AFRICAN DEVELOPMENT BANK

PROJECT: Technology Park
COUNTRY: Cape Verde

APPRAISAL REPORT

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OITC DEPARTMENT

July 2013

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Currency Equivalents

As of April 2013

UA 1	=	USD 1.51
UA 1	=	EUR 1.17
UA 1	=	CVE 125.43

Fiscal Year

1 January – 31 December

Weights and Measures

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

Acronyms and Abbreviations

AfDB	African Development Bank
BCP	Business Continuity Planning
BC	Business and common facilities Centre
CCV	Cape Verdean contos (equivalent to 1,000 CVE)
CSP	Country Strategy Paper
CVE	Cape Verde Escudo
DC	Data Centre
EASSy	The Eastern Africa Submarine Cable System
ETS	Economic Transformation Strategy
ESMP	Environmental and Social Management Plan
GoCV	Government of Cape Verde
GPRSP	Growth and Poverty Reduction Strategy Paper
IC	Incubation Centre
ICT	Information and Communication Technology
NOSI	Operational Nucleus for Information Society
PB	Pentabyte (10^{15}bytes)
PC	Personal Computer
PESI	Information Society Strategic Program
PMT	Project Management Team
PSC	Project Steering Committee
PRSP	Poverty Reduction Strategy Paper
TB	Terabyte (10^{12}bytes)
TQC	Training and Qualifications Centre

Loan Information

Client's information

BORROWER: Republic of Cape Verde

EXECUTING AGENCY: Operational Nucleus for Information Society - (NOSI)

Financing plan

Source	Amount (Euro)	Instrument
ADB	31.59 million	ADB project loan
Government of Cape Verde	4.4 million	counterpart funding
TOTAL COST	**35.9 million**	

ADB's key financing information

Loan currency	Euro
Interest type	Floating
Interest rate margin	60 pb + the Bank's contribution margin
Commitment fees	Not applicable
Other fees	Not applicable
Loan payment	Half yearly
Maturity	20 years
Grace period	5 years
FIRR, NPV (base case)	7.98%, NPV 13.6 million euros
EIRR (base case)	18.08%

Timeframe - Main Milestones (expected)

Concept Note approval	April, 2013
Project approval	July, 2013
Effectiveness	October, 2013
Last Disbursement	December, 2018
Completion	December, 2017

Project Summary

1. Project Overview: The project seeks to contribute to the sustainable development of the country by supporting the Information and Communication Technology (ICT) industry. It will support innovation that would foster inclusive and green growth. The impact of ICT lies in the potential to promote the efficiency and competitiveness of other economic sectors, foster innovative and entrepreneurship initiatives and job creation. The project will involve the development of a Technology Park, including the construction and equipment of a Data Centre (DC) and Business Continuity Plan (BCP) or Disaster Recovery site, Business and common facilities Centre (BC), Incubation Centre (IC) and Training and Qualification Centre (TQC). At its core, this project entails the installation and management of cutting-edge computer storage and processing facility and the provision of knowledge resources that will facilitate the development and transformation of government processes and private sector businesses. The Park will be located in Praia in an area of 8 hectares which is about 3 kilometers from the Praia International Airport. The project will be implemented within a period of 48 months starting from 2013.

The total estimated cost of the project is 35.9 million Euro (UA 30.7 million). A total amount of Euro 31.59 million (UA 27 million) is the proposed ADB loan to the Government of Cape Verde (GoCV); 4.4 million Euro (UA 3.7 million) will be counterpart funding from the GoCV.

The Park will be fully sustained through revenue from the services (cloud, hosting and housing) provided by the DC. The involvement of the private sector through various types of partnership agreements will facilitate opportunities for new business development and contribute to the sustainability of the Park. The project will contribute significantly to other sectors of the country's economy such as education, healthcare and other services. The direct beneficiaries of the proposed project are the people of Cape Verde, the ECOWAS sub region and African Portuguese Countries and in particular the public sector, academic institutions and the private sector.

2. Needs assessment: Given the country's successes in the ICT sector, the Park will respond to the country's drive towards strengthening its positioning as an ICT-hub. It will provide services such as business process outsourcing, call centers, data storage and processing capacity, software development for both government and private sector entities and for export. The Government's Economic Transformation Strategy (ETS) which has ICT as one of the seven (7) key clusters provides a broad vision for a transformed economy and is anchored on seizing Cape Verde's geostrategic location to build the country up as an international platform for high value added services.

3. Bank's value added: The Bank's support is expected to complement the ETS and Government's efforts to implement the Information Society Strategic Program (PESI), which will have positive spin-offs that will include:- improved business climate, governance and improved ICT infrastructure. At the technical level, the Bank's value added will include providing support in project preparation. It will also continue during the project implementation based on its long term experience in the implementation of ICT projects such as the Rwanda ICT centre of excellence, Main One and EASSY Submarine cable systems which have started yielding development results.

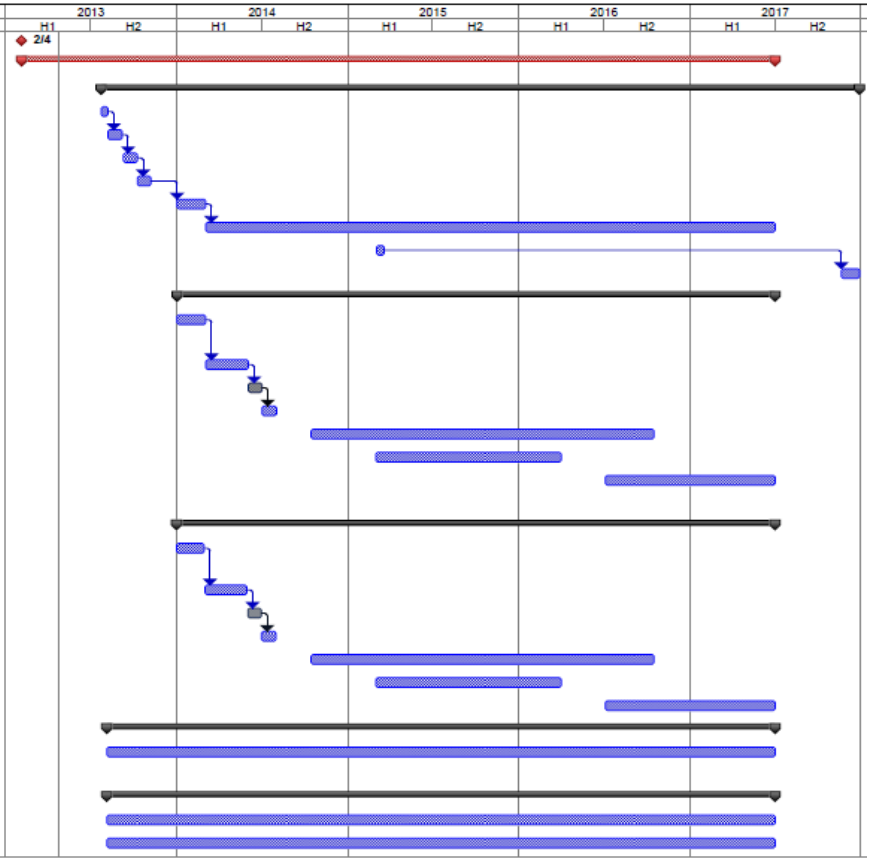
4. Knowledge management: The project design has innovative aspects such as cloud storage which is a current computing trend. It is therefore possible for the Bank to acquire knowledge for its future use. In this regard, the Bank will use and share the knowledge generated from the project preparation and implementation activities as well as exchange of experience between the project staff and experts in Cape Verde. The project design has also recognised the importance of knowledge transfer and has included a component of capacity building for the project management team.

Country and project name: Cape Verde: Technology Park project
Purpose of the project: To stimulate the ICT economic sector in Cape Verde.

	RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS / MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMPACT	Contribution to the inclusive growth and economic diversification of the country by supporting the ICT industry	(%) Share of ICT sector in GDP	0.7% in 2012	2.1% by 2020	Statistical data from: National Statistical Institute; Vocational Training and Employment Institute (IEFP); Ministry of Finance and planning	**Market Risk:** failure to attract international anchor companies. To mitigate this risk the Park will be relying on:(i) Partnership with anchor international companies to be able to provide the competitive, innovative and added value ICT services;(ii) Marketing activities;(iii) Lowering corporate taxes, etc. **Technology Park:** Proliferation of technology Park in Africa. This is mitigated by providing quality services at competitive price.
OUTCOMES	**ICT economic cluster is stimulated by:-** 1.1: Increase in the number of ICT companies established 1.2: Creation of new jobs in the ICT sector 1.3: Access to improved business climate 1.4: Professional with advanced training and certified qualifications 1.5: Quality and access to IT and Internet services are improved	1.1.1 Number of startups and new business 1.2.1 Additional number of direct and indirect persons employed in ICT Sector. 1.3.1 Number of annual customers with access to advanced ICT/business facilities 1.4.1 Number of population trained and certified (50%women) (60%youth) 1.5.1 Internet penetration 1.5.2 Internet speed	95in 2012 321 in 2012 385 in 2012 1000 in 2012 22 in 2012 38% in 2012 1 Gbps	186 by 2017 (30% young entrepreneurs) 1014 by 2017 (50% women) 1217 by 2017 (30-40% women) 2000 by 2017 100 by 2017 50% by 2017 10 Gbps	Agency for Enterprise Development and Innovation (ADEI);	**Customer base retention risk:** Failure to maintain customer base and skilled labor.. This is mitigated by providing high quality of ICT/business services through implementing skills development programme for staff; and instituting attractive retention package to the staff. **ICT Infrastructure risk:** High cost of telecommunication services and energy. This risk is mitigated by the Government assurance of long term low cost communication fees with telecom operators and electric utilities providing telecom services and electricity to the park.
OUTPUTS	1.1: A new Data Centre & Business Continuity Plan or Disaster Recovery site constructed and equipped with adequate storage and processing capacities 1.2: A new Business Centre, Incubation Centre & Training and Qualification Centre constructed and equipped 1.3: Qualification and certification training program developed 1.4: Partnership agreements signed and effective with major ICT International companies 1.5: Annual audits completed 1.6 Control and supervision of works completed	1.1.1 No. of DC & BCP 1.1.2 Processing capacity installed 1.1.3 Storage capacity installed 1.2.1 No. of BC, IC & TQC 1.2.2 No. of open offices 1.2.3 No. of Common facilities 1.2.4 No. of Incubation Center 1.2.5 No. of open offices 1.2.6 No. of training rooms 1.3.1 No. of certified training (Cisco, Microsoft, etc.) developed 1.4.1 No of Agreements signed 1.5.1 No. of Timely annual audits submitted 1.6.1 No. of Supervision reports	Cores: 854 Ram: 9.8 TB 0.5 PB 0.392 PB	2 by 2017 Cores: 1264 Ram: 11 TB 3 by 2017 1 by 2017 13 by 2017 20 by 2017 7 by 2017 30 by 2017 4 by 2017 3 by 2017 1 report per year 1 report per year	Annual Technical & Financial Audits Project Progress Reports Supervision missions	**Implementation risk**: Delay in implementation due to late award of civil works and supervision contracts. This will be mitigated by recruiting experienced contractors and consultants and also close supervision by the PMT and the Bank's supervision team. **Data Center high availability risk:** Failure to provide DC high availability. This is mitigated by securing service level agreements with major IT service provider.
KEY ACTIVITIES	**COMPONENTS**				**RESOURCES**	
	COMPONENT 1: Construction and equipping of Data Centre and Business Continuity Plan or Disaster Recovery Site **COMPONENT 2:** Construction and equipping of Business Centre, Incubation Centre and Training and Qualification Centre **COMPONENT 3:** Support to Institutional Strengthening and Capacity building/training **COMPONENT 4:** Project management				**Component 1**: EUR 14.9 million **Component 2**: EUR 11.5 million **Component 3**: EUR 1.0 million **Component 4**: EUR 5.4 million	

Project Timeframe

ID	Task Name	Start	Finish
1	TECHNOLOGY PARK OF PRAIA	Mon 2/4/13	Sat 7/1/17
2		Mon 2/4/13	Sat 7/1/17
3	**Project Cycle Information**	**Wed 7/24/13**	**Thu 12/28/17**
4	Loan approval	Wed 7/24/13	Tue 8/6/13
5	General Procurement Notice	Wed 8/7/13	Fri 9/6/13
6	Loan agreement signing	Mon 9/9/13	Tue 10/8/13
7	Loan effectiveness	Wed 10/9/13	Wed 11/6/13
8	Project launching	Thu 1/2/14	Mon 3/3/14
9	Supervision mission	Tue 3/4/14	Sat 7/1/17
10	Mid-term review mission	Wed 3/4/15	Thu 3/19/15
11	Completion report mission	Mon 11/20/17	Thu 12/28/17
12	**Component 1 – Construction and equipping of DC & BCP**	**Thu 1/2/14**	**Sat 7/1/17**
13	Launch Request For Proposals for the recruitment of a firm for the detailed architectural design & engineering design	Thu 1/2/14	Mon 3/3/14
14	Recruit a firm for detailed arch design & engineering design	Tue 3/4/14	Mon 6/2/14
15	Review and approval of bidding documents	Tue 6/3/14	Tue 7/1/14
16	Tendering and contract award for civil works	Wed 7/2/14	Fri 8/1/14
17	Implementation of works	Wed 10/15/14	Sat 10/15/16
18	Tendering & contract award for equipment	Mon 3/2/15	Thu 3/31/16
19	Delivery, installation & conf. of equipment	Mon 7/4/16	Sat 7/1/17
20	**Component 2 – Construction and equipping of BC,IC & TQC**	**Wed 1/1/14**	**Sat 7/1/17**
21	Launch Request For Proposals for the recruitment of a firm for the detailed architectural design & engineering design	Wed 1/1/14	Fri 2/28/14
22	Recruit a firm for detailed arch design & engineering design	Mon 3/3/14	Fri 5/30/14
23	Review and approval of bidding documents	Mon 6/2/14	Mon 6/30/14
24	Tendering and contract award for civil works	Tue 7/1/14	Thu 7/31/14
25	Implementation of works	Wed 10/15/14	Sat 10/15/16
26	Tendering & contract award for equipment	Mon 3/2/15	Thu 3/31/16
27	Delivery, installation & conf. of equipment	Mon 7/4/16	Sat 7/1/17
28	**Component 3 – Capacity Building / Training**	**Mon 8/5/13**	**Sat 7/1/17**
29	Launch bidding documents, request of proposals and recruit technical assistance	Mon 8/5/13	Sat 7/1/17
30	**Component 4 Project Management**	**Mon 8/5/13**	**Sat 7/1/17**
31	Supervision of works	Mon 8/5/13	Sat 7/1/17
32	Audit of the project	Mon 8/5/13	Sat 7/1/17



REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE ADB BOARD OF DIRECTORS FOR A PROPOSED LOAN TO CAPE VERDE FOR THE TECHNOLOGY PARK PROJECT

Management submits the following report and recommendation on a proposed loan for Euro 31.59 million to the Republic of Cape Verde to finance the Technology Park project in Praia.

I. STRATEGIC THRUST & RATIONALE

1.1 Project linkages with country strategy and objectives

1.1.1 Since 2003, the Government of Cape Verde has embarked on the implementation of its Economic Transformation Strategy (ETS), a long-term national development vision that seeks to transform Cape Verde into an emerging economy. The strategy has borne fruit and enabled Cape Verde to achieve robust performance in its political, economic and social sectors. As a result, it was reclassified to a higher category in 2008 – that of a lower middle-income country (MIC). The Growth and Poverty Reduction Strategy Paper (GPRSP) III, which endorses the principles of the ETS, is the reference framework for donor operations in the various sectors. The Country Strategy Paper (CSP 2009-2012), approved by the Boards of Directors in October 2009 and extended until end 2013, is aligned on the ETS and GPRSP II (2008-2011). It is underpinned by two main pillars: (I) supporting economic and financial government gains; and (II) contributing to infrastructure development.

