire de l'Autorité Aéronautique. Afin d'assurer la permanence des PAC dans la phase opérationnelle du PRSSAC, il aurait fallu les insérer dans le cadrage budgétaire de la CCAA à partir de l'année fiscale 2014. Cette insertion et les rapports qui en suivraient auraient servi de baromètre pour apprécier l'opérationnalité du projet.

La valorisation des équipements et des infrastructures du projet dépend dans une large mesure sur des solutions mises en place pour leur entretien et leur opération. Or, il ressort de l'analyse du projet et des préoccupations exprimées par les bénéficiaires que lesdites solutions ne sont pas encore en place.

Aussi, Il y a lieu de noter que certains des livrables n'étaient pas de nature à contribuer immédiatement aux changements souhaités en matière de conformité aux normes de sécurité et de sûreté aériennes. C'est le cas par exemple des salles de formation rattachées au CDOU qui bien que construites et équipées par le projet, ne devraient porter des fruits escomptés que dans leur phase opérationnelle avec la mise sur pied d'un programme de formation répondant aux besoins exprimés au départ du projet.

De ce qui précède, il est urgent de mettre en place des mesures visant à consolider les acquis du présent projet, sinon sa durabilité restera compromise tant que ces mesures n'auront pas été prises en compte de manière spécifique dans la programmation budgétaire de la CCAA.

En conclusion, les risques du maintien des objectifs restent significatifs. Il est donc urgent de mettre en place des mesures visant à consolider les acquis du présent projet, par exemple à travers un deuxième projet. La durabilité (des réalisations) du PRSSAC restera compromise tant que ces mesures n'auront pas été prises en compte de manière spécifique dans la programmation budgétaire de la CCAA.

Sur le plan de l'impact du PRSSAC
Le PAD n'a pas établi un lien direct de cause à effet entre les résultats du PRSSAC et les agrégats sectoriels et macro-économiques. Le défi à relever est comment mesurer de manière réaliste et permanente la contribution des projets comme le PRSSAC à l'objectif global long terme du secteur de transport aérien national. Ce défi est encore plus grand s'il faut mener le même exercice au niveau du programme régional dont l'objectif long

terme est ***de contribuer à la création d'un environnement sur et sécurisé pour le transport aérien en Afrique de l'Ouest et du Centre permettant aux compagnies aériennes africaines d'accéder compétitivement aux marchés régionaux et mondiaux*** (cf. PAD). D'où la question de connaitre quelle priorité donner à cette dimension stratégique de l'aviation civile notamment dans les projets futurs.

Dans le cadre du PRSSAC camerounais les résultats présentés ci-dessus et des mini sondages effectués au cours de la présente mission ont conduit aux conclusions ci-après concernant l'effet du projet sur ses bénéficiaires:

Il y a lieu de signaler que ces résultats sont optimistes par rapport à la situation réelle du Cameroun puisque l'évaluation de la conformité dans le cadre de ce projet s'est limitée sur la CCAA et les deux aéroports de Douala et de Yaoundé. *Elle n'a pas pris en compte l'aéroport international de Garoua et les autres aérodromes en service au Cameroun qui n'étaient pas inclus dans le projet*.

Pour l'Etat du Cameroun : Le système de l'aviation civile camerounais a connu une amélioration ***mais reste non conforme aux normes de l'OACI.*** En effet, les résultats de l'ICAO Coordinated Validation Mission (ICVM) qui a eu lieu à la fin de 2013 place le taux de conformité du système de supervision de la sécurité du Cameroun aux normes de sécurité de l'OACI à 52,13 %, ce qui peut prêter à une confusion avec le taux de 76% présenté dans le présent rapport. Il est important ici d'expliquer les raisons de cet écart entre les résultats de l'ICVM et du PRSSAC. En effet, il s'explique simplement par les définitions données dans chaque cas: Alors que le taux de l'ICVM mesure la conformité de tout le système de supervision de la sécurité représenté par les huit éléments cruciaux de l'OACI[81], celui dégagé comme résultat du PRSACC se limite à la conformité de la CCAA seulement et porte sur les six éléments cruciaux auxquels le PRSSAC a effectivement contribué. Ainsi, le PRSSAC n'a pas contribué à deux éléments cruciaux qui sont (i) les Obligations concernant les Licences et les Agréments et (ii) Indications techniques

Par ailleurs, il faut relever que la non réalisation de l'étude sectorielle du transport aérien et du système GNSS, bien que n'ayant pas d'impact sur les objectifs du projet, constitue un handicap majeur dans la mesure où le secteur ne dispose pas d'un cadre de planification lui permettant de répondre aux prescriptions du DSCE. C'est pourquoi il serait important de mettre en place le Deuxième Programme Sectoriel de Transport (PST 2) et un système de données fiables pour le sous secteur conformément aux prescriptions du DSCE.

[81] Les éléments cruciaux sont: Législation Primaire de l'Aviation, Règlements Opérationnels Spécifiques, Structure de l'ACC et Fonctions de Supervision, Indications Techniques, Personnel Technique Qualifié, Obligations Concernant les Licences et Agréments, Obligations de Surveillance Continue et Solution des Problèmes de Sécurité.

Pour l'économie camerounaise*: A titre d'exemple le trafic passagers à l'aéroport de Douala*[82] *a* augmenté globalement d'environ 50 000 passagers depuis la mise en place du projet alors que *l'évolution du fret et du mouvement des avions a connu une chute constante entre 2007 et 2010.*

Dans la même période la contribution du tourisme aux indicateurs macro-économiques tels que l'emploi et l'investissement a connu une amélioration importante.

Tableau 02 : Evolution du trafic à l'aéroport de Douala

Trafic	**2007**	**2008**	**2009**	**2010**
Passagers de transit	496 580	519 691	505 747	549 410
Fret (tonnes)	14 584 462	15 462 203	14 496 587	11 013 752
Mouvements avions	17 452	17 113	15 686	15 039

Source: AZWORLDAIRPORTS.COM

Tableau 03 Contribution du Tourisme à l'Emploi et à l'Investissement

DESCRIPTION	2004 (PAD)	2012
Contribution directe à l'emploi (en milliers d'emploi)	55	94,4
Contribution totale à l'emploi (en milliers d'emploi))	31,9	213,8
Investissements de Tourisme et de Voyages (en millions de dollars)	0,1	55

Source: World Tourism and Travel Council (WTTC)

Ces données appellent cependant aux commentaires suivants concernant le PRSSAC:
(i) Il est difficile d'établir un lien direct de cause à effet entre le PRSSAC et les indicateurs ci-dessus, le PAD étant muet sur le sujet;
(ii) Les projets futurs devront s'efforcer de définir des indicateurs qui permettent de mesurer l'apport direct (cause à effet) d'un projet de cette nature dans les agrégats macroéconomiques du pays.

Pour la CCAA elle a bénéficié d'une image améliorée devant les instances internationales de régulation telle que l'OACI du fait de l'augmentation de sa conformité. Plus particulièrement elle devrait être plus efficace du fait d'un personnel plus qualifié, d'un tableau de bord bien articulé sous formes de Plan d'Actions Correctrices (PAC), des équipements et des outils de travail modernes et fonctionnels (matériel roulant et bâtiments). Elle devrait également avoir des bénéfices financiers importants grâce à des réductions substantielles de ses coûts de formation et une augmentation importante de ses

[82] Les sources internationales de statistiques citées ici n'ont pas de données sur les autres aéroports du Cameroun.

revenus qui sont passés de 9,2 millions de dollars au début du projet à 22,7 millions à la fin du projet.

Pour l'ADC: Son action devra connaitre une efficacité certaine dès lors qu'elle dispose des équipements de contrôle d'accès en zone réservée et de surveillance (vidéo surveillance) modernes et plus performants. Aussi ses coûts opérationnels devraient baisser notamment en matière de maintenance et d'entretien.

Pour les compagnies aériennes: elles déclarent connaitre une meilleure rotation des avions et surtout une nette amélioration des services de sûreté, ceci du fait des équipements de contrôle plus performants et fonctionnels en permanence.

Pour les passagers: Les passagers nationaux et internationaux ont confirmé (à travers un mini sondage réalisé dans le cadre de la présente mission) qu'ils passent moins de temps dans les aéroports du fait des procédures de contrôle améliorées et des équipements de contrôle performants et qu'ils jouissent d'un confort psychologique animé par un sentiment de sécurité naissant.

Pour les prestataires de services: Le même mini sondage a révélé qu'une bonne partie des prestataires de services dans les enceintes aéroportuaires se sentent plus en sécurité et jouissent d'un cadre de travail meilleur qu'avant le projet.

