

Language : ENGLISH
Original : FRENCH



AFRICAN DEVELOPMENT BANK GROUP

PROJECT : Third Airport Project
COUNTRY : Kingdom of Morocco

APPRAISAL REPORT

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Currency Equivalents

[Date: November 2008]

UA 1	=	EUR 1.16665
UA 1	=	MAD 12.2964

Fiscal Year

1 January to 31 December

Weight and Measures

1 metric tonne	=	2204 pounds
1 kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet
1 millimetre (mm)	=	0.03937 inch
1 kilometre (Km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

Acronyms and Abbreviations

ADB	=	African Development Bank
ADM	=	Autoroutes du Maroc (National Motorways Corporation)
BD	=	Bidding Documents
DAC	=	Department of Civil Aviation
DPE	=	Provincial Equipment Directorate
DRE	=	Regional Equipment Directorate
DTR	=	Department of Road Transport
EIB	=	European Investment Bank
ERR	=	Economic Rate of Return
ESMP	=	Environmental and Social Management Plan
EU	=	European Union
EUR	=	European Currency Unit (Euro)
FRR	=	Financial Rate of Return
GDP	=	Gross Domestic Product
HQE	=	High Environmental Quality
IGF	=	General Inspectorate of Finance
JBIC	=	Japan Bank for International Cooperation
MAD	=	Moroccan Dirham
MET	=	Ministry of Equipment and Transports
NHDI	=	National Human Development Index
NPV	=	Net Present Value
ONDA	=	National Airports Authority
PDES	=	National Economic and Social Development Plan
PRST	=	Transport Sector Reform Programme
PST	=	Transport Sector Programme
RAM	=	Royale Air Maroc
RBCSP	=	Result-Based Country Strategy Paper
SNAT	=	National Land Use Management Plan
STEP	=	Treatment and Purification Station
UA	=	ADB Unit of Account

Project Information Sheet

Client information

BORROWER	:	National Airports Authority (“Office National Des Aéroports”) (ONDA)
EXECUTING AGENCY	:	National Airports Authority (“Office National Des Aéroports”) (ONDA)

Financing Plan

Source	Amount (EUR Million)	Instrument
ADB	240	Project loan
ONDA	80.12	Self-financing
TOTAL COST	320.12	

ADB Key Financial Information

Loan Currency	EUR
Type of interest*	Floating
Interest rate margin*	40 basis points + margin on the Bank’s variable cost
Commitment fee*	0%
Other charges*	(type, basis point)
Maturity	(months)
Grace period	(60 months)
FRR, NPV (baseline scenario)	FRR = 12.3%, NPV = MAD 0.495 billion
EIRR (baseline scenario)	21.8% NPV = MAD 2.109 billion

Term 4 years, key stages (expected)

Negotiation of loan agreement	(March 2009)
Loan approval	(April 2009)
Effectiveness	(June 2009)
Project completion	(December 2013)
Start of repayment	(March 2014)

Executive Summary

1. Overview

1.1 The 3rd airport project of Morocco is an important part of the investment programme of the National Airports Authority (ONDA) for the 2008-2012 period. The programme stems from ONDA's 2008-2012 strategic plan, and its cost was reduced in 2008 to MAD 4.684 billion as a result of the negative impacts of the global financial downturn on air transport demand. In terms of cost, the project constitutes 72% of the entire programme, and its implementation will cover a 5-year period (2009-2013). The resources required for implementing the remaining portion of the overall programme (MAD 1.311 billion) will be mobilized from financial partners as from 2011.

1.2 This project mainly concerns the airports of Casablanca, Fez, Agadir, Marrakech and Rabat, which handle the bulk of air traffic to and from Morocco. In 2007, the project airports handled 91% of total passenger traffic, comprising about 12 million persons. Beyond the geographic area covered by these major development poles of the country, the project area covers the entire country, particularly as a result of a new air navigational system that will cover the entire Moroccan air space. With the project area thus defined, the main beneficiaries of the project will be the air transport industry, the tourist and handicraft industry, and communities around the said airports for direct and induced employment.

1.3 The project components concern: (i) extension and rehabilitation of terminal areas of airports concerned, including their installations, (ii) construction of infrastructure for these areas (lighting, aircraft parking areas, car parks, runway slip and access roads, etc.) and construction and installation works of the 2nd Regional Control Centre (RCC) in Agadir; (iii) supply and installation of various security and safety equipment and air navigation aid equipment in the various airports; and (iv) establishment of photovoltaic micro-power stations and an integrated wind farm to supply electricity in the various air terminals. The estimated cost of the project, excluding taxes, is MAD 3,373.06 million (€20.03 million) 75% of which will be covered by an ADB loan amounting to €239.91 million. The main expected outputs are: (i) a substantial increase in the country's airport facilities with increased improvement in air navigation safety and security in the country's entire air space; (ii) certification of all the country's airports; (iii) creation of many and diverse paying jobs, particularly in the tourist and handicraft sector; and (iv) enhanced competitiveness of Moroccan tourism services.

2. Needs Assessment

The investment needs of this project stem from the significant and rapid increase of the various categories of traffic, leading to saturation of the operational capacities of the airports concerned. Indeed, the growth rates between 2004 and 2007 by category of traffic are as follows: passengers 17%; movement 10%; cargo 7% and overflight 14%. On the basis of average estimates, passenger traffic is expected to increase to 15 million travellers by 2010 as against 7 million in 2004. This upsurge in passenger traffic requires an adaptation of infrastructures and equipment to meet demand, and enable the major airports concerned to provide quality service in compliance with international standards. Special attention is given to Casablanca Airport, which is expected to become the leading international hub between Europe and West Africa by 2012, given its current share of 70% of hub-type of international traffic. Within this context, the ONDA has already embarked on extension works for this

airport and that of Oujda. Furthermore, with the downward review of traffic forecasts due to the impact of the current international financial crisis, the works for the 3rd take-off runway in Casablanca have been postponed to 2015.

3. Added Value for the Bank and Knowledge Management

In view of its past operations that were deemed efficient and relevant in the rehabilitation and extension of operational capacities and institutional reforms (Cf. ADB/BD/IF/2005/294 and PCR of the transport sector reform programme, November 2007), the Bank has become a strategic partner in the air sub-sector. The present project is a continuation of the previous operations, and the relevant experience acquired in their management will be useful in the implementation. Specifically, for the knowledge management in the aviation sector, the Controllers and Electronic Engineers Training Institute initially financed by the Bank will help to train and improve the knowledge of the experts concerned. Furthermore, the proposed project is an opportunity for the Bank to enhance its cooperation with other partners, in particular the European Investment Bank (EIB) which intends to finance part of the remaining ONDA overall programme. Initial discussions with the EIB on the programme indicates that its intervention as well as that of the Bank are complementary, and will contribute to achieving the major objectives set in the sub-sector for the medium and long terms.

Result-based Logical Framework

<u>HIERARCHY OF OBJECTIVES</u>	<u>EXPECTED OUTCOMES</u>	<u>SCOPE</u>	<u>PERFORMANCE INDICATORS</u>	<u>INDICATIVE TARGETS AND SCHEDULE</u>	<u>ASSUMPTIONS/ RISKS</u>
<p>Goal (overall goal to which the project should contribute)</p> <p>Improve the competitiveness of air transport so as to provide efficient and quality services in compliance with international standards</p>	<p>Impact (long-term outcomes)</p> <p>Airport infrastructures and installations are upgraded, and meet international standards</p> <p>The quality and efficiency of air services improve in accordance with international standards.</p> <p>The Moroccan sky is completely covered by the air control service, and becomes a continuum of the European space</p> <p>Many new jobs are created in ONDA, the tourism sector, handicraft and trade</p>	<p>Beneficiaries (populations that benefit directly or indirectly)</p> <p>Moroccan population, airport users, airlines, ONDA and tourism and handicraft industries</p>	<p>Impact Indicators (source: users' committee, DR ONDA)</p> <p>Results of airport users' satisfaction surveys, and aircraft traffic and movement.</p> <p>Level of integrated certification of the airports according to Quality, Safety and Environment (QSE) management</p> <p>Status of fulfilment of convergence commitments as stipulated in "open sky" and "single sky" agreements</p> <p>Number of jobs generated</p>	<p>Expected long-term progress</p> <p>Users satisfied with the quality and efficiency of air transport</p> <p>Casa airport has become an international hub between Africa/Europe/America and Middle East, and receives 15 million tourists in 2020</p> <p>All the airports are certified according to Quality, Safety and Environment (QSE) management</p> <p>All the convergence commitments stipulated in the "open sky" and "single sky" agreements are met</p> <p>+626 new jobs in ONDA of whom 138 are women and +30,000 new jobs created in tourism and handicraft sectors, 22% of which are for women</p>	<p>Assumptions</p> <p>Pursuance of the transport market liberalization policy, increase in private investments</p> <p>Risks</p> <p>Slowdown in air market liberalization policy as a result of the international financial downturn</p> <p>Mitigation measures</p> <p>Regulatory measures taken by the Government</p>