1.1.2 The Project is aligned to three out of the five Cape Verdean development goals included in the GPRSP (2012-2016): entrepreneurship; human development; and economic infrastructures including ICT. The project falls under Pillar I & II of the CSP 2009-2012 and Extended CSP for 2013 respectively aiming at contributing to infrastructure development and enhancing the competitiveness of the economy. In addition, the proposed project objectives are in line with the Bank's 2013 – 2022 Strategy with infrastructure focus, and ICT operations strategy (2012 – 2014). The project is also aligned to the Regional Integration Strategy Paper (RISP) for West Africa under Pillars I and II which support investment in ICT projects with regional dimension and the strengthen of capacity of ECOWAS member countries.

1.1.3 The development of the Government Programme such as the Information Society Strategic Program (PESI) in 2005 was a fundamental milestone in the government focus on developing the ICT sector. The PESI's development is anchored on the potential of ICTs in transforming the country's sustainable economic growth. As such, its developmental framework was rooted in promoting the five Cape Verdean development goals: good governance; entrepreneurship; development of human capital; social development and basic and economic infrastructure. The proposed project aims at addressing each of the aforementioned five goals. The Project is expected to adopt cutting-edge technology that is environmentally, socially and economically feasible.

1.2 Rationale for Bank's involvement

1.2.1 The Bank has financed a number of ICT projects at national and multinational levels such as the regional ICT centres of excellence in Mali and Rwanda respectively. It has also supported Main One and EASSY submarine cables which have started yielding development

results including triggering a bandwidth increase in the markets they serve, which has resulted in slashing Internet prices that have trickled down to the end users especially in the mobile telephony. This experience gives the Bank a comparative advantage in Africa.

1.2.2 Cape Verde has 60% youth population between ages 18– 30. Twenty-five percent (25%) of the country's population is living in poverty. Unemployment rate rose from 10.3% in 2010 to 12.2% in 2011. The Government is therefore focusing on strategies to foster job creation, build local capacity and increase ICT contribution to the economic growth in a sustainable manner. The proposed Project seeks to contribute achieving those goals.

1.2.3 The Bank's support is also expected to complement the Government's efforts to implement the Information Society Strategic Program (PESI), with positive spin-offs which will include improved business climate, governance and improved ICT infrastructure. Cape Verde is internationally connected directly through two submarine cable systems: Atlantis 2 and West African Cable System (WACs) and in addition have access to all other West African Submarine Cables via its fibre to Dakar. The project will leverage on the available high bandwidth capacity provided by these cables. With access to all these cables, international and regional customers are ensured good international connectivity.

1.2.4 There is a need for certified training (e.g. Microsoft, Cisco, IBM, VMWare, etc.) and specific training in certain areas of expertise (e.g. mobile, web apps, etc.) in the country which is not currently available from local public and private institutions. In order to bridge the current training needs, the Bank's support is also expected to focus on the development of qualification and certification programme.

1.3 Donors coordination

Table 1.3: Donor contribution to the Sector

Sector				***Size***				
				% GDP	***% Export***	***% Labour Force***		
Year				**2010**	**2010**	**2010**		
Transport and Communications				16,2	*N/A*	*N/A*		
Players – Public Annual Expenditure – Cape Verde Communications Sector (Average in CVE)								
				Donor Coordination				
				Portugal	***China***			
Year		*Total*	*Government*					
2009-2010	*CVE in m*	3,576,097,600	101,021,529.16	781,090,686	2,693,977,600			
	%	100%	3%	22%	75%			
Level of Donor Coordination								
Existence of Thematic Working Groups						***Yes***		
Existence of SWAPs or Integrated Sector Approaches						***No***		
ADB's involvement in donors coordination						***Member***		

Comments on Donor coordination:

There are at least 13 active donors providing development assistance to Cape Verde across all the economic sectors. These include, by area of support, the following Budget Support Group (AfDB, WB, EU, Portugal, Spain, and Luxembourg), Water Management (AFD, BADEA, JICA, Saudi Fund, and Kuwait Fund), Energy Production and Distribution (IBRD/WB/JICA/AfDB/OFID/EBID), ICT (Government of Portugal, China Exim Bank),

Health Sector (Government of Austria, Saudi and Kuwait Fund). The on-going ICT projects portfolio of the World Bank and the EU is estimated at USD 80 million, and EUR 54 million respectively. Cape Verde has a formal donor coordination mechanism led by the Ministry of Finance & Planning. The Government of Cape Verde is implementing a Data Centre (DC) for the development of its e-Government solutions with the assistance of Portugal and China. On the other hand, the new DC to be financed by the Bank will provide services to the Banking, Insurance and other private financial services. It will complement the existing DC and provide backup, disaster recovery or business continuity procedures and information security solutions which will serve both governments and the financial sector, thus ensuring a strong alignment with the Government strategy for the ICT sector. The Bank, through Senegal Regional Field Office, has regular participation and direct contacts with, Cape Verde Government, Local Authorities and other Development Partners.

II. PROJECT DESCRIPTION

The overarching objective of the project is to contribute to the inclusive growth and economic diversification of the country by supporting the ICT industry. Specifically, the project is expected to promote innovation and leverage the country‘s growth by stimulating the ICT economic cluster; train youth, create new jobs in the ICT sector and position Cape Verde as an international center for services, a Gateway to Africa.

The proposed project will involve construction and equipment of:

(i) a Data Center (DC) and Business Continuity Plan (BCP) or Disaster Recovery Site (high-performance, highly available infrastructure);
(ii) a Business Center (BC), which will provide open spaces for offices and properties so that companies can construct their own dedicated offices, together with an auditorium, a conference center, a foyer and a collection of meeting rooms;
(iii) an Incubation Center (IC), which will provide open space already equipped for incubated companies/projects; and
(iv) a Training and Qualification Center (TQC), which will include training facilities and fully outfitted labs.

At its core, this project entails the installation and management of cutting edge computer storage and processing architecture (Cores = 1264; Memory = 11TB; Storage = 0.5PB). The project also includes strengthening the operational and technical capacity of the existing project management team.

2.1 Project components

Table 2.1: Project components

Nr.	Component name	Est. cost (Euro)	Component description
1	Construction and equipment of Data Centre (DC) & Business Continuity Plan (BCP) or Disaster recovery site	14.9	▪ Construction of the DC and BCP ▪ Provision of secure energy supply facilities ▪ Control and supervision of works ▪ Provision of IT equipment ▪ Configuration of Servers and Storage Area Network ▪ Provision of furniture
2	Construction and equipment of Business Centre (BC), Incubation Centre (IC) & Training and Qualification Centre (TQC)	11.5	▪ Construction of the BC, IC and TQC ▪ Provision of secure energy supply facilities ▪ Control and supervision of works ▪ Provision of IT equipment ▪ Provision of furniture ▪ Develop qualification and training programme for the TQC
3	Institutional Strengthening and Capacity building	1.0	▪ Technical Assistance - Consultancy Real Estate Management; Event Management; Financial Mgmt; Incubation process; and Procurement
4	Project management	5.4	▪ Detailed architectural & engineering design of the Tech Park ▪ Supervision of works ▪ Annual auditing during the entire project

2.2 Technical solution retained and other alternatives explored

The existing Data Centre (DC) houses all of the government's services, occupying 200 servers (40% virtual and 60% physical), and has reached its maximum capacity. The technical solution retained is to implement a Data Centre in a different location as an integral part of the proposed Technology Park that would provide services to the banking, insurance and other financial institutions. Additionally, the DC will provide latest data storage and processing services such as cloud storage, hosting and housing to regional and international customers in the healthcare, education and other sectors. The Technology Park will address the country's vision to implement the type of ecosystem required for the ICT cluster. The alternative solutions explored are summarized in table 2.2 below.