LEÇONS TIREES DU PROJET ET RECOMMANDATIONS

Les leçons tirées du PRSSAC notamment lors de l'atelier de restitution susmentionné peuvent être résumées comme ci-après et devraient être pris en compte dans la conception du projet des expériences et leçons tirées des projets futurs. Pour lesdits projets futurs, il faudrait :

(i) s'assurer de la disponibilité des données financières et techniques du projet à travers la réalisation des études de base au plus tard lors de l'évaluation afin de disposer des données fiables sur la durée, les coûts et les indicateurs du projet ;
(ii) veiller à ce que les processus de passation des marchés pour les activités critiques du projet soient achevés suffisamment tôt en lançant les appels d'offres y relatifs de préférence dès l'évaluation du projet;
(iii) achever les évaluations d'impact social bien avant la mission d'évaluation et achever les mesures d'atténuation des impacts sociaux de préférence avant le lancement des appels d'offres;
(iv) introduire dans la conception des projets autant que faire se peut des contrats pluriannuels conclus avant la mise en vigueur du projet notamment pour les dispositifs d'appui à la gestion et au suivi;
(v) établir un calendrier clair et réaliste de mise en place du personnel clef du projet et veiller à ce que celui-ci soit en place de préférence avant l'évaluation du projet ou au plus tard avant la mise en vigueur des financements;

(vi) bien intégrer dans la conception du projet des mesures visant à assurer la transition entre la fin du projet et la prise en main de la phase opérationnelle du projet;
(vi) prévoir le poste de spécialiste de suivi-évaluation dans l'équipe des projets complexes notamment pour renforcer la capacité de suivi de leurs opérations et résultats;
(vii) compte tenu du caractère permanent des menaces d'insécurité aérienne vécues dans le monde entier aujourd'hui il faudrait que la maitrise de la sécurité et de la sûreté aériennes soit totale et permanente. A cet effet, les prochaines phases du PRSSAC devraient être formulées de manière à institutionnaliser leurs solutions dans les politiques et actions gouvernementales, y compris les cadres budgétaires;
(viii) pour assurer la cohérence des objectifs, des stratégies et des hypothèses sectoriels avec le DSCE camerounais *il faudrait également repenser les phases futures du PRSSAC dans l'optique de l'optimisation de la contribution et surtout de la synergie des différents opérateurs du secteur du transport aérien pris globalement*.

Guinea

I. Contexte

Les pays de l'Afrique de l'Ouest et du centre ont bénéficié d'un appui de la Banque Mondiale pour financer le **Projet régional pour le renforcement de la sécurité et de la sûreté de l'aviation en Afrique de l'Ouest et du Centre (PRSSTAAOC).**

L'Accord de financement du volet guinéen de ce Projet a été signé le **29 mai 2006**, par le Ministre de l'économie et des finances et le Représentant résident de la Banque mondiale en Guinée, pour une enveloppe de 4900 DTS soit 7.100.000 USD, sous forme de Don (**Don IDA H215-GUI**). Sa mise en vigueur a été faite le 24 août 2006.

La première phase de ce projet régional a été lancée pour une durée initiale de trois (3) ans dans les quatre pays suivants : Burkina, Cameroun, Guinée et Mali.

En ce qui concerne la Guinée, cette durée initiale a été particulièrement modifiée et prorogée à deux reprises en raison de perturbations sociopolitiques que le pays a enregistrées tout au long de la vie du projet.

Pour sa mise en œuvre, une Equipe de gestion composée de cadres choisis parmi les fonctionnaires de la Direction Nationale de l'Aviation Civile et du Bureau d'Etudes du Ministère des Transports a été mis en place par un Arrêté du Ministre.

Un spécialiste de passation des marchés et un comptable qui étaient les seuls salariés du projet, ont été recrutés pour gérer les aspects fiduciaires du projet. Aussi, conformément aux critères de la Banque Mondiale, un auditeur externe a été sélectionné pour vérifier périodiquement les comptes du projet et en faire rapport à la Banque Mondiale.

L'Equipe de gestion du Projet était composée comme suit :
- un coordonnateur, responsable de la composante sûreté ;
- un responsable de la composante sûreté ;
- un responsable du suivi et évaluation ;
- un responsable administratif et financier ;
- un spécialiste de la passation des marchés
- un comptable.

L'objectif principal de ce Projet consiste à apporter aux Etats concernés, les moyens leur permettant d'améliorer le cadre institutionnel et règlementaire de leurs structures d'aviation civile afin de les mettre en conformité avec les normes de sûreté et de sécurité édictées par l'Organisation de l 'Aviation Civile Internationale (OACI).

L'appui de la Banque Mondiale pour la réalisation de cet objectif permet de rehausser le niveau de la sûreté et de la sécurité de l'aviation afin de créer un environnement sûr, propice au développement du transport aérien qui, du reste, est un important moyen

d'intégration et une activité porteuse de croissance par excellence. L'atteinte de cet objectif favorisera une participation plus accrue des compagnies aériennes de cette région aux activités du transport aérien international en leur permettra d'accéder aux marchés régionaux et internationaux. Il est à noter que la part desdites compagnies au transport aérien international est marginale. Cependant, le développement de cette activité est de nature à soutenir une croissance économique durable au niveau régional.

Pour y parvenir, il était nécessaire d'appuyer les aviations civiles d'Afrique de l'Ouest et du Centre dans la mise en œuvre des plans d'actions issues des audits que l'OACI a réalisés dans les Etats concernés.

Les carences identifiées lors des audits de l'Organisation de l'aviation civile internationale (OACI) sont une des raisons qui entrainent la faible participation des compagnies de cette région à l'exploitation du marché du transport aérien international. Ce projet a donc été une bonne opportunité pour la Guinée pour la correction des déficiences de son système d'aviation civile.

Pour la Guinée, ces carences se caractérisent principalement par :

- le manque de structure adaptée à l'exploitation aérienne ;
- l'insuffisance des personnels techniques qualifiés au sein des structures chargées de veiller à la mise en œuvre des normes et pratiques recommandées de l'OACI en matière de sécurité et de sûreté ;
- l'indisponibilité de ressources suffisantes pour accomplir les missions de sûreté et de sécurité dévolues à l'aviation civile.

II. Composantes du Projet

Pour le volet guinéen du projet, les trois composantes suivantes ont été retenues :

- une composante sûreté de l'aviation,
- une composante sécurité de l'aviation,
- une composante appui institutionnel.

La mise en œuvre effective de ces composantes doit permettre :

- ✓ d'améliorer le niveau de conformité de l'aviation civile vis-à-vis des normes de sécurité définies par l'OACI,
- ✓ d'améliorer le niveau de conformité de l'aviation civile vis-à-vis des normes de sûreté définies par l'OACI,
- ✓ de renforcer le niveau de conformité des aéroports internationaux vis-à-vis des normes de sûreté et de sécurité.

Pour cela, des indicateurs ont été identifiés dont les valeurs de référence doivent être améliorées à la fin du projet pour permettre d'atteindre les objectifs du projet.

Les missions de sûreté et de sécurité qui permettent l'atteinte de ces objectifs sont dévolues à la Direction de l'aviation civile. A cet effet, elle doit disposer de moyens

financiers suffisants, d'un personnel qualifié et de l'autorité nécessaire pour mener à bien les missions qui lui incombent.

C'est pourquoi, en vue de pérenniser les acquis du projet, la Banque Mondiale a identifié deux priorités pour lesquelles le Gouvernement guinéen s'est engagé à réaliser ; à savoir :

- l'adoption et la publication d'un nouveau code de l'aviation civile ;
- la transformation de la Direction Nationale de l'aviation civile guinéenne en une entité dotée de l'autonomie financière et de gestion.

III. Réalisation des activités

Les composantes du projet ont été mises en œuvre à travers des activités réparties dans cinq catégories. A la suite de la réallocation des ressources du projet faite en 2013, la répartition par catégorie présente la situation contenue dans le tableau ci-dessous.

Répartition des resources par catégorie

Catégories	Montant de la catégorie (DTS)
Services de consultants	628.482
Travaux	1.120.000
Fournitures	2.396.518
Formation	270.000
Fonctionnement	485.000
Total	**4.900.000**

SERVICES DE CONSULTANTS

- ***Audit technique et financière de l'Agence de la Navigation Aérienne (ANA)***

Pour s'assurer de la pérennité de la fourniture des services de navigation aérienne, il était nécessaire de s'assurer que l'ANA, qui est la structure bénéficiaire des équipements d'aide à la navigation aérienne (NAVAIDS) dispose de la capacité technique et financière d'assurer leur maintenance et de procéder à temps opportun, à leur renouvellement.

Un audit technique et audit financier de l'Agence de la Navigation Aérienne (ANA) ont été programmés à cet effet et réalisés respectivement par le Cabinet AEROTECH et FICADEX qui ont leur siège principal basé au Sénégal.