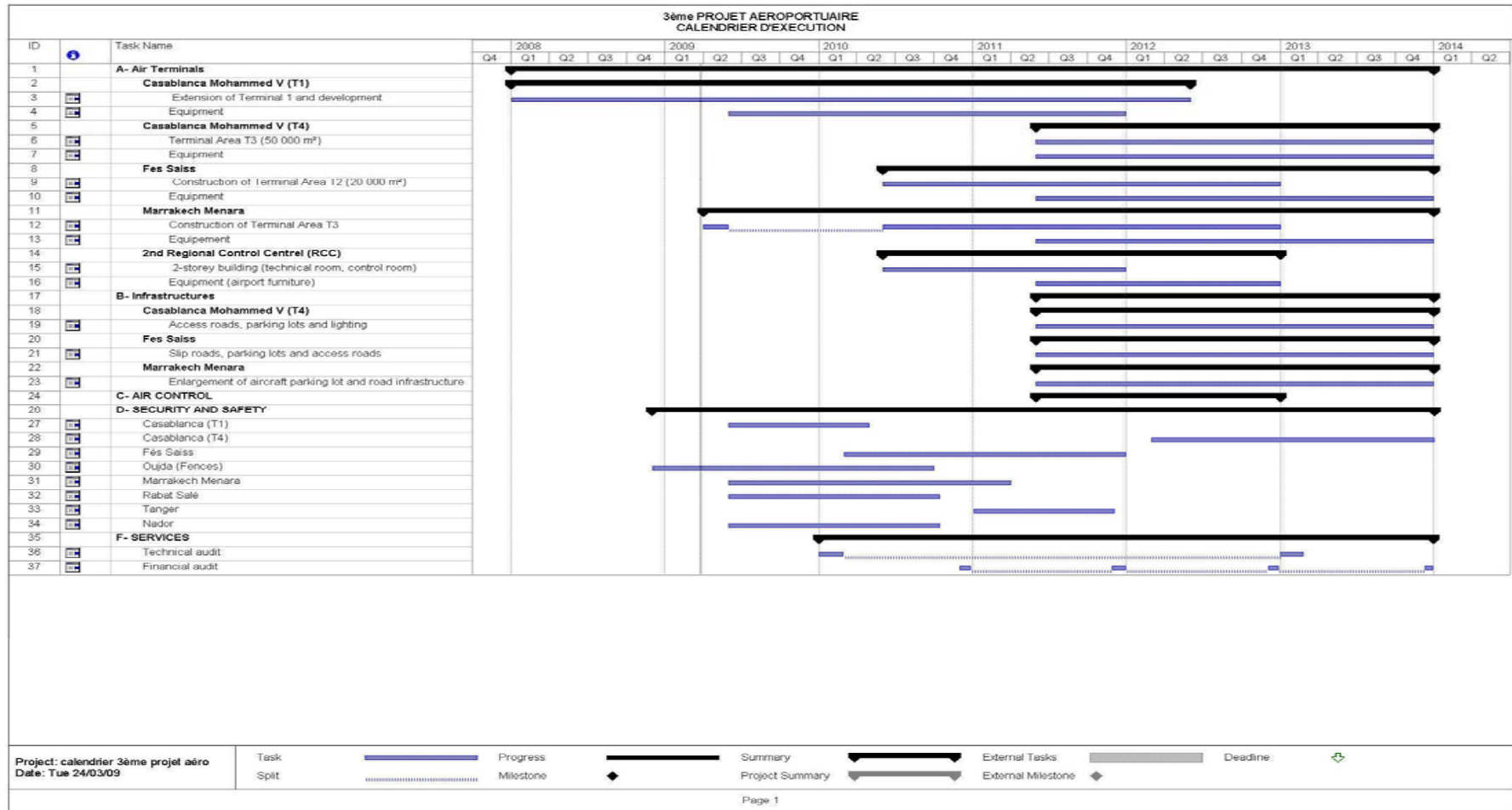
<u>HIERARCHY OF OBJECTIVES</u>	<u>EXPECTED OUTCOMES</u>	<u>SCOPE</u>	<u>PERFORMANCE INDICATORS</u>	<u>INDICATIVE TARGETS AND SCHEDULE</u>	<u>ASSUMPTIONS/ RISKS</u>
<p>Project Objective (<i>Changes sought or expected from project implementation</i>)</p> <p>Increase airport operational capacities by upgrading infrastructures, expanding the air navigation system, and reinforcing ground security installations</p>	<p>Effects (<i>medium-term outcomes</i>)</p> <p>The developed Terminal Areas (ZT) and related facilities are upgraded and operated.</p> <p>2nd RCC constructed, equipped and operated to deconcentrate the air control service of the national space</p> <p>The airport platforms of Casa, Fes, Oujda, Marrakech, Tangier and Nador are made more secured</p> <p>Photovoltaic micro power stations with a total capacity of 224.30 KWh and a 30 million KWh wind farm integrated to the national electric grid operated.</p>	<p>Beneficiaries</p> <p>Airport users Airlines, ONDA and tourism and handicraft industries</p>	<p>Impact Indicators (<i>source: DR ONDA</i>)</p> <p>Increase in capacity of air terminals and related facilities to absorb peak demand (11km²/million pass./yr)</p> <p>Guarantee of continuity of air control service in the national air space (management of aircraft crossing the Moroccan information zone). Reduced number of diversionary landing and aircraft incidents</p> <p>Certification of airport platforms according to AVSEC standards of ICAO and ECAC</p> <p>Replacement rate of part of electricity consumption of ONDA by renewable energy</p>	<p>Expected medium-term progress and schedule</p> <p>The static capacity of available air terminals of 1.8 million pass./yr in 2012 in Fes and 9 million pass./yr in Casa (4.55 million pass./yr) and 4.55 million pass./yr in Marrakech, which gives total availability of 10.9 million pass./yr</p> <p>Continuity of air navigation ensured and fully guaranteed in the national space in the event of natural disaster or illegal acts</p> <p>Abolition of diversionary landing and reduced change over time from 40 to 20mn at major airports</p> <p>Airport platforms in Casa, Fez, Oujda, Marrakech, Tangiers and Nador are certified in conformity with AVSEC¹ standards of ICAO and ECAC²</p> <p>Installation of production capacity of 224.3 KWh and 30 million KWh of renewable energy</p>	<p>Assumptions/Risks</p> <p><i>Assumptions</i> Implementation of ONDA 2008-2012 strategic plan</p> <p><i>Risks</i> Air traffic projections on which the financing plan is based are not achieved</p> <p><i>Mitigation measures</i> The ONDA has already revised its projections downwards and plans to adjust the remaining actions of the investment programme accordingly.</p>

¹ AVSEC : Aviation Security

² ECAC : European Civil Aviation Conference

<u>HIERARCHY OF OBJECTIVES</u>	<u>EXPECTED OUTCOMES</u>	<u>SCOPE</u>	<u>PERFORMANCE INDICATORS</u>	<u>INDICATIVE TARGETS AND SCHEDULE</u>	<u>ASSUMPTIONS/ RISKS</u>
<p>Inputs and activities</p> <p>A. Buildings/Equipment (€223.73 million) Rehabilitation and/or extension works and equipment of 3 terminal areas (ZT) including building of the 2nd Regional Control Centre (RCC) in Casa, Fez, Marrakech and Agadir</p> <p>B. Related Infrastructures (€35.07 million) Works relating to lighting system, broadening of slip roads, aircraft parking areas, and access roads; lighting and vehicle parking areas.</p> <p>C. Air control (€1.70 million) Procurement and installation of air control equipment (data processing systems radar and flight plan and simulator, AFTN and D-volnet system, etc.) for the building of the 2nd RCC constructed in Agadir</p> <p>D. Security and safety (€7.90 million) Procurement and installation of security and safety equipment (anti-intrusion fences, x-ray and related security gates, detectors of traces of explosives, video surveillance and access control)</p> <p>E. Environment (€0.37 million) Procurement and installation</p> <ul style="list-style-type: none"> • photovoltaic micro power stations in Casa, Oujda, Marrakech, Tangiers and Rabat • a wind farm in Essaouira connected to the national electricity grid; and <p>Establishment of a management planning system of sound nuisance and measurement of the quality of air.</p> <p>F. Services (€2.27 million) Management and monitoring of all project activities, consultant assistance mission (inspection and supervision of works, geotechnical control, acceptance and installation of various equipment, technical and financial audit, audit of project accounts), mid-term review and completion of project</p>	<p>Outputs (<i>short term results</i>)</p> <p>3 ZTs rehabilitated and/or constructed and equipped for greater reception capacity</p> <p>Upgrading of related airport facilities in Casa, Fez and Marrakech</p> <p>2nd Regional Control Centre equipped</p> <p>Security and safety equipment installed in the airport platforms and accesses of Casa, Fez, Oujda, Marrakech, Tangiers, and Nador</p> <p>Installation of 224.30 KWh photovoltaic micro power stations and putting in place of 30 million KWh wind farm connected to the national electric grid to ensure sustainable development of airport operations.</p> <p>Management and monitoring of project activities, including all consultant assistance missions and mid-term reviews</p>	<p>Beneficiaries</p> <p>ONDA, companies, suppliers, consulting firms and riparian populations of the airports.</p>	<p>Output Indicators</p> <p>Area of ZTs rehabilitated and/or constructed</p> <p>Upgrading of related facilities for reception of Airbus A380 Code F aircraft</p> <p>Availability of the 2nd Regional Control Centre covering the entire national space</p> <p>Providing airport platforms with security and safety equipment</p> <p>Installation of renewable energy production facilities</p> <p>Physical and financial status of the project <i>Sources (supervision reports, project account audits, project technical and financial audits, mid-term and completion reports)</i></p>	<p>Expected progress and short-term schedule</p> <p>20 Km² of ZT capacity in 2012 and 100 km² of ZT capacity of 9 million pass/yr in Casa and Marrakech in 2013</p> <p>Related facilities of terminals of Casa, Fez and Marrakech upgraded in 2013 to receive Airbus A380 Code F aircraft</p> <p>2nd Regional Control Centre constructed in Agadir to ensure continuity of air control service in the national space</p> <p>Installation of security and safety facilities in the airports of Casa (T1) and Oujda in 2010, Nador in 2012, Casa (T4), Fez, Marrakech and Tangiers in 2013</p> <p>224.30 KWh photovoltaic micro power stations installed and 30 million KWh wind farm connected to the national electric grid in 2012</p> <p>Management planning system for sound nuisance and measurement of the quality of air established in 2010.</p> <p>60% progress rate of project at end 2011 and 10% in 2013</p>	<p>Assumptions</p> <p><i>Assumptions</i> Good coordination of works and procurement of equipment</p> <p><i>Risks</i> Poor coordination of works implementation and procurement of various equipment to be installed could cause delays in project completion;</p> <p><i>Mitigation measures</i> Measures have been taken to avoid significant slippages in project activities, particularly the appointment of a project coordinator responsible for monitoring all the activities, preparation, preparation of a detailed procurement plan to be updated each year during mid-term review to adjust project implementation</p>