Table 2.2: Project alternatives considered and reasons for rejection

Alternative name	Brief description	Reasons for rejection
Data Centre	Upgrade existing Government Data Centre to deliver cloud, hosting and housing services.	**i)** Need to setup an internationally competitive Data Centre with competitive technological infrastructure (secure and interoperable international broadband networks), located within a Cyber Park. This would have entailed major revamping of the existing data centre. **ii)** Need to attract foreign direct investment for ICT-based services not necessarily linked to Government facilities.
Incubation Centres	Creation of two Incubation Centres for ICT start-up businesses, one in Santiago Island and the other in the Island of Saint Vicente.	**i)** Need to expose local ICT entrepreneurs to competitive market conditions and demands provided by international companies; **ii)** Need to setup an internationally competitive Cyber Park with competitive technological infrastructure which provide environment suitable for growth of Incubation Centres.
Training in Service Delivery Areas	Delivery of training courses, in articulation with public and private institutions, in order to build capacity in competitive areas for Cape Verde, namely business process outsourcing, call centres, software and multimedia content production, web applications and e-learning.	**i)** Need for partnerships with international players to create certified training programs in the country in areas such Cisco, Microsoft, IBM etc. currently not available from local public and private institutions; **ii)** Need to setup an internationally competitive training facility within an environment that encourages skills development and provides opportunities.

2.3 Project type

This is a stand-alone operation, financed by ADB loan. There is no Government policy yet on ICT projects to be financed through sector budget support. The project involves the construction and equipment of Data centre, Business centre, Incubation centre and Training and Qualification centre with ICT facilities. The project will be contributing to providing ICT infrastructure required for the promotion of innovation and leverage of the country‘s growth by stimulating the ICT economic sector.

2.4 Project cost and financing arrangements

2.4.1 The total cost of the Technology Park is estimated at Euro 35.9 million. The project costs have been estimated on the basis of data obtained from the detailed feasibility study and preliminary master plan design and in consultation with NOSI, a government agency, which is responsible for ICT projects implementation in the country.

2.4.2 A total amount of Euro 31.59 million is the proposed ADB loan to the GoCV; Euro 4.4 million will be the Government counterpart funding. The following tables 2.3, 2.4 and 2.5 below present the estimated project costs by components, financing source and category of expenditure. In addition, table 2.6 and 2.7 show the expenditure schedule by component and component by financing source respectively. Technical Annex B2 provides detailed cost estimates.

Table 2.3: Project cost estimates by component [figure in Euro & CCV]

Description	EURO			CCV				
	Foreign	Local	Total	Foreign	Local	Total	% Foreign	% Total
Component 1 : Data Center and Business Continuity Plan or Disaster Recovery Site	11,934,710	2,983,677	14,918,387	1,315,981	*328,995*	*1,644,976*	*80.00%*	*41%*
Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center	9,216,886	2,304,222	11,521,108	1,016,300	*254,075*	*1,270,375*	*80.00%*	*32%*
Component 3: Support to Institutional Strengthening and Capacity Building	809,807	202,452	1,012,259	89,293	*22,323*	*111,617*	*80.00%*	*3%*
Component 4: Project Management	992,400	4,366,209	5,358,609	109,427	*481,440*	*590,867*	*18.52%*	*15%*
Total Base Cost	***22,953,803***	***9,856,559***	***32,810,363***	***2,531,001***	***1,086,834***	***3,617,835***	***69.96%***	
Physical Contingencies (5%)	1,299,122	324,780	1,623,902	143,248	35,812	179,060	*80.00%*	*5%*
Price Contingencies (2%)	1,247,157	311,789	1,558,946	137,518	34,379	171,897	*80.00%*	*4%*
Total Project Cost	***25,500,082***	***10,493,129***	***35,993,211***	***2,811,767***	***1,157,025***	***3,968,791***	***71%***	***100%***
** Contingencies excludes the opportunity cost of land acquisition*								

Note: Exchange rates are provided in the introduction of this report (page (i))

Table 2.4: Sources of financing [figure in Euro]

Description	EURO			
	Foreign	Local	Total Costs	% Total
ADB - Loan	25,272,000	*6,318,000*	*31,590,000*	*88%*
Government of Cape Verde	0	4,403,210	*4,403,210*	*12%*
	25,272,000	***10,721,211***	***35,993,211***	***100%***

Table 2.5: Project cost by category of expenditure ADB funding [figure in Euro and CCV]

Description	EURO			CCV			
	Foreign	Local	Total Costs	Foreign	Local	Total Costs	% foreign
Works	15,553,548	*3,888,387*	19,441,935	1,715,012	428,753	2,143,765	*80%*
Goods	5,713,354	*1,428,339*	7,141,693	629,983	157,496	787,479	*80%*
Services	1,458,819	*364,705*	1,823,524	160,857	40,214	201,071	*80%*
Total Base Cost	***22,725,721***	***5,681,430***	***28,407,151***	***2,505,852***	***626,463***	***3,132,315***	***80%***
Physical Contingencies (5%)	1,299,122	324,780	1,623,902	143,248	35,812	179,060	*80%*
Price Contingencies (2%)	1,247,157	311,789	1,558,946	137,518	34,379	171,897	*80%*
Total Cost (AfDB loan)*	***25,272,000***	***6,318,000***	***31,590,000***	***2,786,617***	***696,654***	***3,483,271***	***80%***
** The total cost above (AfDB Loan) excludes the counterpart contribution of Euro 4,403,210. By addong the counterpart fund, the total project cost should amount to Euro 35,993,211 which is consistent with the other cost tables.*							

Table 2.6: Expenditure schedule by component [figure in Euro]

Components	EURO				
	2014	2015	2016	2017	Total
Component 1 : Data Center and Business Continuity Plan or Disaster Recovery Site	2,237,758	5,221,436	6,713,274	745,919	14,918,387
Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center	1,728,166	4,032,388	5,184,498	576,055	11,521,108
Component 3: Support to Institutional Strengthening and Capacity Building	151,839	354,291	455,516	50,613	1,012,259
Component 4: Project Management	803,791	1,875,513	2,411,374	267,930	5,358,609
Total Base Cost	**4,921,554**	**11,483,627**	**14,764,663**	**1,640,518**	**32,810,363**
Physical Contingencies (5%)	243,585	568,366	730,756	81,195	***1,623,902***
Price Contingencies (2%)	233,842	545,631	701,526	77,947	***1,558,946***
Total Project Cost	**5,398,982**	**12,597,624**	**16,196,945**	**1,799,661**	**35,993,211**

Table 2.7: Components by financing source [figure in Euro]

COMPONENTS	Government		ADB		Total
	Amount	% of total	Amount	% of total	Amount
Component 1 : Data Center and Business Continuity Plan or Disaster Recovery Site	-	0%	14,918,387	100%	14,918,387
Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualificati	-	0%	11,521,108	100%	11,521,108
Component 3: Support to Institutional Strengthening and Capacity Building	-	0%	1,012,259	100%	1,012,259
Component 4: Project Management	4,403,210	82.17%	955,398	17.83%	5,358,609
Total Base cost	**4,403,210**	**13.42%**	**28,407,152**	**86.58%**	**32,810,363**
Physical Contingencies (5%)	0	0%	1,623,902	100%	1,623,902
Price Contingencies (2%)	0	0%	1,558,946	100%	1,558,946
Total Cost	**4,403,210**	**12.23%**	**31,590,000**	**87.77%**	**35,993,211**

2.5 Project's target area and population

2.5.1 The economy of Cape Verde is predominantly service oriented with commerce, transport, tourism, and public services accounting for about three-fourths of GDP. This island's economy suffers from a poor natural resource base, including serious water shortages exacerbated by cycles of long-term drought and poor soil for agriculture on several of the islands. In Cape Verde, remittances from the diaspora supplement the GDP by more than 20%. Despite the lack of resources, sound economic management has produced steadily improved incomes.

2.5.2 The population is estimated at 531,046 (July 2013 est.) with a growth rate of 1.4% and at least 90% of population below the age of 55. About 60% of the total population is considered urban population and the unemployment rate is at least 12.2% and 25% of the population is below poverty line. The proposed project will be located halfway between the city center and Praia's international airport, at a distance of only 3 km respectively.

