AFRICAN DEVELOPMENT BANK

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FOR INFORMATION

MEMORANDUM

TO : **THE BOARD OF DIRECTORS**

FROM : **Cecilia AKINTOMIDE**
Secretary General

SUBJECT : **CAPE VERDE : TECHNOLOGY PARK PROJECT**

ADB LOAN OF EUR 31.59 MILLION

TECHNICAL DOCUMENT*

Please find attached the Technical Annexes of the above-mentioned project.

Attach.

Cc. : **The President**

*Questions on this document should be referred to:			
Mr. A. OUMAROU	Officer-In-Charge	OITC	Extension 3075
Mr. F. PERRAULT	Regional Director	ORWB	Extension 2036
Mrs. L. MOKADEM	Resident Representative	SNFO	Extension 6530
Mr. S. JACK	Chief Information and Telecom. Engineer	OITC	Extension 3000

SCCD:C.H.

AFRICAN DEVELOPMENT BANK

PROJECT: Technology Park
COUNTRY: Cape Verde

TECHNICAL ANNEXES

Date: July 2013

Appraisal Team	**Team Leader:**	Team Leader: Mr. Salieu Jack, Chief Information and Telecom. Engineer, OITC
	Team Members:	Team Members: Mr. Ali Yahiaoui, Chief ICT Officer, OITC Mr. Enock Yonazi, Principal Telecom. Engineer, OITC Mr. Ahmed Attout, Senior Financial Analyst, OWAS Ms. Mose Mabe-Koofhethile, Principal Procurement Specialist, ORPF Mr. Uche Duru, Senior Environmental Specialist, ONEC Mr. Adalbert Nshimyumuremyi,Chief Country Economist, ORWB/SNFO Mr. Alain Nna, Regional Financial Mgmt. Coordinator, ORPF Mr. Corbin Guedegbe, Chief Education Analyst , OSHD; Mr. Jose Da Graca Pinto, Operations Officer, SNFO
	Sector Director:	Sector Director: Mr. Amadou Oumarou, OIC, OITC
	Regional Director:	Regional Director: Mr. Franck Perrault, ORWB Res.Representative: Mme. Leila Mokaddem, SNFO

Peer Reviewers	Mr. A. Ali, Principal Transport Engineer (OITC); Mr. K. Mhirsi, Chief Investment Officer (OPSM); Mr. S. Ijeh, Chief Financial Economist (OSGE); Mr. P. Opoku-Darkwa, Senior Transport engineer (OITC); Mr. M. Ali; Principal Systems Engineer (CIMM); Ms. K. Mfalila, Principal Environmental Specialist

A. NATIONAL DEVELOPMENT AGENDA, SECTOR BRIEF AND JUSTIFICATION FOR THE COUNTERPART FINANCING LEVEL OF THE PROJECT

A.1 Policy Context

1.1 The Government has, since 2003, embarked on the implementation of its Economic Transformation Strategy (ETS), its long-term national development vision that seeks to transform Cape Verde into an emerging economy. The transformation is intended to be both extensive and intensive. The agenda provides a broad vision for a transformed economy, anchored on seizing Cape Verde's geostrategic location to build the country up as an international platform for high value added services. It is extensive in that it recommends broadening the country's production base by developing niche sectors such as tourism, maritime economy, aero-business, information and communication technologies, financial services, creative economy and agribusiness. Information technology is one of the 7 key clusters of the ETS. The goal is for Cape Verde to become a cyber-island and provide services such as business process outsourcing, call centers, and development of software for export especially in electronic and integrated governance. The country intends to anchor this on the successes recorded by the state agency for the information society, through the Operational Nucleus for the Information Society, (NOSI).

1.2 The Growth and Poverty Reduction Strategy Paper (GPRSP), which endorses the principles of the ETS and those of the Government Programme, is the reference framework for donor operations in the various sectors. The Project is aligned to the GPRSP II (2008-2011). It is also aligned to three out of the five Cape Verdean development challenges included in the Government GPRSP III (2012-2016): entrepreneurship, human development, and economic infrastructures. The development of 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 centered on the potential of ICTs in leveraging the country's sustainable economic growth. As such, its developmental framework was rooted in promoting the five Cape Verdean development challenges: - 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 challenges.

1.3 The Country Strategy Paper (CSP 2009-2012), approved in October 2009 and Extended to end 2013, is aligned on the ETS and GPRSP II (2008-2011). It was underpinned by two main pillars: (I) supporting economic and financial governance gains; and (II) contributing to infrastructure development.. The project falls under Pillar I & II of the CSP aiming at enhancing the competitiveness of the economy and contributing to infrastructure development, which was also identified as a priority sector for the Bank's intervention. In addition, the proposed project objectives are in line with the Bank's Medium Term Strategy (2007-2012) and the Bank's Strategy (2013 – 2022) recently approved by the Board with infrastructure focus, and the Bank's ICT operations strategy (2012 – 2014).

A2 Project Sector of Intervention

2.1 In Sub-Saharan Africa, Cape Verde is among the countries with the most advanced ICT sector. The ICT market liberalization in 2005 accelerated the penetration of telecommunication services, primarily in the areas of mobile telephony from 21% in 2005 to 83% in 2012, and the Internet service from 8% to 38% in 2012. There has also been an increase in the number of ICT companies from 35 in 2005 to 95 in 2012. The country currently has network coverage on its nine (9) islands, attributed to investments in the communications infrastructure by both public and private entities. The project currently being prepared will further contribute to developing the ICT market through positioning Cape Verde as an international center for services and as a Gateway to Africa. The driving force behind the advancement of ICT in Cape Verde is the ambitious transformation agenda of the Cape Verdean government and vision, aimed at promoting sustained economic growth and reducing poverty.