Project Implementation Schedule



**REPORT AND RECOMMENDATION OF ADB GROUP MANAGEMENT TO THE BOARD OF DIRECTORS
ON A PROPOSED LOAN TO THE KINGDOM OF MOROCCO TO FINANCE THE THIRD AIRPORT
PROJECT**

Management is submitting the present report and its recommendations on a loan proposal of EUR 240 million to the National Airports Authority (*Office National des Aéroports*) (ONDA) for the financing of the Third Airport Project of Morocco.

I. Strategic Orientation and Justification

1.1 Project Linkages with Country Strategy and Objectives

1.1.1 The project falls within the implementation of the general framework of the National Development Plan (NDP) initiated in 2002 by the Government and based on the following areas of focus: (i) consolidation of the rule of law and improvement of the efficiency of the Moroccan Administration; (ii) opening up of the domestic market to competition; (iii) strengthening and modernization of transport networks; (iv) upgrading of the national economic fabric and private sector support; and (v) fight against poverty and social disparities. With regard to (iii), as a result of various transport infrastructure projects accompanied by judicious reforms carried out in 2003-2007, Morocco has succeeded in enhancing the competitiveness of its economy, and thereby accelerated the socioeconomic development process. However, economic growth for the 2008-2012 period requires various kinds of transport infrastructure that have not yet been constructed. Within this new context, the Ministry of Equipment and Transport (MET), which has supervisory authority over the ONDA, has redefined its action strategy for the period, highlighting three priority areas, namely: (a) confirmation of the implementation of the major projects; (b) logistical competitiveness; and (c) mobility and sustainable transport.

1.1.2 The strategic plan adopted by ONDA for the 2008-2012 period stems from this new action strategy and is based on 3 major structuring projects, namely: (a) integration into the European space (“open sky” agreement) for air transport and navigation; and Morocco’s adherence to the Galileo satellite programme; (b) development of the Casablanca airport platform as an international hub linking Africa to Europe, and America to the Middle East; and (c) the integrated certification of major airports (Casablanca, Rabat, Marrakech, Fez, Agadir, Oujda and Tangiers) in terms of Quality, Security, Environment (QSE) management.

1.1.3 The design of the present project draws on the orientations of the ONDA strategic plan, and represents a key portion of the investment programme for the period. To take into account the impacts of the current international financial crisis, the total investment has been reviewed downwards to MAD 4.684 billion to be disbursed in two tranches, the first of which is the subject of the present project of an estimated cost of MAD 3.373 billion (72%) financed by the Bank and the ONDA. The 2nd tranche will concern the second loan by 2011 to be negotiated with another financial partner. The present project is in keeping with Pillar 2 of the Country Strategy Paper (CSP) 2007-2011 for Morocco approved in April 2007, which identified development and upgrading of infrastructures as the Bank’s intervention area. Indeed, by focusing on this pillar, one of the strategic objectives of the Bank’s assistance is to strengthen the competitiveness of Morocco’s economy through the extension and upgrading of infrastructures. The present project

is included in the 2007-2011 CSP; its implementation will contribute to improving the competitiveness of air transport under the “open sky” and “single sky” agreements signed with EU, and thereby consolidate Morocco’s position on the international tourism market.

1.2. Justification for Bank Involvement

1.2.1 The justification for the proposed project is mainly based on the strong growth of air traffic observed in recent years, and on the trend analyses indicating that this favourable development would continue over several years. Indeed, the rates recorded between 2004 and 2007 by category of traffic are as follows: passengers 17%; movements 10%; freight 7% and overflights 14%. According to current projections that take into account the impacts of the current financial downturn, passenger traffic should grow to about 15 million persons by 2015. To address this major and rapid growth in air transport demand, it has become indispensable to expand the infrastructures and equipment of the country’s major airports.

1.2.2 The Bank’s involvement in the financing of the project responds primarily to the need to consolidate the achievements of the 3 previous operations carried out in the sub-sector involving the Bank’s financing, namely: (i) the airport rehabilitation project; (ii) the airport capacities improvement and expansion project; and (iii) the transport sector reform programme, a portion of which has been devoted to this sub-sector. These three operations have been completed. An evaluation of the Bank’s assistance in the transport sector indicates that these operations were consistent and relevant, and met the country’s challenges and sector objectives. Indeed, these operations have positively impacted on the quality of air transport service, namely: (i) improvement of the operational and technical performance of ONDA with guaranteed safety of overflights in the Moroccan air space, and comprehensive and omnipresent technical assistance on the ground; (ii) autonomy in the training provided by the Mohamed V Academy for Civil Aviation which has become a reference for the sub-region by exporting its air control, air safety electronic and meteorological expertise; (iii) the liberalization of the air sub-sector has resulted in a substantial reduction in transport costs with the entry into the Moroccan sky of 40 new foreign airlines partly made up of airlines providing fares and services at lower costs (50% reduction of handling costs) and the increase in international traffic with nearly 1000 flights/week in 2007 as against 500 flights/week at end 2003.

1.2.3 The Bank’s intervention in this project will, in particular, enable Morocco to improve its airport resources and installations in conformity with international standards as regards air transport capacity, safety and security to meet traffic demand and satisfy all the convergence commitments stipulated in the “Open Sky” and “Single Sky” Agreements signed with the EU relating to the liberalization of the air transport market and the integration of the domestic air space with that of the EU respectively. Thus, Morocco will place itself in a vantage position on the increasingly competitive international air transport market that is highly demanding in safety/security and environmental matters.

1.3. Aid Coordination

1.3.1 Several donors are involved in the Moroccan transport sector, providing loans or grants. These are the ADB, IBRD, EIB, EU, AFD, JBIC-JICA, IsDB, AFESD and the Kuwaiti Fund. The contributions of these various organizations in recent years are given in Table 1.1 below. On the whole, aid in Morocco is coordinated through a consultative mechanism with periodic

meetings between MAFO and development partners represented in the country. Where necessary, specific meetings between partners are also organized, and such meetings offer the opportunity for the Bank to coordinate its interventions with those of other institutions operating in the Moroccan transport sector.

Table 1.1

Year	Contribution by Donor (UA Million*)								
	ADB	IBRD	EIB	EU	AFD	JICA	IsDB	AFESD	Kuwaiti Fund
2001/2002	54.50	-	-	-	-	140.04	-	28.83	-
2003	-	-	-	79.92	-	-	-	-	-
2004	-	25.09	-	-	62.77	-	-	-	-
2005	-	-	108.68	-	-	-	-	-	-
2006	101.92	40.78	-	-	-	106.25	70.94	80.55	76.16
2007	40.24	-	154.35	-	-	47.33	82.10	7232	-
2008	-	-	89.59	-	-	-	-	50.13	-

* Exchange rate on approval date

1.3.2 In the specific case of the ONDA 2008-2012 investment programme of which the present project is an integral part, the ADB, EIB and local banks have been consulted by the Government. During the project preparation and appraisal missions, meetings were held between the Bank and the EIB in which emphasis was laid on the justification for the project, as well as the need to support the ONDA to implement the project according to the indicative schedule for pursuing the implementation of the overall programme up to 2015. Emphasis was also placed on the need to strengthen the coordination of financing to be put in place through the existing mechanism that proved its worth in the previous interventions in the transport sector in general, and in the air sub-sector, in particular.