2.5.3 Cape Verde has a landing point for the Atlantis-2 fiber-optic transatlantic fiber cable system that provides links to South America, Senegal, and Europe. It has about 38 Internet service providers and it ranks 148th in comparison to the world in the number of internet users. These factors make the country strategic position to harness the advantages of its location.

2.5.4 The proposed project will be located halfway between the city center and Praia's international airport, at a distance of only 3 km respectively. The project will contribute to developing the ICT market which was liberalized in 2005 through positioning Cape Verde as an international center for services and as a Gateway to Africa.

2.6 Participatory process for project identification, design and implementation

2.6.1 The conception and operation of the proposed technology park is built on a foundation of participatory and consultative process involving various public and private sector stakeholders who will also be involved during the project implementation as part of its Advisory Board. This participatory consultation process started in 2010 and has involved over 40 consultation forums which covered the contextual analysis and formulation of the project as well as discussions on the strategic vision of the ICT sector in the country.

2.6.2 Stakeholders from the public sector included: (i) Government representatives: Ministry of Finance and Planning, Ministry of Infrastructures and Maritime Economy, Ministry of Higher Education, Science and Innovation and Ministry of Tourism, Industry and

Energy; (ii) Agencies, Directorate Generals and public institutes: Cape Verde Investments, National Communications Agency (ANAC); Agency for Enterprise Development and Innovation (ADEI); Operational Nucleus for Information Society (NOSI); Strategic Policy Center and National Statistics Institute; and (iii) Corporate associations: Barlavento Chamber of Commerce, Sotavento Chamber of Commerce and Cape Verde Association of Young Entrepreneurs (AJEC).

2.6.3 Educational and vocational training institutions have also made inputs to the conception of the project in view of their expected role in the project components on education and training. These include the University of Cape Verde, Jean Piaget University and Vocational Training and Employment Institute (IEFP). Likewise, private sector operators in industry and the diaspora population have also been involved given the expected potential investment from these sectors. The Bank's identification, preparation and appraisal missions discussed with stakeholders including ICT companies, academic institutions, civil society and development partners. The participatory and consultative process helped the design of the project to generate the specialized critical mass in order to develop a solid ICT cluster in Cape Verde.

2.7 Bank Group experience, lessons reflected in project design

2.7.1 The Bank Group intervention in Cape Verde is dated back to year 1977, with 43 operations across several economic and infrastructure sectors and total cumulative approvals of UA 202.7 million. As of January 2013, the active portfolio of the Bank's operations comprises 3 public operations including 2 projects in energy sector and a water mobilization's study for net commitments amounting to UA 14.45 million. The portfolio review in 2012 ranked the country's performance satisfactory and a significant improvement compared to 2009.

2.7.2 The Bank had financed a number of ICT projects at national and multinational levels such as the regional ICT centres of excellence in Mali and Rwanda. The Bank has also supported Main One and EASSY submarine cable systems which have started yielding development results (triggering a bandwidth increase in the markets they serve, at the same time slashing Internet prices). Lessons from implementing these projects include: (i) the need to conduct preliminary architectural design and detailed feasibility study including business plan to ensure quality at entry, and (ii) the need to have partnership agreements with private sector to increase opportunities for new businesses in the country. In addition, lesson learnt from ICT projects implemented in the country include the need for a detailed schedule of requirements prior to project implementation. This has been considered in the design to conduct a detailed engineering design before implementation of the project.

2.8 Key performance indicators

The indicators proposed to monitor the construction and equipment of the Technology Park are: (see logframe). *Impact indicators*: percentage share of ICT sector in GDP; *Outcome indicators*: (i) Additional number of direct and indirect persons employed in ICT Sector; (ii) Number of startups and new businesses established; (iii) Number of annual customers with access to advanced ICT/business facilities; (iv) Number of population trained and certified (% women) (% youth); Internet penetration; *Output indicators*: (i) Number of Data Centre & Business Continuity Plan/Disaster recovery site constructed and equipped; (ii)

Processing capacity installed; (ii) Storage capacity installed; (iii) Number of Business Center, Incubation Center & Training and Qualification Center constructed and equipped; (iv) Number of open offices; (v) Number of Common facilities; (vi) Number of Incubation Center; (vii) Number of training rooms. The detailed feasibility study provided acceptable baseline data. The data to assess outputs and outcomes indicators will be collected and analysed by an Evaluation and Monitoring expert to be recruited by the project.

III. PROJECT FEASIBILITY

3.1 Economic and financial performance

3.1.1 The project is economically and financially viable as shown in table C.1 below.

Table C.1: Key economic and financial figures

FIRR (base case) 7.98%	NPV EUR 13.6 million @ 5%
EIRR (base case) 18.08%	NPV EUR 14 million @ 12%

NB: detailed calculations are available in Annex B7

The assumptions that serve as the basis for calculations of the EIRR are provided in Annex B7. The main assumption are based on the investment, operations & maintenance and re-investment cost during the economic life of project estimated at 25 years. The project is also assumed to become operational in 2017 after the completion of the entire construction works and proper installation of IT equipment. The financial benefits of the project are based on parameters set in the feasibility study prepared in Dec-2012, through a MIC Grant financed by the Bank. It consists of revenues generated through (i) providing housing, hosting and cloud services through the data centre and business continuity plan; (ii) leasing of open and corporate offices, (iii) incubation centre; (iv) training; (v) renting the auditorium, foyer, conference and meeting rooms; (vi) concessions granted for restaurant, gymnasium, and stores. The economic benefits of the project consist of reduction in cost and time spent on overseas training, and job creation. By the time the new project attains full capacity, it will be able to create 1,014 new jobs directly tied to the business of the park. In addition, 1,217 indirect jobs will be created through services not directly tied to the park's activities, such as marketing, accounting, tourism, audit, security, cleaning, and renovation. The project is also expected to generate additional unqualified benefits from improved governance, and other social benefits such as competitiveness, enabling business environment, and robust capacity for public and private sector.

In addition, the project benefits greatly from the political stability in Cape Verde and its exceptionally good access to international broadband capacity. These two factors make the technology park the location of choice for international ICT firms, particularly for the Portuguese speaking countries. It has the potential to become the technology hub between South America, Europe and Africa for the Portuguese community.

3.1.2 Most of the project facilities, buildings, equipment, and other infrastructure will reach different values at the end of their economic live. Hence, the salvage value was calculated individually with an average of 30% (please see annex B7 – Table 7.1 for detailed calculation). Sensitivity analysis has been carried out and examined against different risks

associated with the project. Sensitivity analysis was conducted with variations in several parameters. The analyses, which are presented in Annex 7 shows that despite the increase in cost and decrease in revenues, the project remains economically and financially viable as stated in tables *C.2* and *C.3* below:

Table C.2: EIRR Sensitivity Analysis

(figure in EUR 000's)

Assumption	EIRR	NPV
Base Case Scenario	18.08%	14,058
Increase in total Cost by 10% (incl. O&M expenses)	15.61%	8,304
Decrease in Revenues by 10%	15.36%	6,915
Increase in total Cost by 10% and decrease in revenues by 10%	12.96%	1,177

Table C.3: FIRR Sensitivity Analysis

(Figure in EUR 000's)

Assumption	FIRR	NPV
Base Case Scenario	7.98%	13,637
Increase in total Cost by 10% (incl. O&M expenses)	5.62%	2,969
Decrease in Revenues by 10%	5.37%	1,605

3.2 Environmental and Social impacts

Environment

3.2.1 The project has been rated by ORQR as a category II project considering that the project will not involve significant negative environmental and social impacts and these impacts can be readily mitigated. The project site with a footprint of 8 hectares is identified within the urban development plan and is on a derelict piece of land which has no direct linkage to environmentally or socially sensitive areas. As such the minimal adverse environmental impacts expected are typical of building construction activities such as elevated dust, noise, traffic management, runoff management, etc. that are largely site specific.