- ***Etude préparatoire pour la création d'une autorité autonome de l'aviation civile***

Dans la perspective de la création d'une autorité autonome de l'aviation civile, il était nécessaire qu'une étude soit réalisée pour déterminer le scénario le plus approprié pour y parvenir et proposer la structure la plus adaptée. Cette étude a été réalisée par le Cabinet français EGIS AVIA.

L'étude réalisée a été présentée par le cabinet lors d'un séminaire de validation qui a lieu en 2011, à Conakry. L'UEMOA a été invitée à prendre part à ce séminaire afin de partager son expérience dans la mise en place de structures analogues dans la région qu'elle couvre. La mise en place de la structure autonome de l'aviation civile guinéenne est en cours. Le projet de Décret d'application y relative est en cours d'examen au niveau du Gouvernement.

- ***Elaboration d'un nouveau Code de l'aviation civile***

Les principales carences relevées lors des audits réalisés en Guinée par l'OACI procèdent de l'inexistence, de l'inadaptation ou de l'obsolescence de la législation et de la règlementation pertinentes en matière d'aviation civile. Au regard des évolutions enregistrées dans le domaine de l'aviation civile internationale, il était impératif de doter l'aviation civile guinéenne d'une nouvelle loi aéronautique qui prend en compte les exigences de sécurité et de sûreté de l'aviation.

L'élaboration d'un nouveau Code de l'aviation civile et de ses textes d'application a été confiée à un Consultant individuel.

Ce Code a été adopté par la Loi L/2013/063/CNT du 05 novembre 2013 qui a été promulguée par le Décret du Président de la République D/2013/160/PRG/SGG du 28 novembre 2013.

- ***Etude, supervision et contrôle des travaux de construction de trois routes à l'aéroport de Conakry***

La construction de ces routes repose sur les justifications suivantes :

1. L'aéroport de Conakry est situé dans une zone densément peuplée et enclavée. Pour rejoindre leur centre d'activités, il a été constaté que les populations riveraines qui sont coincées entre le bord de mer et la piste d'envol ont une forte tendance à traverser cette piste. Cependant, la traversée de la piste par les piétons a un impact négatif sur la sécurité des vols, en général, et la sûreté de l'aviation, en particulier. Pour y remédier, il s'est avéré nécessaire de programmer la construction d'une route de contournement de l'aéroport pour permettre aux véhicules de transport public de desservir cette zone en vue d'offrir aux populations concernées, une alternative de mobilité.

2. Pour assurer une surveillance accrue du domaine aéroportuaire, la gendarmerie du transport aérien (GTA) est appelée à effectuer des patrouilles permanentes le long de la clôture intérieure. D'où la nécessité de construire une route de patrouille.

3. Le portail principal de l'aéroport est situé dans une position qui donne un accès direct à l'aire de trafic et aux aéronefs en stationnement ; ce qui rend cet espace vulnérable à une attaque frontale. A cet effet, il s'est avéré nécessaire de déplacer cet accès vers une position excentrée et créer une nouvelle voie d'accès à l'aire de trafic.

L'étude, la supervision et le contrôle des travaux de ces trois routes ont été confiés à BETEC, Bureau d'Etudes basé à Conakry.

- ***Etude, supervision et contrôle des travaux de construction d'un point d'isolement d'aéronefs***

L'aménagement d'un point de stationnement isolé d'aéronefs sur tout aérodrome est une exigence contenue dans les normes de l'Organisation de l'aviation civile (OACI). Une programmation a été faite dans le projet pour répondre à cette exigence qui a été relevée comme carence du système d'aviation civile de la Guinée lors de l'audit l'OACI. Une surface rigide de 9700 m2 (en béton armé) a été aménagée dans le prolongement de l'aire de trafic. Cet espace est dédié pour le stationnement de tout aéronef qui fait éventuellement l'objet d'un détournement ou dont la présence sur l'aéroport constitue une crise en sûreté de l'aviation.

En période normale, cette surface qui vient en augmentation de l'aire de trafic, est utilisée dans le cadre de l'exploitation régulière l'aéroport.

L'étude, la supervision et le contrôle de cette activité ont été confiés à WEST INGENIERIE, Bureau d'études basé à Conakry.

- ***Elaboration du plan d'urgence de l'aéroport de Conakry***

Tout aéroport doit disposer d'un plan d'urgence pour faire face aux situations de crise qui peuvent survenir (actes d'intervention illicite, crash).

Le plan conjoncturel de chaque intervenant à l'aéroport découle de ce plan d'urgence aéroportuaire. Son élaboration procède des normes des Annexes 17 et 14 de la Convention relative à l'aviation civile internationale.

Cette activité a été réalisée par le Cabinet STUDI INTERNATIONAL dont le siège social est à Tunis, en Tunisie.

TRAVAUX

Les travaux exécutés dans le cadre du projet ont consisté essentiellement en la réalisation d'infrastructures dont la pertinence procède des normes de l'OACI relatives à la sûreté de l'aviation.

Avant le lancement de ces travaux, il s'est avéré nécessaire de procéder à l'indemnisation et au déplacement des personnes qui effectuaient des activités agricoles dans les zones marécageuses de l'enceinte aéroportuaire. Pour procéder à cette indemnisation, un consultant a été recruté pour l'identification et la sensibilisation des personnes concernées en vue de leur délocalisation, car l'exécution de telles activités en ce lieu est contre-nature et incompatible avec les activités aéronautiques.

Les principaux travaux réalisés concernent :

- la construction d'une chaussée en béton bitumineux, d'une longueur de 0,352 km et d'une largeur de 6 m. Cette dernière sert de nouvelle voie d'accès à l'aire de trafic de l'aéroport de Conakry. Sa réalisation a été confiée à une entreprise de construction et de travaux publics dénommée EGUICOR ;

- la construction d'un point de stationnement isolé d'aéronefs, qui est une surface rigide de 9700 m2 (béton). La réalisation de cette infrastructure répond à une exigence de l'Organisation de l'aviation civile (OACI) ;

Il était prévu également de construire une route de patrouille pour la Gendarmerie du transport aérien, mais cette variante a été abandonnée au profit de l'installation de six (6) guérites sur le pourtour de la clôture de l'aéroport. A cet effet, une réallocation des ressources a été faite pour privilégier l'acquisition de fournitures, notamment celles indispensables pour la sécurité de la navigation aériennes et qui étaient fortement sollicitées par les compagnies aériennes.

FOURNITURES

Pour le fonctionnement de la cellule de gestion du projet et le renforcement de la sûreté de l'aviation et la sécurité des vols à destination de la plateforme aéroportuaire de Conakry, les fournitures suivantes ont été acquises :

- deux véhicules pour la cellule de gestion du projet,
- deux véhicules et deux motos pour les patrouilles et la garde de l'aéroport,
- des équipements informatiques et mobiliers de bureau pour l'installation de la cellule de gestion du projet,
- des guérites acquises et installées pour la surveillance du périmètre aéroportuaire,
- des équipements et matériels de communication et de transmission pour la Gendarmerie de transport aérien ;
- des mobiliers et de la bureautique pour la Direction Nationale de l'Aviation Civile,
- des équipements d'aides à la navigation aérienne (NAVAIDS : ILS, DVOR, DME). Ces équipements ont permis de mettre l'aéroport de Conakry aux normes de sécurité de la navigation aérienne ;
- une nouvelle console pour la tour de contrôle de l'aéroport de Conakry remplacer l'ancienne qui était devenue obsolète et dont certains composants n'étaient plus compatibles avec les nouveaux équipements installés à bord des aéronefs et ne permettant pas ainsi la transmission automatique de certaines données ;
- un système de collecte et de diffusion de données satellitaires pour la météorologie aéronautique (SADIS et SIOMA). Ces nouveaux équipements permettent la transmission automatique des informations aux aéronefs et sont compatibles avec les instruments et équipements de bord.

ACTIVITES DE FORMATION

Des activités de formation ont été réalisées fondamentalement dans le domaine de la sûreté et de la sécurité de l'aviation.

Dans ce cadre, des sessions de formation ont été organisées en faveur des personnels d'encadrement de la sûreté, soit :

- **En matière de sûreté :**

156.

- 150 agents chargés de la mise en œuvre des mesures de sûreté (policiers, gendarme douaniers),
- 6 auditeurs/inspecteurs, superviseurs, ainsi que des personnels des compagnies aériennes et autres prestataires,
- 25 personnes (policiers, gendarmes) ont été formées pour la lutte contre la fraude documentaire.

- **En matière de sécurité :**

Dans le domaine de la supervision de la sécurité, 11 inspecteurs ont été formés dans les domaines de la navigabilité des aéronefs, des opérations, des aérodromes et des licences des personnels aéronautiques.

Par ailleurs, outre les formations qui avaient été réalisées dans le cadre du marché d'acquisition des nouveaux équipements (SADIS et SIOMA) de la météorologie aéronautique, 30 cadres et agents de ce service ont bénéficié de formations portant sur lesdits équipements.