II. Project Description

2.1 Project Components

2.1.1 The estimated cost of the revised investment programme of MAD 4.684 billion covers the following major components:

- (a) Air Navigation: Automation of air control and construction of a second Regional Control Centre (RCC);
- (b) Mohammed V Airport: Rehabilitation of Terminal 1, extension of Terminal 2, aeronautical infrastructure, cargo platform, construction of a third take-off strip and Terminal 4;
- (c) Marrakech Airport: Development of terminal installations and related facilities (Terminal T3);
- (d) Rabat Airport: Extension of Terminal 1 and equipment, expansion and reinforcement of movement areas, new terminal zone T3;

- (e) Oujda Airport: New terminal and equipment, service area, new take-off strip;
- (f) Essaouira Airport: Extension and reinforcement of aeronautical infrastructure;
- (g) Fez Airport: Extension of terminal installations;
- (h) Other Airports: Extension of installations, extension of air terminals, aeronautical infrastructure, etc;
- (i) Other Projects: Airport management system, security and safety programme, upgrading of facilities, computerization of ONDA services, strengthening of training system, etc.

2.1.2 At the sectoral level, this project aims at improving the competitiveness of air transport through delivery of efficient and high quality services in accordance with international standards. Specifically, the objective of the project is to increase airport operational capacities by upgrading the infrastructures, extending the air navigation system, and reinforcing ground security installations. The components and costs of this project are summarized in Table 2.1 below:

Table 2.1
Project Components

No.	Components	Estimated Cost (€million)	Description of Components
A	Air Terminals +		
A1	Buildings and	166.80	<ul style="list-style-type: none"> ▪ Works on the extension or rehabilitation and equipment of terminal areas in Casablanca Mohamed 5th (T4-50,000 m²), Fez Saiss (T2-20,000 m²), Marrakech (T3-50,000 m²) and the 2nd Regional Control Centre (RCC) within the Agadir airport
A2	Equipment	56.93	<ul style="list-style-type: none"> ▪ Equipment of developed terminal areas, including T1 Terminal in Casablanca Med V and 2nd RCC (airport furniture)
B	Infrastructures	35.07	<ul style="list-style-type: none"> ▪ Extension works on aircraft parking areas, lighting system, slip roads, access roads and car parks, including lighting in the above developed terminal areas
C	Air Control	21.70	<ul style="list-style-type: none"> ▪ Supply and installation of air navigational aid equipment for the 2nd RCC
D	Security and safety	27.90	<ul style="list-style-type: none"> ▪ Supply and installation of security and safety equipment for the different terminals (T1 and T4 at Casa Mohamed V, Fez Saiss, Agadir Al Massira, Marrakech Menara, Rabat Sale, Tangiers Ibn Batouta, Essaouira, Mogador, Ouarzazate and Nador El Araoui)
E	Environment	9.37	<ul style="list-style-type: none"> ▪ Installation of 224.30 KW photovoltaic micro power stations in the terminals and a 30 million KW wind farm in Essaouira connected to the ONE grid ▪ Installation of a noise management system, including measurement of the air quality in airports
F	Service	2.27	<ul style="list-style-type: none"> ▪ Supervision and management of project activities, notably control and supervision of works, including geotechnical control of the said works, acceptance and installation of equipment, as well as technical and financial audit, and auditing of project accounts.
Total		320.03	

2.2 Technical Options Selected and Other Alternatives Explored

The following technical options have been selected:

Air Terminals: The sizes of the buildings are based on the passenger traffic that would be handled at arrival and departure (11,000 m²/million passenger/year). The construction standards adopted take into account the nature of the ground, the dominant micro-climate, appropriate materials and parking needs. The equipment to be installed in the air terminals (passenger loading bridges, baggage handling system, and information, signs and sound system, etc.) was selected taking into account cost-effectiveness and new technologies in the area of safety and security. Overall, the technical options selected are appropriate for each air terminal of the project, with a favourable cost effectiveness ratio. Consequently, the search for alternative options was not necessary.

Facilities related to Developed Terminal Areas: The selected infrastructures comprise: the rehabilitation of aircraft parking areas, construction of car traffic roads, construction of anti-intrusion fences, etc. Their design is based on current technical standards whose effectiveness has been proven. The technical options selected for these facilities are based on the practical experience of ONDA Directorate of Engineering and Maintenance, which endorsed them accordingly.

Air Safety and Security Equipment: The equipment consists of: navigational aid facilities, radar data processing and transmission system, aircraft instrument landing system (ILS) and passenger ground control systems. Drawing on its solid experience in this area, the ONDA opted for a technology that meets the requirements of safe air navigation in the Moroccan air space and effective passenger control at arrival and departure. In this regard, it benefited from the expertise of specialized firms.

2.3 Project Type

2.3.1 Like the two previous projects financed by the Bank in the air sub-sector, the 3rd airport project is an investment project consisting in construction works for air terminal buildings, development of related facilities in the air terminals, procurement of safety and security equipment, etc. The proposed financing instrument is a project loan to be granted to the ONDA in its capacity as Borrower with State guarantee. This was the Government's preferred option as indicated in its financing request.

2.3.2 This financing plan is justified for the following reasons: (i) ONDA is an industrial and commercial public establishment with management autonomy, as well as satisfactory operational performance and financial health (cf. 3.1.1 analysis of ONDA accounts); (ii) financial projections, taking into account the negative impacts of the international financial crisis, indicate that the financial situation of ONDA will remain comfortable at the end of the project with a turnover of MAD 3.56 billion by 2012 as against MAD 2.3 billion in 2008, and an increase in net income from MAD 826 million in 2008 to MAD 1,165 million in 2012 (about 9% increase per year); (iii) ONDA has been regularly repaying the two previous loans granted by the Bank.

2.3.3 It should be noted that, on the whole, the project components concern air safety and security in Morocco. Consequently, the Government prefers to maintain them under its control rather than entrust them to the private sector. However, the operation of local commercial premises, developed parking areas, and the maintenance of air terminal buildings will be transferred to the private sector as was the case in previous projects financed by the Bank.

2.4 Project Cost and Financing Arrangements

2.4.1 The total cost of the project, excluding taxes, is estimated at MAD 3,373.06 million (UA 274.31 million or €320.03 million), comprising foreign currency costs of MAD 2,528.60 million (UA 205.64 million or €239.91 million) and local currency costs of MAD 844.7 million (UA 68.68 million or €80.12 million). This cost is based on unit prices obtained during recent competitive bidding for similar works in Morocco. Physical contingencies have been estimated at 10% of the base cost. Provisions for price escalation are based on the implementation schedule, taking into account the rate of inflation of the sector estimated at 5%. These costs were also taken into account in the recommendations of the study on unit costs of works executed by the Bank (Technical Annexes – B1). Table 2.2 below provides a summary of the project cost estimates, excluding taxes.

Table 2.2
Summary Project Cost Estimates, excluding Taxes

Component	MAD Million			UA Million			EUR Million		
	FE	LC	Total ET	FE	L.C	Total E.T	FE	LC	Total ET
A. Air Terminal									
A1 Buildings	1034.74	487.36	1522.10	84.15	39.63	123.78	98.17	46.24	144.41
A2 Equipment	515.00	4.50	519.50	41.88	0.37	42.25	48.86	0.43	49.29
B Infrastructure	224.00	96.00	320.00	18.22	7.81	26.02	21.25	9.11	30.36
C Air Control	198.00	0.00	198.00	16.10	0.00	16.10	18.79	0.00	18.79
D Safety & Security	211.37	43.20	254.57	17.19	3.51	20.70	20.05	4.10	24.15
E Environment	0.00	85.50	85.50	0.00	6.95	6.95	0.00	8.11	8.11
F Services	6.15	14.58	20.73	0.50	1.19	1.69	0.58	1.38	1.97
Base Cost	2189.26	731.14	2920.40	178.04	59.46	237.50	207.71	69.37	277.08
Physical contingencies	218.93	73.11	292.04	17.80	5.95	23.75	20.77	6.94	27.71
Price escalation	120.41	40.21	160.62	9.79	3.27	13.06	11.42	3.82	15.24
Total	2528.60	844.47	3373.06	205.64	68.68	274.31	239.91	80.12	320.03
%	75%	25%	100%	75%	25%	100%	75%	25%	100%

2.4.2 The Bank's financing will cover the foreign currency cost of the project, representing 75% of the total cost. Specifically, this financing will cover 70% of the cost of works, excluding taxes, and 100% of the costs of supply and installation of equipment. The 25% balance, corresponding to the entire local costs, will be borne by the ONDA. Table 2.3 below provides a summary of the financing plan by source and by component:

Table 2.3
Summary Cost Estimates by Component and Source of Finance

COMPONENT	MAD Million			EUR Million		
	ADB	ONDA	TOTAL	ADB	ONDA	TOTAL
A Air Terminals						
A1 Buildings	1 034.74	487.36	1522.10	98.17	46.24	144.41
A2 Equipment	515.00	4.50	519.50	48.86	0.43	49.29
B Infrastructure	224.00	96.00	320.00	21.25	9.11	30.36
C Air Control	198.00	0.00	198.00	18.79	0.00	18.79
D Safety and Security	211.37	43.20	254.57	20.05	4.10	24.15
E Environment	0.00	85.50	85.50	0.00	8.11	8.11
F Services	6.15	14.58	20.73	0.58	1.38	1.97
Base Cost	2 189.26	731.14	2920.40	207.71	69.37	277.08
Physical Contingencies	218.93	73.11	292.04	20.77	6.94	27.71
Price Escalation	120.41	40.20	160.62	11.42	3.82	15.24
Total	2 528.60	844.47	3373.06	239.91	80.12	320.03
%	75%	25%	100%	75%	25%	100%