3.2.2 The direct positive environmental impacts of the project will arise due to the landscaping activities that will be carried out during construction. From a broader perspective, the project has the potential to contribute to the enhancement of environmental natural resources for the country through supporting the country's growing potentials in virtual tourism and scientific marine research. This derives from the electronic data storage and processing capacity, which are essential for these activities that will be made available through the project.

3.2.3 In line with the requirements of applicable Bank procedures, the borrower has developed an Environmental and Social Management Plan (ESMP) which details the impacts of the project and measures to enhance positive impacts while avoiding, minimizing and mitigating negative impacts. This ESMP has been reviewed to ensure its compliance with the provisions of the Bank and has been disclosed accordingly. The project sponsors are also in engagement with the national Directorate of Environment who will oversee the assessment,

management and monitoring requirements for the project in accordance with the environmental legislation of the country. See Annex-B8 for further details on Environmental and Social Analysis.

Social

3.2.4 The characteristics of the project present opportunity for positive socioeconomic impacts. The project will enhance the e-governance activities in the country, given that the existing data center is over subscribed. The increased IT capacity from the project will translate to speeding up various government activities including the judicial process, automated healthcare management systems, the education sector in the areas of e-learning all of which will have positive implications on poverty reduction.

3.2.5 In the more immediate context, it is anticipated that the Park will generate new 1,014 jobs directly tied to the business of the park's components (of which 50% are women). In addition to these, 1,217 jobs will be created through companies residing in the business center and start-ups in the incubation process (of which 30-40% are women). It is expected that at least 70% of this workforce will be sourced from within the country.

3.2.6 The project will also have positive socioeconomic impacts through its contribution to entrepreneurship and vocational training especially in the ICT industry. The incubation centre which will be the second in the country will be a valuable facility to the countries growing population of computer science graduates, estimated at 2000 per year, who may have interests in developing IT startups in areas such as; cloud services for business and e-government solutions, mobile applications, particularly mobile banking applications, web applications, PC/tablet/smartphone convergence and social media.

3.2.7 The vocational training component of the project is also designed to provide higher level certifications in different professional skills aspects of ICT. It is noted that this type of certification facility is currently unavailable in the country and interested citizens only rely on foreign facilities.

Climate Change

3.2.8 Cape Verde has dual vulnerability to climate change, both as a small island and as an arid country in the Sahel region. In this context, the project site is at considerable distance from the coast line, about 4km, and at about 60m above sea level. However, it will rely on the national water utility agency for the supply of water, this gives for better integrated water management process at a national level. The project civil engineering design also integrates the need for efficiency in water management. The project will also rely on the national grid which has up to 25% of the energy generated from renewable sources, it will however have a backup diesel generator. The project itself will also contribute indirectly to climate change mitigation, given its potential to facilitate the automation of various business process and as such yield efficiencies in traditional energy consumption and transportation behaviors.

Gender

3.2.9 The project is expected to enhance gender related development issues. Statistics from the education sector show a higher proportion of female beneficiaries compared to male especially at higher education levels. Likewise information from the existing facilities similar to the project in the country also shows a higher proportion of female participants. For

example, the existing business incubation center is currently hosting 3 female entrepreneurs compared to 2 males. It is therefore expected that the project will continue to enhance these aspects of development and poverty reduction through its implementation arrangements to encourage broader participation.

3.2.10 The HIV prevalence rate in the country is below 1%, while the government has plans and programmes with the targets of reducing related death rates, infection rate and discrimination to 0% by 2015. The project is expected to benefit from this programme and would also have its own activities in line with government directives as part of its social management plan.

Involuntary resettlement

3.2.11 The project will not involve an involuntary displacement as the site is currently not used for any purpose and belongs to the government.

IV. IMPLEMENTATION

4.1 Implementation arrangements

4.1.1 The implementation of the project will use existing government structures currently implementing Information Communication and Technology (ICT) projects. The arrangement is incorporating lessons and experiences gained with different operations in Cape Verde and the region. The "Operational Nucleus for Information Society - (NOSI)", a Government Agency, which has been created under the Prime Minister's Office, shall be the Executing Agency (EA) of the project. The implementation of the project shall be carried out through a Project Management Team (PMT), under NOSI, currently implementing ICT projects, and managing the feasibility study of the Project. See Annex-B3 for further details on NOSI and its institutional set-up.

4.1.2 An assessment made by the Bank on the capacity of the implementing agency revealed that NOSI, through an existing PMT, has implemented or in the process of completing projects financed by other international donors such as China Exim Bank, World Bank, Government of Portugal, United Nations, and the Investment Climate facility for Africa (ICF). It was also revealed that the PMT has the necessary core skills (i.e. Finance/Admin. Officer, a Civil Engineer and (3) ICT Specialists) but requires additional strengthening to be sufficient. Therefore, additional technical staff will be added to the PMT namely: Project Coordinator; Monitoring & Evaluation Officer; Accountant; Procurement Officer; Environmental and Social Officer. All members of the PMT will be engaged and paid by the Government. It is worth mentioning that the proposed project will add considerable increase to projects being implemented or managed by NOSI. This is anticipated to be met with adequate development in NOSI operational capacity, through the project institutional strengthening and capacity building component.

4.1.3 Due to the various parties involved in the project, a project steering committee (PSC) will be established and Chaired by the Prime Minister's office to (i) ensure proper coordination and (ii) oversee the implementation of the project. Members of the PSC will be composed of designated representatives from Ministries of: (i) Finance and Planning; (ii) Infrastructure and Maritime Economy; (iii) Tourism, Industry and Energy; (iv) Higher

Education and Innovation; (v) Agency for Entrepreneurship Development and Innovation; (vi) in addition to representatives from the Association of Young Entrepreneur; Banks; and the Chambers of Commerce.

Disbursement Arrangement

4.1.4 The Direct Payment and Reimbursement Guarantee Methods will be used to pay contractors/suppliers to be employed under the project. Disbursements under the loan would be made in accordance with the list of goods and services and Bank's rules and procedures as laid-out in the Disbursement handbook as applicable.

Financial Management

4.1.5 The project financial management transactions will be managed by the Project Management Team (PMT) under NOSI. It will maintain accounts in accordance with international accounting standards and will ensure that accounting and financial management systems include internal controls and procedures, and a set of records acceptable to the Bank.

4.1.6 The PMT will be staffed with an experienced qualified Accountant who will be responsible for record keeping, accounts, disbursements preparation and financial statements. It will be equipped with appropriate autonomous system, i.e. accounting software. Separate accounts will be maintained for the project, in accordance with the Bank's requirements. Detailed accounts concerning expenditure financed by the Bank and the Government should facilitate the identification of expenditure by project component, category of expenditure and source of finance.

Audit

4.1.7 The annual financial statements and internal control will be audited annually in accordance with the Terms of Reference approved by the Bank. The Audited report will be sent to the Bank no later than six month after the end of each fiscal year audited. Technical Annex B4 and B6 provide details on the financial management and audit arrangements respectively.

Procurement Arrangements

4.1.8 Procurement of International Competitive Bidding (ICB) contracts and Consulting Services for the Project will be carried out in accordance with the "Bank's Rules and Procedures for Procurement of Goods and Works" (May 2008 Edition, Revised July 2012) and "Bank's Rules and Procedures for the Use of Consultants (May 2008 Edition, revised July 2012), using the relevant Bank Standard Bidding Documents. Procurement of National Competitive Bidding (NCB) contracts will be carried out in accordance with the National Procurement Law No. 17/VII/2007 dated September 10, 2007 and updated on January 5, 2009, using the National Standard Bidding Documents (NSBD), subject to the revisions, exceptions and provisions stipulated in the Financing Agreement.

4.1.9 NOSI shall have the overall responsibility for implementing and carrying out procurement activities related to goods and services. In accordance with the Legal Regime of Public Works Contracts Law 54/2010 which requires that all procurement activities for construction works be carried out by the Ministry of Infrastructure and Maritime Economy,

NOSI shall delegate procurement activities related to construction civil works to the General Infrastructure Directorate (GID) under the Ministry of Infrastructure and Maritime Economy. The coordination under this Project will be agreed upon between NOSI and the Ministry of Infrastructure and Maritime Economy. Technical Annex B5 provides details on the procurement arrangements, the list of procurement items, procurement rules and procedures relating to goods, works, consulting services, and training, as well as the review procedures required by the Bank.