Les membres de l'équipe de gestion du projet ont également bénéficié de session de formation en matière de gestion des projets financés par la banque Mondiale.

Toutes ces activités de formation ont été réalisées aussi bien localement que dans des institutions de formation, telles que l'ERNAM à Dakar, l'EAMAC à Niamey, l'ENAC à Toulouse, l'ISADE à Dakar, le CESAG à Dakar.

FONCTIONNEMENT

La mise en œuvre des activités du projet a été assurée par la Cellule de gestion instituée par le Ministre des Transports. Cette Cellule qui est intégrée à la structure de la Direction Nationale de l'Aviation Civile, était animée par des cadres qui en sont issus. Les charges liées à son fonctionnement étaient supportées par le projet, notamment :

- la dotation en fournitures et équipements informatiques et la bureautique,
- la frais de communication (téléphone et internet),
- les publications des appels d'offres et avis à manifestation d'intérêt dans la presse,

- l'entretien des véhicules acquis dans le cadre du projet (4 véhicules automobiles dont 2 véhicules et 2 motos pour la patrouille aéroportuaire,
- la dotation hebdomadaire de ces véhicules en carburation,
- l'entretien et le gardiennage des locaux du projet

IV- Résultats et impact du Projet

Toutes les activités qui étaient inscrites au Projet régional de renforcement de la sécurité et de la sûreté de l'aviation civile (PRSSAC) ont été intégralement réalisées et achevées à 100%, avec un taux de décaissement de 100%.

Au nombre des impacts du projet, on peut citer :

- une nette amélioration de la sécurité (dont le taux de conformité est passé de 53% en début de projet, à 77% à la clôture) et la sûreté (dont le taux de conformité est passé de 1% en début de projet, à 55% à la clôture)
- de meilleures conditions de sécurité et de confort pour les procédures d'atterrissage et de décollage avec l'installation de nouveaux équipements d'aide à la navigation aérienne (ILS/VOR/DME) ;
- la disponibilité d'équipements et système (SADIS et SIOMA) permettant la collecte et la transmission automatique des données météorologiques par satellite à la tour de contrôle et aux compagnies aériennes,
- une nette amélioration de la fiabilité du contrôle aérien avec l'installation d'une nouvelle console à la tour de contrôle de l'aéroport de Conakry;
- une amélioration de la surveillance du domaine aéroportuaire par la Gendarmerie du transport aérien, avec l'acquisition de véhicules pour les patrouilles de sûreté (pick-up et motos) ;
- une augmentation de la capacité de l'aire de trafic et de stationnement des aéronefs, avec l'aménagement de 9.700m^2 surface sur le prolongement du tarmac, qui doit servir de point de stationnement isolé des aéronefs qui sont en situation de crise ;
- une plus grande sécurité des aéronefs en stationnement sur l'aire de trafic grâce à la construction d'une nouvelle voie d'accès à l'aéroport.

Ces différentes réalisations qui ont considérablement amélioré la sécurité et la sûreté sur la plateforme aéroportuaire ont, d'une part, amené certaines compagnies aériennes à augmenter leurs fréquences :

- Air France est passée de 4 à 7 fréquences hebdomadaires,
- Brussels Airlines est passée de 2 à 3 fréquences,
- Royal Air Maroc est passée de 5 à 7 vols hebdomadaires,
-

et d'autre part, sept nouvelles compagnies, ont commencé la desserte de l'aéroport Conakry, à savoir :

- Air Côte d'Ivoire, à raison de 4 fréquences hebdomadaires,
- ASKY, à raison de 11 touchées hebdomadaires,
- Emirates Airlines, à raison de 4 fréquences hebdomadaires,
- Gambia Bird, à raison de 3 vols hebdomadaires
- Sénégal Airlines, à raison de 7 vols hebdomadaires, ramenés à 4,
- Mauritania Airways,
- DHL, à raison de 4 fréquences hebdomadaires.

La compagnie Turkish Airlines envisageait également de lancer ses opérations sur la destination Guinée au début du second semestre de cette année. Malheureusement, la survenue de l'épidémie à virus Ebola à annihilé ces avancées ont été éprouvées par au courant du premier trimestre de 2014, ce qui a entrainé la suspension des vols de plusieurs d'entre elles.

LES INDICATEURS DU PROJET

Les valeurs de référence des indicateurs du projet ont été déterminées en fonction des résultats des audits de sûreté et de sécurité réalisés par l'OACI, respectivement en 2003 et 2004.

Pour la sûreté, cet audit est basé fondamentalement sur l'annexe 17 (sûreté) à la Convention relative à l'aviation civile internationale et les parties pertinentes relatives à la sûreté et contenues dans les autres annexes.

En ce qui concerne la sécurité, il sied d'indiquer que pour la détermination des indicateurs du projet, ce sont les résultats issus de l'audit fondé sur l'évaluation des annexes 1, 6 et 8 qui ont été pris en compte car le principe des audits basés sur une approche systémique n'étaient pas lancés par l'OACI au moment de la préparation et le lancement de ce projet.

Toutefois, au cours de l'exécution du projet, l'OACI a réalisé en Guinée, en avril 2012, un audit fondé sur l'approche systémique (USOAP) qui intègre toutes les annexes à la Convention relative à l'aviation civile internationale, exceptées les annexes 17 (sûreté) et 9 (facilitation). Cependant, les indicateurs du projet n'ont pas été modifiés pour prendre en compte les résultats issus de ce dernier audit. Par conséquent, les valeurs de référence n'ont pas été modifiées dans les indicateurs du projet. C'est pourquoi, les résultats contenus dans le tableau ci-dessous sont basés sur l'ancienne formule des audits (annexes 1,6 et 8).

Tableau des indicateurs du Projet

Indicateurs de résultats	Niveau de référence	Valeur octobre 2013	Cible de fin de projet	Observations Observations
Composante 1				
SECURITE DE L'AVIATION				
Taux de conformité avec les normes sécurité de l'OACI	53%	**> 77%**	>75%	Les valeurs de référence des indicateurs du projet sont fondés sur l'audit réalisé par l'OACI en 2004 portant sur trois annexes (Annexes 1,6, 8). L'audit de sécurité réalisé en avril 2013, fondé sur l'approche systémique (portant sur 16 annexes), a produit un niveau de conformité de 8% dû principalement à l'inexistence d'un cadre législatif et règlementaire adéquat ou à la caducité des textes existants. Cependant, le taux de conformité basé sur l'audit de 2004 a été amélioré avec l'accomplissement de certaines actions notamment l'adoption et la publication d'un nouveau code de l'aviation civile et de plusieurs autres textes règlementaires.
Pourcentage des inspecteurs de sécurité en conformité avec les normes de l'OACI	38%	**100%**	>60%	Le niveau des activités de l'aviation civile guinéenne lors de l'audit en 2004 nécessitait la disponibilité de 11 inspecteurs. Ces derniers ont tous été formés. **L'objectif de cet indicateur est atteint.**
Niveau du budget de la DNAC	n.a.	**n.a.**	>0,7	Il n'y a pas eu d'évolution sur cette rubrique, car l'autonomie de l'aviation civile n'est pas encore effective pour lui permettre de disposer d'un budget autonome. Toutefois la loi relative à

				l'autonomie de l'aviation civile a été votée et promulguée. Les Décrets d'application permettant de rendre cette entité opérationnelle sont en train d'être publiés progressivement. Un budget spécifique sera alors dédié à la Direction de l'Aviation Civile (entité autonome)
Composante 2				
SURETE DE L'AVIATION				
Taux de conformité avec les normes de sûreté de l'OACI	1%	**>55%**	>35%	Les activités réalisées en matière de sûreté dans le cadre du projet, notamment l'adoption du code de l'aviation civile et de textes, ainsi que la formation des personnels intervenant dans la chaine de sûreté, l'acquisition de moyens de communication et de déplacement pour les services de sûreté, l'aménagement de voies de circulation ont permis de rehausser le niveau de conformité avec les normes de sûreté. Toutes ces activités étaient inscrites dans le plan d'actions élaboré à l'issue de l'audit de sûreté de l'OACI réalisé en 2003. Cet **objectif est atteint.**
Les Pourcentage des inspecteurs de sûreté agréés formés pendant les trois dernières années	**30%**	**>100%**	>70%	Au titre de cet indicateur, il était prévu d'atteindre le nombre de 6 inspecteurs formés. En plus des 3 qui existaient, 6 nouveaux inspecteurs ont été formés à la date du 30 octobre 20013. **L'objectif de cet indicateur est atteint.**
Montant du budget alloué à la sûreté en US$	**n.a.**	**n.a.**	0,25	Il n'y a pas eu d'évolution sur cet indicateur. La DNAC n'est toujours

				pas autonome.
Composante 3				
SURETE AEROPORTUAIRE				
Agents de sûreté aéroportuaire ayant 3 ans d'expérience ou plus	**<58%**	**>85%**	>65%	Sur les 82 agents de sûreté de la police de l'air et de la police aux frontières de l'aéroport de Conakry, 74 ont plus de trois de service **L'objectif de cet indicateur est atteint.**
Nombre de problèmes graves révélés par les exercices de crise annuels	**n.a.**	**n.a.**	<5	Valeur inconnue car l'exercice de crise n'a pas encore eu lieu. Toutefois, la réalisation de cet exercice est un des objectifs prioritaires de la nouvelle entité autonome de l'aviation civile.
Pourcentage de passagers arrêtés en possession d'objets illicites tels que définis par l'OACI, saisis par les services de sûreté des compagnies aériennes	n.a.	**<1,5%**	<3%	Les campagnes de sensibilisation réalisées ont permis de réduire considérablement l'introduction dans les bagages de cabine, d'articles dangereux et interdits à bord des aéronefs. **Cet objectif est atteint.**