2.4.3 The tables below present the disbursement schedule of the project by component and expenditure categories financed by the Bank:

Table 2.4
Project Disbursement Schedule

Component	in EUR million						
	2008	2009	2010	2011	2012	2013	Total
A Air Terminals							
A1 Buildings	0.00	0.44	17.42	61.68	56.68	30.57	166.80
A2 Equipment	0.00	0.22	0.44	12.93	21.92	21.42	56.93
S/Total A	0.00	0.66	17.86	74.62	78.59	52.00	223.73
B Infrastructure	0.00	0.00	0.00	5.48	19.73	9.86	35.07
C Air Control	0.00	0.00	0.00	8.68	13.02	0.00	21.70
D Safety and Security	0.00	2.63	13.48	4.49	2.96	4.34	27.90
E Environment	0.00	0.38	1.86	2.52	4.60	0.00	9.37
F Services	0.02	0.52	0.62	0.31	0.51	0.30	2.27
Total Cost	0.02	4.19	33.81	88.02	119.59	67.55	320.03
%	0.0%	1.3%	10.6%	27.3%	37.3%	20.8%	100%

Table 2.5
Expenditure Categories Financed by the Bank

Expenditure Category	UA Million				EUR Million			
	Base Cost	Physical Contingencies	Price Escalation	Total Excl. Tax	Base Cost	Physical Contingencies	Price Escalation	Total Excl. Tax
Works	102.37	10.24	5.63	118.23	119.43	11.94	6.57	137.94
Equipment	75.17	7.52	4.13	86.83	87.70	8.77	4.82	101.30
Services	0.50	0.05	0.03	0.58	0.58	0.06	0.03	0.67
Total ADB	178.04	17.80	9.79	205.64	207.71	20.77	11.42	239.91

2.5. *Project Areas and Beneficiaries*

2.5.1 The project concerns airports that are currently receiving the bulk of air traffic in Morocco. Outside the geographic space covered by these airports, the project area covers the entire country. The major reasons for such limitation are as follows: (i) the air navigational assistance system that would be installed to meet the safety and security requirements covers the entire Moroccan air space; (ii) the impact of the project on the tourism sector will be country-wide. Indeed, at least 65% of the additional traffic will be made up of international tourists heading for the numerous tourist sites located throughout the country, and (iii) the airports concerned are located in the major economic poles of the country, where the expected induced impacts in terms of creation of new lucrative and employment activities will be spread in most of the localities of high tourism potential of the country.

2.5.2 The major beneficiaries of the project are: (i) the ONDA, a public establishment in charge of airport investments, as well as the management and operation of Moroccan airport infrastructure and facilities; (ii) airlines and users of airports, who will benefit from the significantly shorter timeframes due to the speed in the handling of traffic, as well as the comfort, safety and security conditions; (iii) commercial and service companies for which new opportunities will be provided within the airports; (iv) the tourism and handicraft sector; and (v) the local communities who will be the primary beneficiaries of the jobs created, notably women who are highly active in the handicraft sector, retail business, maintenance of public places, etc.

2.6 *Participatory Approach to Project Identification, Design and Implementation*

Following the adoption of its 2008-2012 strategic plan, the ONDA organized information and sensitization seminars on its investment programme for the civil population, local elected representatives, officials of the Administration, NGOs and other associations. These meetings were accompanied by opinion surveys conducted in 2008 on the environmental and social impact assessment of the various project components. The results of the surveys showed that the general public opinion was favourable to the implementation of all the components of the project. Furthermore, user satisfaction surveys (passengers, concessionary companies, and airlines) indicate a significant level of satisfaction with the quality of services provided in the airports of Casablanca, Marrakech, Agadir, Tangiers, Fez, Oujda, Rabat, Nador and Ouarzazate, and consequently, for the investments to be made in these airports.

2.7 *Consideration of Bank Group Experience and Lessons learnt in Project Design*

2.7.1 The Bank has financed two operations in the air sub-sector similar to the present project, as well as the financing of the Transport Sector Reform Programme (PRST). All these operations have been completed and their evaluation by OPEV points to the following lessons: (i) the Bank's interventions in the sector was consistent and relevant, meeting the challenges of the country as well as its sector objectives; (ii) the financial autonomy and expertise of ONDA are satisfactory, and will help to ensure sustainability of the outputs; (iii) the ONDA has a solid institutional capacity in training and influence on a regional scale (Controllers and Electronic Engineers Training Institute financed by the Bank); (iv) the ONDA has a good implementation and adaptation capacity to match the new context; (v) concerning the 1st airport project, the

quality of basic studies was inadequate; this resulted in numerous modifications to the project; (v) the project was also delayed by disbursement slippages, the lack of mid-term review that could have helped to identify difficulties to be remedied, and the lack of flexibility on the part of the Bank in accepting modifications proposed by the executing agency.

2.7.2 The design of the present project took into account these lessons and recommendations. Indeed, as regards the quality at entry, the costs were based on detailed engineering designs and unit costs of similar ongoing works and equipment contracts, together with more realistic provisions for physical and financial contingencies. Concerning disbursements, permanent contact by MAFO with the executing agencies will help to avoid slippages. For some time now, executing agencies in Morocco have been receiving monthly statements of disbursements. As for the mid-term review of the project implementation, as indicated in paragraph 4.2.2, this will be conducted by 2011 and the frequency of supervision will be maintained at 2 annual missions. Furthermore, since the ONDA has competent resource persons, the project will not provide technical assistance for its implementation. However, for the purposes of efficiency in the management of the various components of the project, the technical team of the ONDA Resource Directorate responsible for monitoring of project activities will be headed by a coordinator, whose appointment will be a loan condition.

2.8. *Key Performance Indicators*

2.8.1 The performance indicators identified and the results expected at project completion are those indicated in the result-based logical framework. These are mainly: (i) the results of airport users' satisfaction surveys and the number of airports obtaining the Quality, Security, Environment (QSE) certification at the end of the project and by 2020; and (ii) the number of tourists received at departure and arrival at the end of the project; (iii) abolition of diversionary flights of aircraft and reduction in the waiting time at air terminals; (iv) rate of coverage of the domestic space in air navigational assistance; and (v) decrease in the ONDA energy bill.

2.8.2 These quantified indicators will be verified through statistical data collected by the ONDA departments. The entities concerned have solid experience in the collection of the said data, and are well equipped for the task. Statistical reports and other reference documents will be provided in collaboration with MAFO and during Bank missions.

III. *Project Feasibility*

3.1. *Economic and Financial Performance*

3.1.1 ***Analysis of ONDA Accounts:*** The financial analysis was based on the audited results of the ONDA for the year 2007. The audited results for the year 2008 are not yet available. However, the provisional data indicate a turnover of MAD 2.3 billion (+11%), and a net income of MAD 826 million (+44%). In 2007, the ONDA turnover exceeded the MAD 2 billion threshold and stood at MAD 2.098 billion, as against MAD 1.835 billion in 2006, representing a 14.3% increase. This growth reflects the quantitative increases recorded in the activity, as follows: 17% for passenger traffic, 8% for aircraft movements, 10% for freight, and 5% for overflight. Despite the significant increase in operating costs as a result of the new operating

environment and the operation of new projects, the added value recorded an 11.5% increase, amounting to MAD 1.671 billion. The gross operating surplus stood at MAD 1.137 billion (15.2% growth), with an operating income of MAD 802.9 million (which corresponds to a 70.7% increase) and a net income of MAD 574.1 million compared to MAD 252.0 million in 2006. The net profit ratio was 27.4%, representing a two-fold increase compared to the previous years' level. These increases have enhanced the profitability of the company and its financial health, reflected by an increase in margins, self-financing capacity, strengthening of its equity and generation of surplus resources in terms of revolving fund, notably through sustained debt recovery. The annual debt service coverage ratio, which stands at 1.2, rose to 1.8. The main results of the ONDA as well as the major financial ratios over the 2003-2007 period are given in Annex B5.

3.1.2 **Economic Performance**: The economic performance indicator used is the Economic Rate of Return (ERR) calculated on the basis of cost effectiveness for the entire ONDA investment programme taking into account the impacts of the international financial crisis. The economic cost considered corresponds to the amount of the projected investment, excluding taxes and without price adjustment, of MAD 4.45 billion. As for the benefits, they consist of revenue generated by passenger, freight, aircraft movement traffic, overflights and the value added of related activities (concessionary operation of developed spaces for commercial use, car parks, etc.). The ERR of 21.8% and resulting value added were determined over a 20-year period (cf. Annex B6). The ERR has been subject to a sensitivity test consisting of 10% increase in economic cost, 10% decrease in benefits, and a combination of the two variations. The resulting ERRs are 18.8%, 20.8% and 18% respectively (cf. Annex B5). Despite these variations, the project remains economically viable.

3.1.3 **Financial Performance**: The Financial Internal Rate of Return (FIRR) is the basic indicator used in assessing the financial performance of the overall investment programme of ONDA. In considering the investment cost at current prices (MAD 4.684 billion) and revenue generated by the programme (passengers, freight, aircraft movements, overflights, and operation of developed spaces), and assuming a real discount rate of 10%, the net present value (NPV) is MAD 0.49 billion. As for the FIRR, it would stand at 12.30% for the 2008-2027 period for the baseline scenario. For scenario 1 which takes into account the impact of the crisis on the overall traffic, the FIRR would stand at 10.9%. An analysis of the financial statements and financial projections of ONDA has also been conducted (cf. Annex B6). The results of the economic and financial analysis (base case scenario) provided in Table 3.1 below show that the project is economically and financially viable. Details of the calculation are given in Annex B.5.