4.2 Monitoring

Monitoring will be based on the Project log-frame, using project resources. The PMT will be responsible for monitoring, and report regularly to the Project Steering Committee (PSC) and to the Bank. Another level of monitoring will be through quarterly progress reports, annual audits and Bank supervision missions. The proposed Project will support M&E capacity development.

Timeframe	**Milestone**	**Monitoring process / feedback loop**
October 2013	Strengthen the operational and technical capacity of Project Management Team (PMT). Project launched.	Launching mission is organized with different skills mix
December 2013	PMT is in place	Completed terms of reference for the detailed architectural &engineering design document, completed tender document, supervision reports
January 2014	Launch Request for Proposals for the recruitment of a firm for the detailed architectural design	Completed detailed architectural &engineering design document, supervision reports
June 2014	Implementation of works	Contract agreement with the selected construction company
June 2016	Construction and equipping of the DC and BCP completed	Quarterly Progress Reports Supervision missions
December 2016	Construction and equipping of the BC, IC and TQC completed	Quarterly Progress Reports Supervision missions
December 2017	Project completed	Last Quarterly Progress Reports. PCR mission planned

4.3 Governance

4.3.1 Cape Verde has made good governance a key pillar of its development strategy. In 1993, the Government established the Tribunal de Contas (Auditor/Controller General) with assistance from the Netherlands. This was a significant step forward from relying on sanctions and penalties against fraud and corruption criminally punishable. The establishment of the Tribunal has alleviated fraud and corruption in the country. Governance Indicators for Cape Verde show that in terms of Political Stability it has consistently ranked among the 75-90th percentile of countries in the world. The record on "Control of Corruption" has been improving steadily since 1998 and it is now approaching the 75th percentile.

4.3.2 With regards to ICT sector, the Government has, since 2003, embarked on the implementation of its Economic Transformation Strategy (ETS), a long-term national development vision that seeks to transform Cape Verde into an emerging economy. ICT is

one of the seven (7) key clusters of the ETS. The idea is for Cape Verde to become a cyber-island and provide services such as business process outsourcing, call centers, and develop software for export, especially in electronic and integrated governance, given the national successes in this area. The plan is to anchor this on the successes recorded by the state agency for the information society, through the Operational Nucleus for the Information Society, (NOSI). NOSI began the ambitious e-government reforms in 1998. By 2008, it had set up a national network for the public sector, including the municipalities; designed an integrated financial management system (SIGOF) that provides budget information in real time; set up a national identification database unifying information from several public registries; and developed domestic capacity to design software applications adapted to the needs of Cape Verde's public sector.

4.3.3 For the present project, a Project Steering Committee (PSC) will be established during implementation to oversee the overall management and operations of the project. The existing project management team at NOSI will report to the PSC and the Bank on a regular basis.

4.4 Sustainability

4.4.1 The sustainability of the project depends on the degree of ownership by the country and the level of their commitment to achieve the objective of the project. In this regard, the Park will have the adequate level of support of the stakeholders such as the government, the academic community and the private sector (companies from the ICT and other sectors, e.g. financial, education and innovation, etc.) who will also be involved during the project implementation.

4.4.2 The Technology Park will also be financially sustained through revenues directly generated by the Park's Data center, Business center and Training and Qualification center. The sustainability of its infrastructure depends on the availability of resources to cover the recurrent cost. The resources from revenues will be sufficient to sustain the Park's maintenance needs. An average of 7.5 million Euros (UA 6.4 million) annually will be revenue generated by the Park during the first five years of operations. The Park will be fully sustained through revenue from the services (cloud, hosting and housing) provided by the DC.

4.4.3 In addition, the companies operating in the Park will generate revenues and jobs will be created directly and indirectly. Further, the Park will be economically sustained by tax revenues; salaries paid to local population; efficiency gains proceeding from the increased use of Information Technology in business; and savings proceeding from imports reduction (e.g. ICT technicians will get their certifications domestically, BCP services will no longer be hosted abroad, etc.)

4.4.4 The Park will be socially sustainable as it will succeed in generating and sharing benefits to the whole community around it, contributing to economic development and poverty alleviation. The involvement of the local communities and private sector (national and international) will be promoted especially the involvement of the private sector through various types of partnership agreements will contribute to the sustainability of the Park.

4.4.5 The Park will be developing skills as a factor of sustainability. The academia will be actively involved in ICT training, mentoring and technology transfer to incubated companies, while adequate promotion of business opportunities requiring venture financing will be necessary for the Diaspora who can also participate in business development activities. The relationships with media partners will be pursued by providing regular information concerning Park activities, while assuring at the same time adequate national and international exposure to the Park.

4.4.6 Finally, energy efficiency will not be disregarded, through the use of bioclimatic criteria in architectural design, solar protections, passive solar systems, thorough insulation, high performing glazing and windows, and appropriate ventilation systems.

4.5 Risk management

The project has identified key risks that may negatively affect project outputs and outcomes. The table below presents the main risks, which is elaborated in the results-based logical framework.

Risk	Rating	Risk Mitigation Factors
Failure in attracting anchor companies	M	(i) Partnership with anchor international companies to be able to provide the competitive, innovative and added value ICT services. (ii) Marketing activities (iii) lower taxes, etc.
Proliferation of technology Park in Africa.	L	Provide quality services at competitive prices.
Failure to maintain customer base and skilled labour	L	Provide high quality of ICT/business services through implementing skills development programme for staff; and instituting attractive retention package to the staff.
High cost of telecommunication services and energy	L	Government assurance of long term low cost communication fees with telecom operators and electric utilities providing telecom services and electricity to the park.
Lack of adequate support to incubated companies	M	Implementation of a structured mentoring programme with participation of experts in start-up incubation.

4.6 Knowledge building

4.6.1 The project design has innovative aspects from which it is possible for the Bank to acquire knowledge for its future use. The design process of the project involves the project preparation activities such as detailed feasibility studies, preliminary master plan design and analysis of technical and financial data, etc.

4.6.2 The Bank will use and disseminate the knowledge generated from the project preparation and implementation activities as well as exchange of experience between the project staff and experts in Cape Verde.

V. LEGAL INSTRUMENTS AND AUTHORITY

5.1 Financing instrument and conditions

The financing instrument proposed is an ADB project loan of Euro 31.59 million to the Republic of Cape Verde.

5.2 Conditions associated with Bank's intervention

Conditions precedent to Entry into force of the Loan Agreement: The loan agreement shall enter into force upon the fulfillment by the Borrower of the conditions set out in Section 12.01 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements of the Bank.

Conditions precedent to First Disbursement: The obligations of the Bank to make the first Disbursement shall be conditional upon the entry into force of the loan agreement.

Other Conditions: The Borrower shall, in form and substance satisfactory to the Bank, fulfill the following conditions:

(i) No later than six months after the entry into force of the Agreement, provide evidence of the recruitment of a Project Coordinator; a Monitoring and Evaluation Officer; an Accountant; a Procurement Officer; an Environmental and Social Officer, whose qualifications and experience shall be acceptable to the Bank;

(ii) No later than six months after the first disbursement, provide evidence of counterpart funding of: (a) the public land leasehold property documents; and (b) the project management team charges to be included annually in the national budget;

(iii) No later than six months after the first disbursement, provide evidence of the establishment of the Project Steering Committee (PSC) chaired by the Prime Minister's office. Members of the PSC will be composed of designated representatives from Ministries of: (a) Finance and Planning; (b) Infrastructure and Maritime Economy; (c) Tourism, Industry and Energy; (d) Higher Education and Innovation; in addition to representatives from (e) the Agency for Entrepreneurship Development and Innovation; (f) the Association of Young Entrepreneurs; (g) Banks; and (h) Chambers of Commerce.