ACTIVITES FINANCEES PAR LE PRSSAC (DON IDA H2150)

1. Services de Consultants

N°	ACTIVITES	PRESTATAIRE	MONTANT USD
1	Etude préparatoire pour la création d'une autorité autonome de l'aviation civile	EGIS AVIA (SOFREAVIA)	133 194,00
2	Honoraire consultants divers		57 617,00
3	Audit Technique de l'ANA	LE CABINET AEROTECH	59 111,00
4	Audit Financier de l'ANA	GROUPE FICADEX GUINEE &SENEGAL	58 785,00
5	Avenant à l'étude d'aménagement du point d'isolement d'aéronef	WEST INGENIERIE sarl	20 000,00

N°	ACTIVITES	PRESTATAIRE	MONTANT USD
6	Etude pour l'aménagement d'un point d'isolement d'aéronefs	WEST INGENIERIE sarl	37 785,27
7	Etude construction de trois (3) routes de 15km353,8 à l'Aéroport	BETEC SARL	65 859,49
8	Honoraire du comptable PRSSAC 2006-2012	FACINET CISSE	60 000,00
9	AUDIT PRSSAC 2006-2009	TAFSIR AUDIT ET CONSEIL	21 277,00
10	Consultant en passation des marchés 2007 – 2011	MAMADOU DIAN DIALLO	56 000,00
11	Elaboration du plan d'urgence de l'aéroport	STUDI INTERNATIONAL	95 434,87
12	Formation à l'exploitation du SADIS et du SIOMA	BENTEFOUET JANVIER	39 900,00
13	Supervision et contrôle des travaux d'aménagement de la voie d'accès à l'aéroport	BETEC	27 430,45
14	Supervision et contrôle des travaux de construction d'un point d'isolement d'aéronefs **(2)**	WEST INGENIERIE	31 479,16
15	Mise à jour code de l'aviation civile	PHILIPPE FOILLARD	63 442,00
16	Consultant en passation des marchés 2011-2013	MAMADOU DIAN DIALLO	30 000,00
17	Honoraire du comptable du PRSSAC 2012-2013	ABDOULAYE KEITA	27 000,00
	Audit des comptes du PRSSAC 2010-2013	PANAUDIT GUINEE	10 109,58
	SOUS TOTAL 1		**894 424,82**

2. Fournitures

N°	ACTIVITES	FOURNISSEUR/PRESTATAIRE	MONTANT USD
1	Acquisition mat. Informatique & mobiliers de bureau	BUROTIC CONTACT SERVICE & ESPACE 21	74 779,30
2	Acquisition NAVAIDS	THALES ATM GmbH	1 475 180,00
3	Acquisition Système SADIS/SIOMA	DEGREANE HORIZON	642 777,00
4	Acquisition de 2 Véhicule	CFAO GUINEE	55 898,00
5	Acquisition 2 véhicules et 2 Motos	SETA GUINEE	65 859,47
6	Fourniture et Installation Guérites	E.GUI COR	49 065,51
7	Acquisition Matériel Communication Gendarmerie Aéroport	BOUBA ELECTRONIQUE	74 620,51

N°	ACTIVITES	FOURNISSEUR/PRESTATAIRE	MONTANT USD
8	Equipement Direction Aviation Civile	GFELC SARL	108 000,00
9	Fourniture console d'exploitation de la tour de contrôle de l'aéroport	INTELCAN TECHNO SYSTEMS inc	1 126 795,00
	SOUS TOTAL 2		**3 672 974,79**

3. Travaux

N°	ACTIVITES	FOURNISSEUR/PRESTATAIRE	MONTANT USD
1	Réhabilitation Salle Réunion	E.GUI.COR	16 906,00
2	Indemnisation personnes déplacées à l'aéroport de Conakry	PRSSAC	145 895,72
3	Aménagement d'une voie d'accès à l'aéroport	E.GUI.COR	530 000,00
4	Aménagement d'un point d'isolement d'aéronefs	CDE	971 970,64
	SOUS TOTAL 3		**1 664 772,36**

4. Formation

N°	ACTIVITES	PRESTATAIRE	MONTANT USD
1	Formation cadre DNAC, ANA SOGEAG, DNM	CESAG DAKAR, EAMAC NIGER , ISAD DAKAR, ENAC TOULOUSE, ERNAM DAKAR,	**397 475,47**

FONCTIONNEMENT

Total fonctionnement : USD 785 319,56

V- Conclusion

Il importe de souligner que ce projet a contribué fortement à améliorer le système d'aviation civile dans notre pays et a permis de nous mettre aux normes de l'OACI dans maints domaines.

Aussi, l'administration de l'aviation civile dispose désormais d'un personnel qui s'est familiarisé avec les directives et critères qui gouvernent la gestion des projets financés par la Banque Mondiale. Ils ont également acquis des compétences dans des domaines aussi multiples que variés, tels que :

- l’élaboration de plans de passation de marchés et la passation de marchés
- le décaissement des ressources affectées aux projets
- l’élaboration des rapports de suivi financier

Ces acquis méritent d’être capitalisés en les utilisant dans d’autres projets similaires.

En vue de maintenir et d’amplifier la dynamique d’amélioration des infrastructures de sûreté et de sécurité, amorcée en Guinée, il serait souhaitable d’envisager la mise à niveau des aérodromes domestiques dans ces domaines, car ces derniers sont incontestablement des pourvoyeurs de l’aéroport de Conakry en passagers.

C’est pourquoi, nous souhaiterions bénéficier d’un autre projet qui s’inscrirait dans la continuité de celui qui vient d’être clôturé.

Mali

1. INTRODUCTION :

Conformément à l'accord de crédit signé le 25 mai 2007 entre la République du Mali et l'Association Internationale pour le Développement (IDA) dont l'objectif principal est de soutenir le Mali dans ses efforts pour améliorer la conformité de son aviation civile et l'aéroport International de Bamako avec les normes de sécurité et de sûreté de l'Organisation de l'Aviation Civile Internationale (OACI)**, le Projet Régional de Sécurité et de Sûreté Aériennes en Afrique de l'Ouest (PRSSAOC)** a clôturé physiquement ses activités ce 30 juin 2013. Il rentre dans sa période probatoire d'achèvement qui prend fin le 30 octobre 2013. Cette période permet de réaliser les audits des comptes financiers ainsi que de procéder au règlement financier des activités ayant pu être réalisées avant la date de clôture.

2. LES PRINCIPAUX REPERES DU PSSTAAOC

Mars 2006 : négociations ;
Mai 2006 : signature de l'accord de financement ;
Montant du crédit : 3 800 000 DTS soit 5,450 millions de dollars US (taux du 25 mai 2006) ;
Novembre 2006 : entrée en vigueur ;
Novembre 2006 : démarrage effectif des activités ;
Fin décembre 2009 : fin d'exécution initiale ;
Fin décembre 2011 : date de clôture après première prorogation ;
Fin juin 2013 : date de clôture après deuxième prorogation.

3. LA DECLINAISON DU PROJET

La Composante Nationale du Mali vise l'amélioration de la conformité de l'Administration de l'Aviation Civile et de l'aéroport International de Bamako-Sénou avec les règles de sécurité et de sûreté de l'OACI. Le Projet comprend trois (3) composantes :

3.1. Renforcement des capacités : Les actions de renforcement des capacités ont permis :

- La formation en sûreté de l'aviation civile de neuf (09) auditeurs-inspecteurs et de quatorze (14) instructeurs. Soixante (60) autres agents provenant des différents services du secteur du transport aérien (ANAC, Police, Gendarmerie, Douanes, ASECNA, Compagnies Aériennes, etc.) ont suivi différentes autres formations sur diverses mallettes pédagogiques normalisées en sûreté
- La formation en sécurité : globalement plus de vingt un (21) agents de l'ANAC et de la compagnie Air Mali ont suivi les formations en navigabilité, exploitation aérienne, licence du personnel navigant, certification d'aérodromes ainsi que la technique d'audit,

- La formation en informatique de plus de 50 agents de l'ANAC
- La formation de quatre négociateurs de situation de crises certifiés premier 1er et second niveaux renforcée par le cours de coordination à la négociation.
- La formation en anglais d'une vingtaine d'agents de l'ANAC dans un institut de langue à ACCRA (Ghana)
- La spécialisation du Point focal en passation de marchés publics.