Table 3.1
Results of the Economic and Financial Analysis (base case scenario)

Economic Rate of Return (ERR)	21.80%
Net Present Value (NPV)	MAD 2,109,393
Financial Internal Rate of Return (FIRR)	12.30%
Net Present Value (NPV)	MAD 494,895
Discount Rate	10%

3.2. *Environmental and Social Impact*

3.2.1 ***Environment:*** An environmental and social impact assessment (ESIA) was conducted on the project in 2008 by a specialized consulting firm. The outcomes of the ESIA were validated by ONDA prior to being submitted to the Bank. On the basis of these results, the project was classified in category 2 by the Bank. The main reasons are as follows: (i) the project will not entail any displacement or resettlement of populations; (ii) the works for the air terminal buildings and related facilities, as well as the works of the 2nd Regional Control Centre (RCC) will be located in the current airport areas, where there is no archaeological heritage, fauna or flora to be protected; (iii) the buildings are of the High Environmental Quality (HEQ) type and the installations will include treatment and purification stations; (iv) the excavations for the works will very highly limited and their impact on plant cover will be minimal; (v) the specific measures taken to mitigate or eliminate negative impacts identified are adequate; and (vi) the expected positive economic, social and security impacts are highly significant. The Environmental and Social Management Plan (ESMP) has been posted on the Bank's website. The mitigation measures outlined by the plan in the project implementation will be monitored by the sustainable development committee established by the ONDA.

3.2.2 ***Positive Impacts:*** The expected positive impacts are as follows: (i) reduction to the strict minimum of risks of accidents and diversion of aircraft thanks to the complementary air navigation facilities that would help to cover the country's entire air space; (ii) significant improvement in conditions for receiving passengers and handling accompanied baggage; (iii) the quality, safety, environment (QSE) certification of airports concerned. Furthermore, the project is consistent with the sustainable development policy through the energy component that provides for diversification of the energy supply system through the installation of photovoltaic micro power stations integrated into the air terminal buildings and the establishment of a wind farm in Essaouira integrated into the ONE grid. The new renewable energy sources would lead to reduced energy bills and improvement of the carbon balance that requires that total emissions in all airports be reduced from 4 to 1 kg equivalent CO₂ per passenger by 2012. Their estimated cost of MAD 85.5 million (UA 6.95 million) is taken into account in the total cost of the project, excluding taxes.

3.2.3 ***Negative Impacts:*** The negative impacts of the project on the environment will be limited since the works for the buildings and related facilities will be confined to the existing airport areas. The expected negative impacts during the implementation and operational phases are essentially: waste and effluence from the power stations, noise and dust during the construction and operation, noise due to air traffic, as well as increased energy consumption.

3.2.4 ***Mitigation Measures for the Negative Impacts:*** To address all the negative impacts identified, the following measures will be taken: (i) the specifications of the works will systematically describe the mitigation measures to be taken for each type of environmental risks, including the Quality Assurance and Environment Safety Hygiene Plans; (ii) the worksites will be organized in accordance with the labour laws; (iii) the materials will be disposed of in areas far from built-up areas and organized in such manner as to avoid pollution of surface or ground water sources; (iv) wastes from the sites will be recycled or disposed of in accordance with current standards; and (v) the existing noise control system will be reinforced.

3.2.5 **Climate Change**: Climate change was one of the concerns taken into account in the project design. Indeed, the successful experience of solar panels installed at the Med V Airport in Casablanca will be extended under the present project to the major airports in the country (Casablanca 71.43 kW, Oujda 70.56 kW, Marrakech 55.44 kW, Tangiers 20.6 kW and Rabat 6.72 kW). The project entails the construction of a wind farm in Essaouira that will produce 30 million kWh annually, and will be mainly used to supply the airports with renewable energy. Through this component, the project will be contributing to the fight against climate change by avoiding total estimated greenhouse gas emissions of 204 tonnes of CO₂ equivalent.

3.2.6 **Gender**: At the national level, the promotion of women and the fight against discrimination based on gender constitute one of the pillars of the National Development Programme (NDP) implemented since 2002, particularly the 5th pillar devoted to poverty reduction and social disparities. At the level of the ONDA, the measures taken in this regard in recent years are beginning to yield encouraging results. Indeed, out of a total number of 2,656 persons surveyed in 2007, 530 were women, representing 20% of the total workforce, with 210 professionals, 225 senior female technicians, and 95 operatives. This trend will be enhanced with the projected recruitment under the project between 2008 and 2012 involving an additional workforce of 626 persons (executives, foremen, and operatives). The ONDA is ready to recruit on the basis of the current principle, namely equal opportunities and equal treatment for men and women in employment.

3.2.7 **Social**: In addition to employment opportunities by the ONDA, the project will help to create many jobs in the commercial and tourism sectors. During the construction and operation, an estimated 2,500 jobs will be created, 22% of which will be for the female population. In the tourism sector, whose share in the GDP is estimated at 15%, the project will contribute to creating over 30,000 jobs distributed between the various tourism components as follows: domestic transport and other services 34%, accommodation 32%, handicraft 24%, and catering 10%. Since the project essentially consists of equipment to be installed within the airports and works on an average scale on buildings in the existing airport areas, it will not result in any significant displacement of employees from other regions during and after the implementation phase. Consequently, the project does not carry any major risks with regard to HIV/AIDS transmission.

3.2.8 **Forced Resettlement**: The project will not result in the displacement of the population or their forced resettlement. Indeed, all the works on the air terminal buildings and the extension of aeronautic areas are located in the existing airport premises, with the exception of works in Marrakech airport for which some land acquisition is necessary. The acquisition procedure has already been initiated, and the project has earmarked an amount of MAD 20 million for the acquisition, including the displacement of existing public utility networks.

IV. Implementation

4.1 Implementation Arrangements

Executing Agency: ONDA

4.1.1 The ONDA, which is the executing agency of the project, has in the past demonstrated remarkable technical performance in the implementation of 2 similar projects. In this regard, it will be responsible, through its Resources Directorate (DR), for preparing bidding documents for the procurement of works, goods and services, conducting competitive bidding, and undertaking the administration of contracts as well as management and monitoring of the implementation of all the project activities. For purposes of efficiency in the monitoring of the components of the project, the DR will appoint an experienced coordinator, who will be the main contact person for the Bank during monitoring and supervision missions. The coordinator will prepare periodic progress reports of the project and monitor project procurements in keeping with the procurement plan established and updated each year in order to prevent any slippage in project implementation. As indicated in paragraph 2.7.2, the effective appointment of the coordinator will constitute a condition precedent to the first disbursement of the loan.

4.1.2 As indicated in paragraph 2.4.1, the ONDA is an industrial and commercial public establishment with management autonomy. The 2008-2012 Strategic plan approved by its Board of Directors defines the strategic objectives and orientations, as well as the related intervention areas selected in the airport sub-sector. The strategic orientations focus on the following main points: (i) enhanced effectiveness of ONDA interventions to enable it to achieve its operational and financial objectives; (ii) actions and measures intended to support the ONDA in an environment marked by economic liberalization and adoption by Morocco of the “open sky” policy, and (iii) institutional reforms and concessioning of the proposed airport installations and equipment. The Bank has examined the Strategic Plan, which effectively includes the achievement of set operational and financial objectives that are closely linked to the success of the current project. In this regard, the ONDA will each year submit the operational and financial report on the implementation status of the strategic plan to the Bank for monitoring and assessment. This will be a loan condition.

Procurement

4.1.3 All works, goods and services will be procured in accordance with the rules of the Bank using the relevant standard bidding and consultancy documents. The selected procurement methods are as follows:

Works: They concern: (i) the construction of air terminal buildings through international competitive bidding; (ii) the construction of the building of the 2nd RCC through international competition, and (iii) related airport terminal infrastructures (parking spaces, road access, slip roads, lighting, etc.) through national competitive bidding for any lot below UA 3 million and through international competitive bidding for any lot above UA 3 million.

Goods: All the airport and air navigational equipment financed from the loan will be procured through international competitive bidding.

Services: Consultancy services for technical and financial auditing will be procured through shopping based on a shortlist.

4.1.4 Review Procedure: In view of the repetitive nature of the lots and ONDA familiarity with the Bank's rules in previous airport projects, the threshold for *ex-post* review is set at UA 3 million. However, the Bank will, before any disbursement, audit the first 3 contracts, which will be subject to ex-post review. Only lots whose estimated amounts exceed this threshold will be subject to ex-ante reviews.

4.1.5 Procurement Plan: An indicative procurement plan has been prepared, particularly for the first 18 months of project implementation. This plan, which will be published on the Bank's Website, is presented in Annex B.4; it will be updated on an annual basis by the ONDA and submitted to the Bank for implementation follow-up.

4.1.6 General Procurement Notice: The text of a General Procurement Notice (GPN) will be published in the United Nations' "Development Business" and on the Bank's Website after finalization. The publication will be made only after approval of the loan and guarantee proposal by the Bank's Board of Directors.