5.3 Compliance with Bank Policies

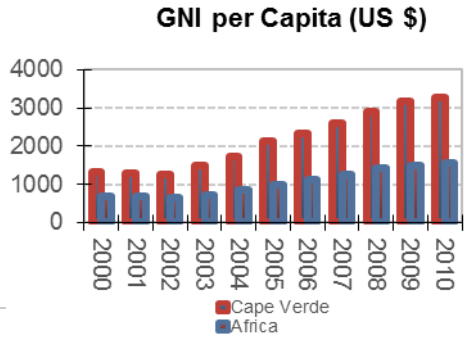
This project complies with all applicable Bank policies.

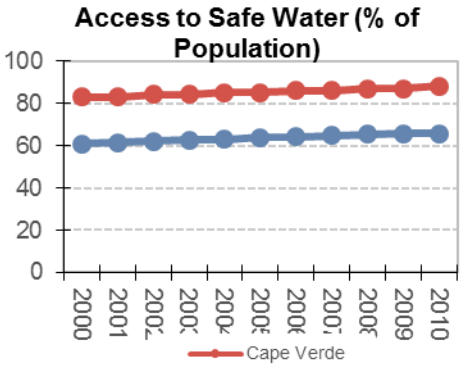
VI. RECOMMENDATION

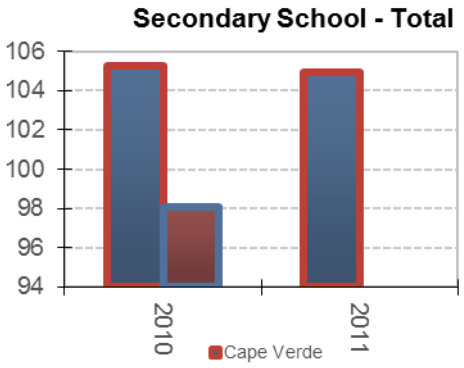
Management recommends that the Board of Directors approve the proposed loan of Euro 31.59 million to the Republic of Cape Verde for the financing of the Technology Park Project, for the purposes and subject to the conditions stipulated in this report.

Appendix I. Country's comparative socio-economic indicators

Indicator	Year	Cape Verde	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)		4,0	30 046,4	80 976,0	54 658,4
Total Population (millions)	2012	0,5	1 068,4	5 628,5	1 068,7
Urban Population (% of Total)	2012	62,5	40,8	44,8	77,7
Population Density (per Km²)	2012	124,1	34,5	66,6	23,1
GNI per Capita (US $)	2010	3 270,0	1 548,9	2 780,3	39 688,1
Labor Force Participation - Total (%)	2012	45,7	37,8	0,0	0,0
Labor Force Participation - Female (%)	2012	39,0	42,5	39,8	43,3
Gender -Related Development Index Value	2007	0,7	0,5	..	0,9
Human Develop. Index (Rank among 169 countries)	2012	132,0	3 972,0	..	..
Popul. Living Below $ 1 a Day (% of Population)	2002	21,0	158,1	25,0	..
Demographic Indicators					
Population Growth Rate - Total (%)	2012	0,9	2,3	1,4	0,7
Population Growth Rate - Urban (%)	2012	2,0	3,4	2,4	1,0
Population < 15 years (%)	2012	30,2	40,0	29,2	17,7
Population >= 65 years (%)	2012	5,6	3,6	6,0	15,3
Dependency Ratio (%)	2012	55,8	77,3	52,8	..
Sex Ratio (per 100 female)	2012	98,6	100,0	934,9	948,3
Female Population 15-49 years (% of total population)	2012	27,0	48,6	53,3	47,2
Life Expectancy at Birth - Total (years)	2012	74,3	58,1	65,7	79,8
Life Expectancy at Birth - Female (years)	2012	77,8	59,4	68,9	82,7
Crude Birth Rate (per 1,000)	2012	20,0	34,2	21,5	12,0
Crude Death Rate (per 1,000)	2012	5,4	10,9	8,2	8,3
Infant Mortality Rate (per 1,000)	2012	18,4	70,8	53,1	5,8
Child Mortality Rate (per 1,000)	2012	21,6	111,3	51,4	6,3
Total Fertility Rate (per woman)	2012	2,3	4,3	2,7	1,8
Maternal Mortality Rate (per 100,000)	2010	79,0	402,3	440,0	10,0
Women Using Contraception (%)	2012	63,3	31,6	61,0	75,0
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2010	57,2	53,6	77,0	287,0
Nurses (per 100,000 people)*	2008	131,7	905,0	98,0	782,0
Births attended by Trained Health Personnel (%)	2005	77,5	1 472,2	39,0	99,3
Access to Safe Water (% of Population)	2010	88,0	65,7	84,0	99,6
Access to Health Services (% of Population)	1988	81,7	65,2	80,0	100,0
Access to Sanitation (% of Population)	2010	61,0	39,8	54,6	99,8
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	1,0	4,6	161,9	14,1
Incidence of Tuberculosis (per 100,000)	2011	243,0	234,6	..	..
Child Immunization Against Tuberculosis (%)	2011	99,0	81,7	89,0	99,0
Child Immunization Against Measles (%)	2011	96,0	76,6	76,0	92,6
Underweight Children (% of children under 5 years)	1994	11,8	63,6	27,0	0,1
Daily Calorie Supply per Capita	2009	2 644,0	2 568,8	2 675,2	3 284,7
Public Expenditure on Health (as % of GDP)	2010	4,1	5,9	4,0	6,9
Education Indicators					
Gross Enrolment Ratio (%)		..	..	..	..
Primary School - Total	2011	109,3	101,9	106,0	101,5
Primary School - Female	2011	104,9	98,1	104,6	101,2
Secondary School - Total	2011	89,7	42,3	62,3	100,3
Secondary School - Female	2011	96,9	38,5	60,7	100,0
Primary School Female Teaching Staff (% of Total)	2011	67,3	43,7	..	..
Adult Literacy Rate - Total (%)	2010	84,3	67,0	19,0	..
Adult Literacy Rate - Male (%)	2010	79,4	58,3	..	..
Adult Literacy Rate - Female (%)	2010	89,3	75,8	..	..
Percentage of GDP Spent on Education	2010	5,6	5,3	..	5,4
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	11,7	8,4	9,9	11,6
Annual Rate of Deforestation (%)	2000	-9,3	0,6	0,4	-0,2
Annual Rate of Reforestation (%)		..	..	..	..
Per Capita CO2 Emissions (metric tons)	2009	0,6	1,2	..	..







Sources : ADB Statistics Department Databases; World Bank: World Development Indicators
UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

Last update: April 2013

Note : n.a. : Not Applicable ; … : Data Not Available.

Appendix II. Table of ADB's portfolio in the country

List of active projects (loans and grants) by Sector:

Sector / Operation	*Approval Date*	*Amount (UA)*	*Source*	*Disb. rate (%)*	*PFI Status**
ENERGY - Project for reinforcing the electricity production, transmission and distribution capacities on the island of Santiago	19/12/2007	4,820,000	Loan	87.7	Non PP/Non PPP
- Electricity transmission and development network development project	03/11/2011	8,420,000	Loan		Non PP/Non PPP
TRANSPORT - Praia airport expansion and modernization	22/05/2013	25,230,769	ADB Loan		-
WATER AND SANITATION - Mobilization of water resources	04/01/2012	1,226,343	AWF Grant		Non PP/Non PPP
MULTISECTOR - Capacity building grant for micro, SME development through business incubators	08/03/2013	773,659	MIC Grant		Non PP/ Non PPP
TOTAL		**40,470,771**		**10.5**	**Non PAR**

* PFI Status (from SAP):

PP	Problematic project
PPP	Potentially problematic project
PAR	Project-at-risk (refer to project that are either PP or PPP)

Appendix III. Key related projects financed by the Bank and other development partners in the country

Project	*Financing source*	*Amount*
Upgrade e-Government	China	USD 17,000,000
Data Center Technological solutions	Portugal	Euro 8,000,000
Feasibility Study - Preparation of the Technology Park project	MIC grant (AfDB)	UA 297,188

Appendix IV. Map of the Project Area