3.2. Appui institutionnel : dans ce cadre, l'assistance a apportée à l'ANAC a porté sur:

- l'élaboration du code, qui a été approuvé par le Conseil des et promulgué en loi le 05 mai 20011 par le Président de la République du Mali, et de douze (12) textes d'application dudit code dans le domaine de la sécurité ont été adoptés par le en Conseil des Ministres
- la mise en œuvre des plans d'actions correctrices issus des derniers audits OACI de sécurité et de sûreté aériennes aboutissant à la rédaction de l'ensemble des manuels de l'inspecteur dans les différents domaines de la sécurité aérienne (la navigabilité des aéronefs, de l'exploitation du transport aérien technique des aéronefs, la certification des aérodromes la licence du personnel, les enquêtes sur les accidents et incidents d'aviation, le contrôle les services de la navigation aérienne et les aérodromes).
- Dans le domaine de la sûreté : l'élaboration du le programme national de la sûreté, du le programme national de contrôle de la qualité de la sûreté, du le programme national du fret, du le programme national de la formation en sûreté, du le plan d'urgence et des procédures d'exploitation normalisées pour l'aéroport de Bamako-Sénou ont été élaborés et adoptés par Décret présidentiel N° 2011 – 469/P-RM du 29 juillet 2011.
- La réalisation de l'Etude Organisationnelle de l'ANAC,
- l'audit de suivi en sûreté a été réalisé pour la détermination de la valeur de l'indicateur de performance -Taux de conformité avec les normes de sûreté de l'OACI,
- l'organisation et la tenue d'un exercice en vue de tester le plan d'urgence ;
- l'élaboration des Plans sectoriels de Crise des services d'appui à l'Equipe de Gestion de Crise.

3.3. Investissement à l'Amélioration des Normes de sécurité et de sûreté de l'Aéroport

Les investissements ont porté sur la réalisation des activités ci-après :

- l'acquisition de cinq (5) véhicules (deux pour les inspections, deux pour la patrouille de sûreté et un pour le Point Focal) ;
- la mise en place d'un réseau de communication VHF de sûreté ;
- l'acquisition et l'installation d'équipements de contrôle de sûreté : six machines à rayons X pour les bagages de cabine, soute et du fret ; quatre Portiques de détection d'objets métalliques ; trente (30) Détecteurs portatifs d'objets métalliques ; quinze (15) miroirs ;

- la fourniture et l'installation du réseau informatique de l'ANAC (25 micro – ordinateurs avec imprimantes et onduleurs chacun, 1 serveur et un router) ;
- l'acquisition et l'installation du système de portes et portails sécurités ; Construction CDOU et de deux postes de contrôle d'accès sur le périmètre aéroportuaire dans le cadre de laquelle, il est à souligner la participation financière de l'ANAC à hauteur de 200 millions de francs CFA et équipement du CDOU.
- la construction de la route de patrouille dans l'enceinte aéroportuaire sur 13,6km de distance.

3.4. Autres services assurés par le projet :

En dehors des dépenses et activités sus visées, le projet a assuré la maintenance et réparation des véhicules ainsi que l'achat des pièces de rechange comme les pneus, les batteries, etc.Le projet a également pris en charge la totalité du carburant nécessaire à la réalisation des inspections de sûreté et de sécurité de l'ANAC ainsi que des patrouille de sûreté aéroportuaire pendant toute sa durée (soit 5 années).

4. ACTIVITE NON REALISEES :

- La partie complémentaire de l'audit en sécurité aérienne : après signature du contrat le consultant IATA a décliné la réalisation de cette prestation en avril 2013.
- L'acquisition de kit de formation à la négociation : les dossiers de consultation a été transmis aux experts certifiés qui n'ont finalement pas transmis d'offres ;
- La réalisation du cloisonnement de la salle des services de renseignement du CDOU due à l'occupation de ce centre par les forces « SERVAL » au moment de la crise au nord du Mali.

5. POINT SUR LES DECAISSEMENTS

Le montant total des décaissements cumulés (intérêt compris) à la clôture du projet s'élève à **2 952 694 777 FCFA** (**6 025 908 USD, 3 979 373 DTS**) soit un taux de décaissement de **99,87%**. Le montant total remboursé s'élève à **3 701 240,00 FCFA (7 553,55 USD, 4 988,19 DTS).**

6. POINT SUR LES INDICATEURS DU PROJET :

Tous les indicateurs de performance ont été atteints dans leur intégralité.

7. GESTION DU PROJET DU PROJET :

Conformément à l'accord de crédit, le projet a été géré techniquement par le l'ANAC à travers le Point Focal tandis que la gestion des comptes financiers du projet ont été confié à l'Unité de Coordination du PST2.

Des missions de supervision de la banque mondiale, effectuées chaque six mois ont permis des recadrages pour l'atteinte des objectifs du projet.
Aussi, des rencontres de mise au point entre les coordinateurs et Point Focaux des différentes composantes des différents pays ayant en commun ce projet régional, ont été tenues dont la dernière en date remonte en novembre 2013. Les comptes rendus de ces rencontres ont tous été transmis au département pour information.

8. IMPACT DU PROJET

En termes de premiers impacts observés dans le cadre de la mise en œuvre du projet, on peut retenir :

- Une nette amélioration de la sécurité et la sûreté (taux de conformité variant respectivement de 28 à 74% - audit USOAP, et de 8 à 85% -audit systémique, confirmés par des audits indépendants.

On peut noter que cette performance en matière de sûreté acquise avec l'apport du projet se maintient et a permis d'atteindre des résultats très satisfaisant taux de conformité de 82%) lors de l'audit de sûreté de l'aviation civile réalisé par l'Union Monétaire Ouest Africaine (UEMOA) en novembre 2013 et cela bien que la méthodologie utilisée soit relativement plus contraignante que celui de l'UASAP de l'OACI car basée sur les critères de performance utilisant un classification binaire couplé à une pondération en fonction du poids de l'exigence (normes) sur le système global de sureté.

- Accroissement des capacités d'intervention des acteurs opérationnels dans les divers domaines techniques de sécurité et de sureté des aéroports du Mali ;
- Augmentation amorcée du trafic aérien de (2006-2013 – Source Aéroports du Mali :
  - passagers 06 %
  - Fret : 60%
  - poste : 68%
  - Mouvement Aéronef : 10% ;
- Amélioration de la desserte de l'aéroport de Bamako-Sénou par de nouvelles compagnies aériennes avec un taux de 42% ;
- Mise à disposition des auditeurs-inspecteurs sûreté certifiés au niveau de tous les services aéroportuaires pour de la réalisation de leur contrôle interne de sûreté;
- Mise à disposition d'une règlementation complète en matière de sécurité et de sûreté aériennes ;
- Réalisation d'une étude organisationnelle de l'ANAC l'ayant permis de s'adapter plus efficacement à son rôle de régulation et de supervision de la sécurité et de la sûreté aériennes ;
- Renforcement de capacité du personnel en gestion de projet et passation de marchés.

CONCLUSION :

Bien que des problèmes d'ordre administratif tels que les retards sur les délais de signature de certains contrats au niveau national et dans le cadre de la réalisation du volet génie civil consentis par l'AGETIPE ont été enregistrés durant sa réalisation, le projet a terminé sur une bonne note du bailleur de fonds (IDA) par la mention « Très satisfaisant ».

Aussi, le rapport d'achèvement du projet côté national, dont copie est en annexe, a été élaboré.

Bamako, le 20 juin 2014

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Société Internationale de Contrôle Aéroportuaire et de Services de Sûreté (SICASS) [International Airport Monitoring and Security Services Company] **– *November, 2014***

"One of the project objectives was to make the National Directorate for Civil Aviation [DNAC] an autonomous entity. Although the Guinean Civil Aviation Authority does have legal status, its structure has not yet been formalized. The implementing decree providing for the organization of its operations is being signed and will strengthen airport safety and security, as has happened in the case of the structural changes made in several countries in the subregion.

In the case of airport safety in Conakry, the establishment of an isolation point and the drafting of a crisis management plan have been very positive, as these activities help support the current emergency operations center (CDOU), which is still in need of equipment. Mechanisms are in place to handle a crisis and an exercise is planned to test their effectiveness. As far as I know, the security services have been provided with mobile devices and small equipment (radios and other equipment). An access way to the reserved zone has been built and should soon be operational. Several sentry boxes have been built along the enclosure, thus strengthening security. A number of training sessions have been held, which have led to a clear improvement in standards among all staff assigned to safety operations.