4.1.7 Disbursement Arrangements: The ONDA Resources Directorate will be responsible for the financial management of the project. This directorate is familiar with the Bank's disbursement rules. Disbursement requests will be prepared by the financial officers of the Directorate in accordance with the provisions of the disbursement manual. The Bank will provide the ONDA with the four current disbursement methods. The Bank's Rabat Office (MAFO) will also be ready to provide the executing agency with support in disbursement operations.

4.1.8 Project Accounting and Auditing: The project accounts will be kept separately from ONDA general accounts in order to facilitate the tracking of expenditures by component, by expenditure category, and by source of finance. These accounts will be audited annually by an independent auditing firm. The audit reports will be submitted to the Bank within 6 months following the end of each fiscal year, in accordance with the general provisions applicable to loan agreements and guarantee agreements of the Bank.

4.2 Monitoring of Project Activities: The project implementation schedule is presented on page vii of this report. It takes into account the relevant experience of the executing agency in the management of timelines for works and procurement of aeronautical equipment, and the Bank's experience in the processing of documents relating to similar previous projects. According to projections, the project activities, which will start upon approval in March 2009, will be completed at the end of 2013. It should be noted that the ONDA had already committed its own resources in 2008 for the extension and development works on the TI terminal area of Mohamed V Airport in Casablanca. At the level of the Bank, the activities under its intervention following approval of the loan will be closely monitored in accordance with the following indicative schedule:

Period	Stage	Monitoring / Feedback Activities
April 2009	General procurement notice	Publication of general procurement notice in the UNDB (Bank)
May 2009	Signing of the loan and guarantee Agreement	Invitation letter to Borrower and Guarantor (Bank)
May 2009	Competitive bidding for works and equipment and shopping for consultancy services	Approval of BDs and shortlists by the Bank; invitation to bid and shopping documents by ONDA
2009-2013	Execution of works and installation of equipment	Control and supervision of works, and verification of conformity of equipment by ONDA
2009-2013	Project supervision and mid-term review	Monitoring of project implementation - supervision missions (at least 1.50 mission/year) (Bank)
March 2014	Completion of project and preparation of completion report	Joint preparation of the completion report (Bank and ONDA)

4.3. Governance: In the previous projects financed by the Bank in the transport sector, no complaint was made by the bidders at the end of the procurement of works, goods and services. For each of the projects financed, the current procurement procedures of the Bank were observed by the executing agencies in the management of bids and contracts. The supervision and audit reports did not indicate any particular irregularity. At country level, the control arrangement put in place (bids opening and contract award committee, State Controller) did not report any obvious cases of irregularity in the procurement and management of contracts. For the present project, the system of monitoring and verification usually applied by the Bank will remain proactive during the entire project implementation. These include the procurement procedures for works, goods and services, review of procurement documents, supervision missions, disbursement procedures and the external auditing of project accounts. Furthermore, with regard to most of the relatively sophisticated electronic equipment, the Bank has planned a mid-term review of the project implementation, and, at project completion, a technical and financial audit of the equipment procured and installed so as to ensure that they are operated in accordance with the standards.

4.4. Sustainability

4.4.1 The resources devoted to the maintenance of installations are substantial: they represent over 10% of the annual income of the ONDA, equivalent to MAD 34.5 million per year. A financial analysis of ONDA accounts shows that these recurrent costs are effectively financed each year. It also shows that the new maintenance requirements as a result of the development and modernization of the national airport complex are systematically covered in the ONDA budget as part of the operating expenses.

4.4.2 The issue of sustainability is also addressed in the present project. Thus, in the technical documents of the project, special emphasis is laid on the quality of aeronautical equipment to be procured, the quality of the construction materials for the air terminals, as well as proven qualifications and experience of the contractors, suppliers and consulting firms responsible for the control and supervision of works. Furthermore, the services of an experienced laboratory will be procured for the geotechnical control of the construction works on the buildings and related facilities at the air terminals.

4.5. Risk Management: It is possible that the air traffic projections on which the financing of the ONDA investment programme are based cannot be achieved as a result of the imponderables of the international financial crisis. To mitigate this risk, the ONDA has reduced the traffic projections contained in its strategic plan. This was taken into account in the economic and financial analysis of the programme (prudential approach).

4.6. Knowledge Development: Most of the equipment to be procured is relatively sophisticated electronic equipment, requiring adequate training of the users. For this reason, the technical staff concerned will receive targeted training that will enable them broaden their knowledge in the management and efficient use of the new equipment. As regards training and knowledge development, the ONDA has its own training structures that provide training to both national and foreign trainees at the Mohammed V International Academy of Civil Aviation responsible for the technical training of ONDA staff and controllers, and the Electronic Technicians Training Institute, specialized in these two areas. Continuing professional training and advanced training of the workforce will be provided through in-house short courses or short courses outside the country in foreign institutions. Furthermore, the ONDA has established training partnership ties with the International Civil Aviation Organization (ICAO) and the Agency for Air Navigation Safety (ASECNA).

V. Legal Framework

5.1. Legal Instrument

As in the case of similar previous projects, the financing instrument used will be a project loan to be granted to the ONDA in its capacity as Borrower with the guarantee of the Moroccan Government.

5.2. Conditions for Bank Intervention

The granting of the loan to the ONDA is subject to the following conditions:

A Conditions precedent to Loan Effectiveness and Disbursement

Section 4.01 Conditions precedent to effectiveness: Effectiveness of the loan agreement shall be subject to the fulfilment by the Borrower, to the satisfaction of the Bank, of the conditions stipulated in Section 2.0.1 of the General Conditions.

(i)

B Other Conditions

ONDA shall, to the full satisfaction of the Bank:

- i. Provide evidence, not later than 30 July 2009, of the appointment of a Project Coordinator responsible for monitoring the implementation of project activities; the qualifications and experience of the Coordinator shall be submitted to the Bank for prior approval (para 2.7.2 and 4.1.1);

- ii. submit to the Bank, not later than 30 June each year, for monitoring and assessment, the operational and financial report of the previous year and a report on the implementation status of the 2008-2012 Strategic Plan approved by the Board of Directors of the Borrower (para 4.1.2).

5.3. Compliance with Bank Policies

This project complies with all the relevant Bank policies, in particular the transport sector policy, the environmental and social policy, rules of procedure for the procurement of goods and services, the CSP for Morocco for the 2007-2011 period, and the Disbursement Manual.

VI. Recommendation

Management recommends that the Board of Directors should approve the loan proposal amounting to **EUR 240 million** to the National Airports Authority (“*Office National Des Aéroports*”) (ONDA) with State guarantee, in accordance with the conditions defined in this report.

Comparative Socioeconomic Indicators of the Country

Morocco - Development Indicators				
Social Indicators	Morocco		Africa	Developing Countries
	1990	2007 *		
Area (Km ²)	711		30 323	80 976
Total population (millions)	24,8	31,2	963,7	5 448,2
Population growth (annual %)	1,9	1,2	2,3	1,4
Life expectancy at birth -Total (years)	64	71	54	65
Mortality rate, infant (per 1000 life births)	63,6	30,6	85,3	54,1
Physicians per 100000 people	...	55,6	39,6	78,0
Births attended by skilled health staff (%of total)	...	62,6	50,4	59,0
Immunization, measles (% of children ages 12-23 months)	79,0	95,0	75,4	78,0
School enrolment, primary (% gross)	66,9	106,8	96,4	91,0
Ratio of girls to boys in primary education (%)	69	90	91	84
Illiteracy rate, adult total (% of people ages 15 and above)	61,3	44,9	33,3	26,6
Access to safe water (% of population)	75,0	81,0	62,3	80,0
Access to sanitation (% of population)	57,0	73,0	45,8	50,0
Human Development Index Value (0-1)	0,549	0,646	0,514	0,691
Hman Poverty Index (% of population)	...	...	36,8	...
Moroc				
Macroeconomic Indicators	1990	2000	2006	2007
GNI per capita, Atlas method (current US\$)	1 030	1 190	1 900	...
GDP (current million US\$)	25 784	37 060	65 176	69 469
GDP growth (annual %)	4,1	1,8	7,8	2,7
Per capita GDP growth (annual %)	2,1	0,6	6,8	1,0
Gross domestic investment (% of GDP)	33,2	25,5	31,0	31,9
Inflation (annual %)	6,8	1,9	3,3	2,0
Budget surplus (% of GDP)	-0,5	-5,5	-1,9	0,7
Private Sector Development and Infrastructure	1990	2000	2006	2007
Time required to start business (days)	...	...	12	12
Investor protection Index (0-10)	...	...	3	3
Main telephone lines subscribers (per 1000 people)	16	49	...	1 620,0
Internet users (per 1000 people)	...	7	...	581,8
Roads, paved (% of total roads)	49	56	...	...
Railways, goods transported (million ton-km)	4 903	4 576	...	...
Trade, External Debt & Financial Flows	1990	2000	2006	2007
Export growth, volume (%)	21,0	3,3	14,0	6,2
Import growth, volume (%)	18,1	3,6	14,3	21,7
Terms of trade	-1,7	-7,4	-4,2	-0,8
Trade balance (mn US\$)	-1 906,3	-3 234,0	-9 051,0	-14 326,1
Trade balance (% of GDP)	-6,6	-8,7	-14,8	-19,2
Current account (mn US\$)	-713,6	-476,0	2 215,0	2 230,2
Current account (% of GDP)	-2,5	-1,3	2,2	-0,1
Debt service (% of exports)	30,4	32,4	8,6	7,9
Total external debt (% of GDP)	71,9	48,6	20,1	11,8
Net total inflows (mn US\$)	1 619,3	600,8	1 577,3	...
Net Official Development Assistance (mn US\$)	1 048,0	418,8	1 045,6	...
Foreign direct investment inflows (mn US\$)	165,0	470,6	2 898,2	...
External reserves (in months of imports)	3,0	4,8	8,6	7,9

Source: ADB Statistics Department, based on various national and international sources.