Mention should be made of the arrival of new airlines at the Conakry Airport such as Emirates Airline, Air Ivoire, Gambia Bird Airlines, Asky Airlines, and Mauritania Airlines. In addition, more frequent stops are being made by such airlines as Air France, Senegal Airlines, and SN Brussels. Turkish Airlines is also planning to start flights to Guinea.

These results plead for the improvement/strengthening of air safety in Conakry during the recent years, to which the World Bank project and Guinean civil aviation authorities have contributed."

Regional Coordination COSCAP – UEMOA Project – August 2014

"We have noted, based on our participation in Steering Committee meetings and reviews done with the World Bank, that the program has allowed States to conduct safety and security activities involving capacity building, specific equipment, and infrastructure establishment. Traffic has also increased, except during crisis periods."

Annex 9. List of Supporting Documents

1. Aide Mémoires: Implementation Supervision Mission, WCAATSSP, dated 2006-2014

2. Legal Documents related to the Project, Financing Agreement, and Legal Opinion

3. Project's restructuring papers

4. Complete copies of ISRs 1 to 19

5. ICAO Audit Report "Summary Report on the Audit Trail of the Safety Oversight of the National Leadership of the Civil Aeronautics of Mali", dated June 2003

6. ICAO Security Audit, Burkina Faso, dated April 9, 2008

7. ICAO-USOAP Audit and Finding Report on Safety Concerns, Mali, dated January 2008

8. ICAO - Status of Implementation of the ICAO Plans of Action for States under the review of MARB including priority States - Montreal, Canada, 24 October 2014

9. Mission Report of the Audit Trail, Burkina Faso, dated March 2009

10. Challenges and Opportunities in West Africa Aviation Market - Potential for Enhanced Air Services and Connectivity – IFC – September, 2013

11. Countries' ICRs (Burkina Faso, Cameroon, Mali)

12. Aviation: benefits beyond borders – Air Transport Action Group (ATAG) – 2014

13. Economic Effects of Air Transport Liberalization in Africa, Megersa A. Abate (Ph.D), Swedish National Road and Transport Research Institute, October, 2013

14. African Airlines Association (AFRAA) – Annual General Assembly, report of the Secretary General – November, 2013

15. Africa's Aviation Industry: Challenges and Opportunities – African Development Bank – November, 2012

16. World Travel & Tourism Council – Travel & Tourism, Economic Impact, 2014 – Burkina Faso

17. World Travel & Tourism Council – Travel & Tourism, Economic Impact, 2014 – Cameroon

18. World Travel & Tourism Council – Travel & Tourism, Economic Impact, 2014 – Guinea

19. World Travel & Tourism Council – Travel & Tourism, Economic Impact, 2014 – Mali

20. World Travel & Tourism Council – Travel & Tourism, Economic Impact, 2014 – Africa

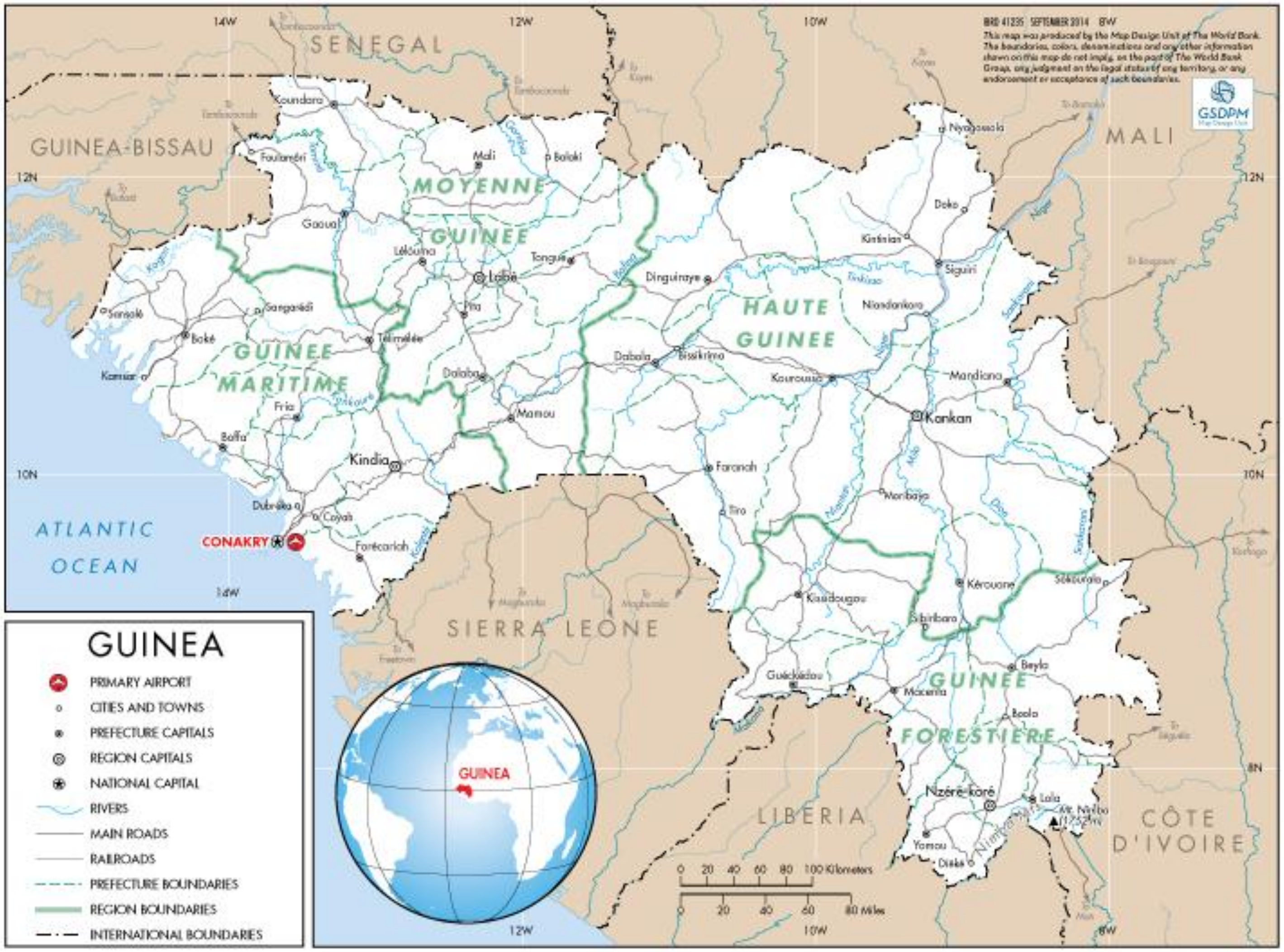
21. African Development Bank- West Africa Monitor Quaterly- Issue #2, April 2014

22. African Development Fund- Capacity Building Programme For The Supervision of Aviation Safety In West And Central Africa (COSCAP Programme) – Project Completion Report (PCR)- OITC Department- February 2014

MAP 1: BURKINA FASO

MAP 2: CAMEROON

MAP 3: GUINEA



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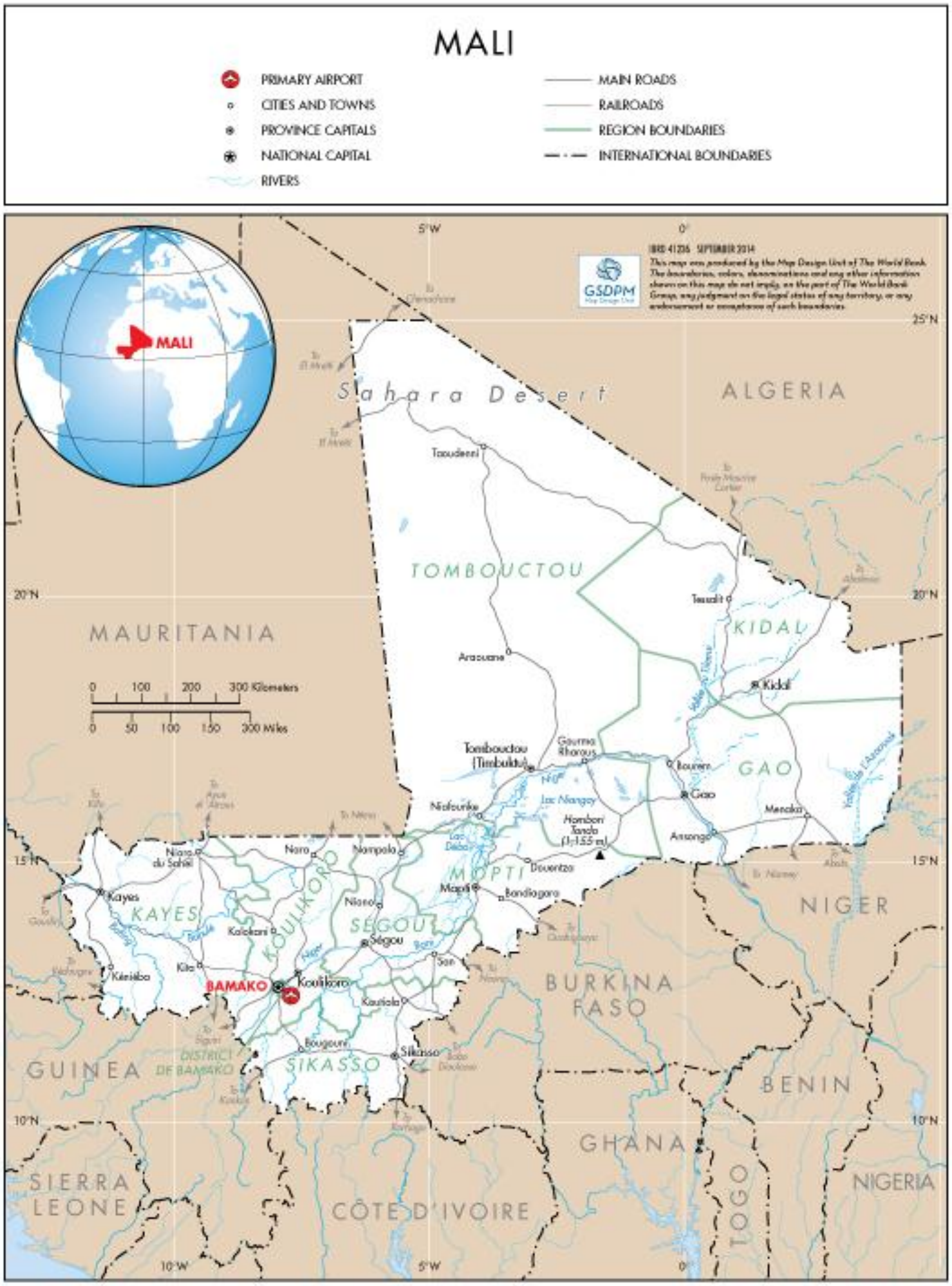
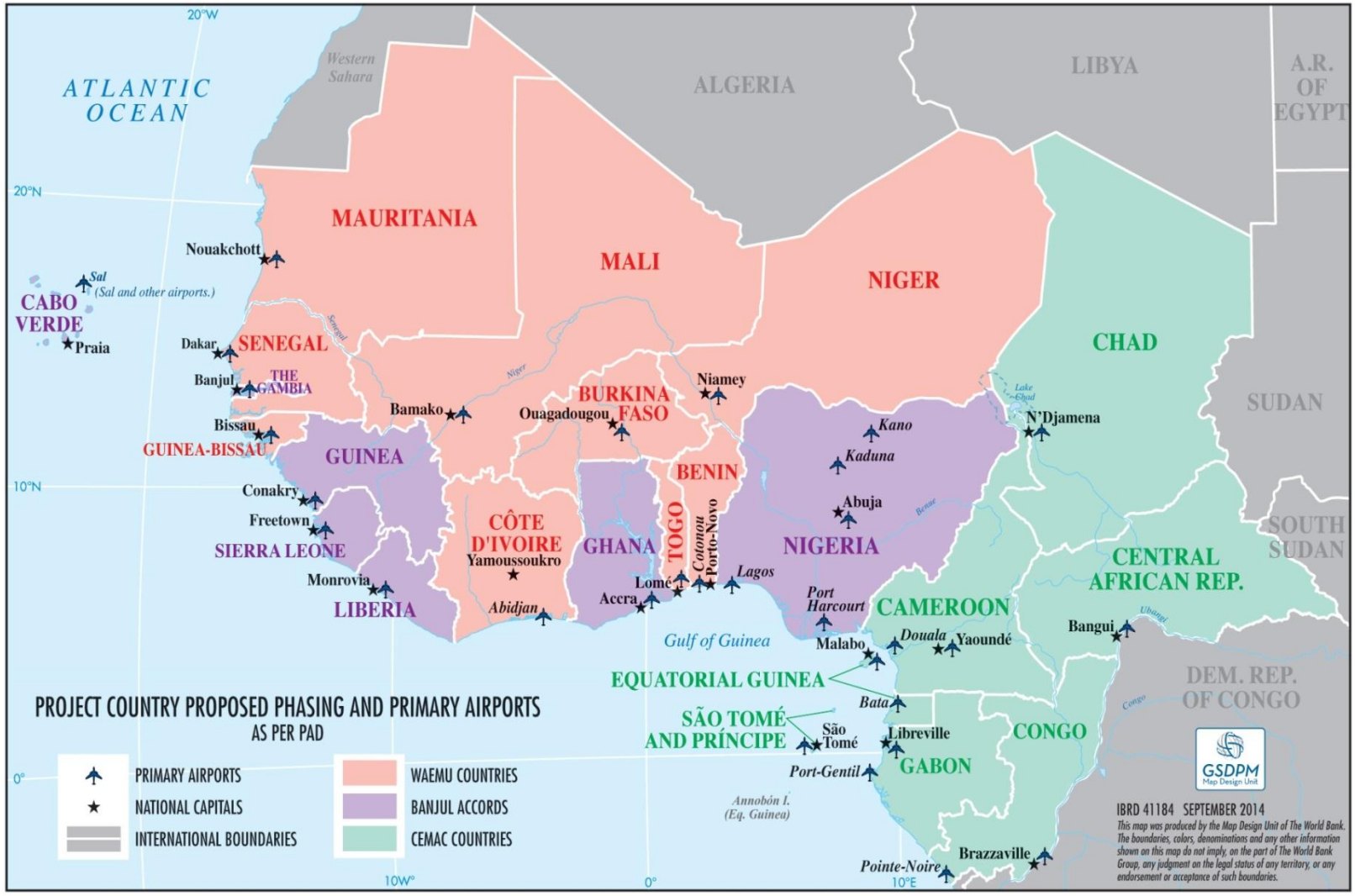
GSDPM
SENEGAL
GUINEA-BISSAU
MALI
SIERRA LEONE
LIBERIA
CÔTE D'IVOIRE
ATLANTIC OCEAN
MOYENNE GUINEE
HAUTE GUINEE
GUINEE MARITIME
GUINEE FORESTIERE
CONAKRY
Koundara
Foulamôri
Mali
Balaki
Gaoual
Lélouma
Labé
Tongué
Dinguiraye
Nyagassola
Doko
Kintinian
Siguiri
Niandankoro
Sangarédi
Sansalé
Boké
Télimélé
Pita
Dabola
Bissikrima
Kouroussa
Mandiana
Kamsar
Dalaba
Fria
Mamou
Kankan
Boffa
Kindia
Faranah
Moribaya
Dubréka
Coyah
Tiro
Forécariah
Kérouané
Kissidougou
Sibiribaro
Beyla
Guéckédou
Macenta
Boola
Nzérékoré
Lola
Yomou
Diéké
Mt. Nimba (1752 m)
14W
12W
10W
8W
12N
10N
8N
0 20 40 60 80 100 Kilometers
0 20 40 60 80 Miles
GUINEA
PRIMARY AIRPORT
CITIES AND TOWNS
PREFECTURE CAPITALS
REGION CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
PREFECTURE BOUNDARIES
REGION BOUNDARIES
INTERNATIONAL BOUNDARIES

MAP 4: MALI



MALI
PRIMARY AIRPORT
CITIES AND TOWNS
PROVINCE CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
REGION BOUNDARIES
INTERNATIONAL BOUNDARIES
MALI
GSDPM
Sahara Desert
ALGERIA
MAURITANIA
TOMBOUCTOU
KIDAL
GAO
MOPTI
SEGOU
KOULIKORO
KAYES
SIKASSO
DISTRICT DE BAMAKO
NIGER
BURKINA FASO
GUINEA
BENIN
GHANA
TOGO
NIGERIA
SIERRA LEONE
CÔTE D'IVOIRE
0 100 200 300 Kilometers
0 50 100 150 200 Miles
Taoudenni
Araouane
Tessalit
Kidal
Tombouctou (Timbuktu)
Gourma Rharous
Bourem
Gao
Menaka
Ansongo
Niafounke
Hombori Tondo (1,155 m)
Douentza
Mopti
Bandiagara
Nara
Nampala
Nioro du Sahel
Kayes
Niono
Kolokani
Ségou
San
Kita
Kéniéba
BAMAKO
Koulikoro
Koutiala
Bougouni
Sikasso
Lac Debo
Niger
Bani
5°W
0°
25°N
20°N
15°N
10°N
10°W

MAP 5: PROJECT COUNTRY PROPOSED PHASING AND PRIMARY AIRPORTS



MAP 6: MAP AS PER EXECUTION