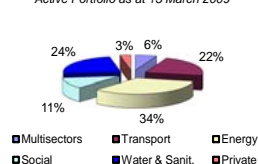
* Most recent year.

Last update: April 2008

MOROCCO - Ongoing Portfolio Operations in 2009
Situation as at 15 March 2009

Sector	Name of Project	Loan No.	Approval Date	Signal. Date	Effect. Date	Closing Date	Project Age (year)	Net Amount	Currency	Total Disbursement	Undisbursed Amount	Disb. Rate (%)	No. Ext.	Ext. Period (months)	SUPERV done in 2008	PCR to be done in 2009	Remarks/ Pending Actions	
										15 March 2009								
1	Multisectors	Third Public Administration Reform Support Programme (PARAP III)	2000130003030	25-juin-08	26-juin-08	23-sept.-08	31-déc.-09	0,7	66 000 000	EUR	66 000 000	0	100,0%	-	-	-	To be done	Bank: Joint WB/EU/ADB supervision mission 23-27 March; Government :
2	Transport	Marrakech-Agadir highway construction project	2000130001831	21-juil.-06	15-déc.-06	4-juil.-07	31-déc.-11	2,7	118 600 000	EUR	19 570 924	99 029 076	16,5%	-	-	2		Bank: - ADM: -
3	Transport	Airport capacity improvement and extension project	2000130000002	18-avr.-01	6-janv.-02	18-sept.-02	31-déc.-08	7,9	77 800 000	EUR	58 278 443	19 521 557	74,9%	2	24 months	2	To be done	Bank: Processing balance of Contract No. 108/04 (EUR 632,820.79) following receipt of RG caution on 13/03/09 ONDA : Submit to ADB supporting documents for EUR 42 000 in the special
4	Transport	Second Rural Roads Programme (PNRR 2)	2000130002380	5-sept.-07	23-nov.-07	8-mars-08	31-déc.-13	1,6	45 000 000	EUR	5 422 355	39 577 645	12,0%	-	-	2		Banque : Eclaircissements sur la détermination des taux de change pratiqués par la BAD dans les décaissements à fournir à l'Emprunteur suite à un
5	Energy	Electric grids interconnection reinforcement project	2000130000069	13-nov.-02	6-mai-03	4-nov.-03	31-déc.-07	6,4	80 000 000	EUR	80 000 000	0	100,0%	-	-	2	To be done	Bank: Reviewing the last 2 requests for justification No. 8 (EUR 7,793,593.68) and No. 9 (EUR 584,095.88) on project special account; related contract No. ST02/2/MT4 to be entered into SAP
6	Energy	Ain Beni Mathar Thermal Solar Power Station Project (Suppl. Loan)	2000130000880	2-mars-05	29-août-05	21-déc.-05	31-déc.-10	4,1	136 450 000	EUR	86 924 820	49 525 180	63,7%	-	-	2		Bank: - ONE: - Submit the status report for July-Dec. 2008
	Energy	Ain Beni Mathar Thermal Solar Power Station Project (Suppl. Loan)	2000130002681	17-déc.-07	7-avr.-08	16-oct.-08	31-déc.-10	1,3	151 400 000	EUR	46 416 223	104 983 777	30,7%	-	-	-		Bank: - ONE: -
7	Social	Quality Basic Education Development Support Project (PAEFQ)	2000120000026	30-nov.-00	30-mai-01	17-juil.-01	30-déc.-08	8,3	5 897 724 480	JPY	3 746 297 110	2 151 427 370	63,5%	1	12 months	2	Ongoing	Bank: PCR ongoing; last disbursement request being processed; Government: Completion Report of the Borrower to be prepared; Supporting documents for special account to be submitted to ADB to close the loan
8	Social	ANAM Technical Assistance	5500155000351	29-sept.-06	27-nov.-06	27-nov.-06	30-juin-09	2,5	600 000	UA	410 473	189 527	68,4%	2	18 months	-		Bank: Processing the 2nd and last request for revolving funds ongoing; Government: -
9	Social	CNOPS Technical Assistance	5500155000352	31-août-06	27-nov.-06	27-nov.-06	30-juin-09	2,6	600 000	UA	523 775	76 225	87,3%	2	18 months	-		Bank: Letter for request for use of available balance underway Government: -
10	Social	SIG Health Map	5500155001701	19-déc.-08	23-déc.-08	23-déc.-08	31-déc.-09	0,3	500 000	UA	N/A	N/A	N/A	-	-	N/A		Bank: - Ministry of Health: Submit to the Bank the conditions for first disbursement
11	Social	Disease Coverage Reform Support Programme - Phase II (PARCOLUM II)	2000130003530	11-déc.-08	23-déc.-08	NYE	31-déc.-11	0,3	70 000 000	EUR	N/A	N/A	N/A	-	-	N/A		Bank: - Ministry of Health: Submit to the Bank the conditions for loan effectiveness
12	Water & Sanit.	Eighth DWS Project	2000130000580	24-nov.-04	7-févr.-05	10-juin-05	31-déc.-10	4,3	66 500 000	EUR	50 153 466	16 346 534	75,4%	-	-	2		Bank: - ONEP: Mission to Tunis to fix interest rate for loans of the 7th, 8th and 9th
13	Water & Sanit.	Ninth DWS Project	2000130001830	21-juil.-06	18-déc.-06	16-mai-07	31-déc.-11	2,7	81 000 000	EUR	17 750 219	63 249 781	21,9%	-	-	2		Bank: - ONEP: Mission to Tunis to fix the interest rates of the loans of the 7th, 8th and 9th
14	Water & Sanit.	Tenth DWS Project	000130003531 / 3	16-nov.-08	23-déc.-08	NYE	31-déc.-13	0,4	110 020 188	EUR	N/A	N/A	N/A	-	-	N/A		Bank: - ONEP: Submit to the Bank the conditions for loan effectiveness
15	Private	Olea Capital Project	2000130003780	27-nov.-08	NYS	NYE	31-déc.-20	0,3	34 000 000	EUR	N/A	N/A	N/A	-	-	N/A		Bank: - ONEP: Finalize discussions with the financial partners (Soc Gen France) for
Net Total Amount (UA)										918 389 564,68								
Total Disburs. Amount (UA)										403 817 123,29								
										44%								
										53%								
										1,8								
										2,9								

Sectoral Commitments Breakdown
Active Portfolio as at 15 March 2009



N/A : Not Applicable / Sans Objet
 NYE : Not Yet Effective / Non encore mis en vigueur
 NYS : Not Yet Signed / Non encore signé

Total Portfolio Amount in EUR	
Multisectors	66 000 000
Transport	241 400 000
Energy	367 850 000
Social	119 733 210
Water & Sanit.	257 520 188
Private	34 000 000
Total	1 086 503 398

Morocco
Major related projects financed by other Financial Partners

FINANCING	Signature Date	Amount
EIB		EUR Million
Rural Roads Programme III	05/12/2008	60
Project of the 2 nd port terminal of Tangiers Med	24/06/2008	40
Fez-Oujda V motorway construction	31/10/2007	180
Motorway Project IV -Tranche B	17/06/2005	70
National Rural Roads Programme - Phase II	17/06/2005	60
IBRD		USD Million
National Rural Roads Programme - Phase II	02/05/2006	60
National Rural Roads Programme	29/06/2004	36.86
AFD		EUR Million
National Rural Roads Programme in the North Provinces	16/11/2000	24
Tangiers - New Tangiers Med railway link project	24/03/2004	25
National Rural Roads Programme - Phase II	13/02/2004	50
JBIC-JICA		JPY Million
Mediterranean Bypass Project	21/09/2001	21.459
Marrakech-Agadir motorway construction project	31/03/2006	17.726
National Rural Roads Programme	15/03/2007	8.439
EU Commission		EUR Million
Mediterranean Bypass Project	Year 2000	124,48
Transport sector reform support programme	Year 2003	96
Arab Fund for Economic and Social Development (AFESD)		USD Million
Marrakech-Agadir motorway construction project	13/03/2006	115.6
Fez-Oujda V motorway construction project	15/03/2007	111.9
Project for the 3-lane dual carriageway of the Rabat – Casablanca motorway	01/12/2008	74.6
Airport capacity improvement and building project	15/05/2001	36.5
Kuwaiti Fund (FKDEA)		USD Million
Marrakech-Agadir motorway construction project	20/03/2006	56
Fez-Oujda motorway construction project	13/12/2006	56
Islamic Development Bank (IsDB)		USD Million
Marrakech-Agadir motorway construction project	01/06/2006	106
Fez-Oujda motorway construction project	01/05/2007	124