AFRICAN DEVELOPMENT BANK

PROJECT: Technology Park
COUNTRY: Cape Verde

TECHNICAL ANNEXES

Appraisal Team	Regional Director	: Mr. J.F.M. PERRAULT,	ORWB
	Sector Director	: Mr. A. OUMAROU,	OITC
	Team Leader	: Mr. S. JACK,	OITC

2.7 The project aims to create an ICT Cluster for the delivery of both internal and external services. The services to be provided internally will target Public Administration and sectors such as Education and Health, businesses in major economic sectors, namely tourism, light industry, fisheries, banking (Financial Marketplace), transport and communications. External services shall be delivered in the scope of international production networks, integrated within automated and mass production chains of major ICT producer and consumer businesses.

2.8 The development of an ICT cluster requires a solid and detailed strategy, capable of defining precise segments within both the internal (most dynamic sectors and Public Administration) and external markets. Such ICT clusters will significantly benefit from the creation of teams of highly skilled professionals capable of attracting investment, managing fund raising in a proactive manner, undertaking direct negotiations with major business groups, negotiating incentive schemes with the Government as well as mobilizing internal productive capacity. The economies of West Africa, Portugal, European Union (particularly host countries to Cape Verdean emigrant communities) and North America are expected targets of this strategy.

A.3 Justification for the counterpart financing level of the Technology Park

The proposed project will be jointly funded by the Bank and the Government of Cape Verde. The Bank's contribution covers 88% of the project total cost (a loan of UA 27 million), while the Government contributes to the funding up to 12% (UA 3.7 million).

Following the reclassification of Cape Verde from category A to category B in 2009, the Technology Park is the second project the Bank envisages to finance under the ADB public window and for which the Bank's contribution represents 88% of the total cost. On request of the Government and in accordance with Section 4.2.2 of Policy on Expenditures Eligible for Bank Group Financing (revised March 19, 2008), the level of the national counterpart was determined on the basis of the following criteria:

(i) Country's commitment to implement its development agenda: Cape Verde's successful socio-economic development during the last decade is widely recognized. Despite its vulnerability due to its fragmented territory, the small size of its population, its dry Sahel climate, and scarce natural resources, the country recorded one of the most impressive economic performances in Africa, with GDP growth averaging 7% between 2004 and 2007. Per capita income increased substantially while poverty declined significantly and the country was heading towards achieving most of the Millennium Development Goals (MDGs). This socio-economic development was supported by the implementation of the Economic Transformation Strategy (ETS) adopted in 2003, which represents the country's long term development vision. As a result of Cape Verde's prolonged successful overall performance, the country was upgraded to Middle Income Country (MIC) status by a United Nations Resolution in 2008. The Growth and Poverty Reduction Strategy Paper (GPRSP), which endorses the principles of the ETS and those of the Government Programme, is the reference framework for donor operations in the various sectors. The country's public expenditure spending indicates that the authorities are committed to funding the development program and that the Bank and other donor financing are fairly well integrated into the Government's budget.

(ii) Country's Financial Allocation to the Targeted Sector

Information technology is one of the 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

2.2 It is worth mentioning that the integration of Cape Verde into the world economy is one of the key strategic objectives outlined in the GOP's (Strategic Development Objectives) where strong emphasis is placed on the need to develop policies geared towards the increase of productivity and competitiveness of all sectors that are most directly confronted with international competition, namely tourism, transport and telecommunications, light industry and fisheries, as well as the future financial marketplace. An economic growth based on increased productivity with the private sector as its key driving force is also envisaged.

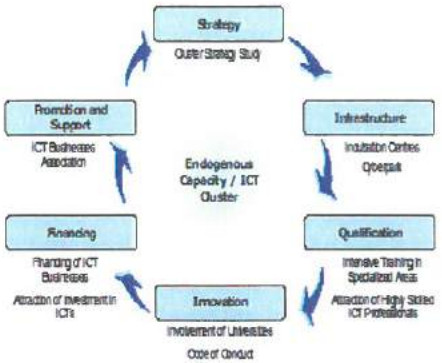

Figure 1 Development of an ICT Cluster

2.3 In this context, ICTs play a key role for various reasons. In the first place, the economy of Cape Verde must adapt itself to the new economic age marked by the globalization of an increasingly "connected" international economy, where countries experience increasing difficulties in maintaining "economic units protected from competitiveness", where productivity grows with the support provided by the new technologies and through innovation of both processes and products, namely in the modernization of traditional sectors and the creation of new businesses. To achieve these objectives, Cape Verde needs to expand its infrastructure and the use of ICTs in its economy, promoting a digital and proactive culture in the business environment.

2.4 On the other hand, the ICTs country challenges should be viewed as an opportunity for Cape Verde. The knowledge-based economy environment that the country is aspiring to establish will enable Cape Verde to create an ICT industry based on its competitive advantages, namely, in the various segments of the ICT ecosystem where geographically disintegrated services (telenetworking) may be delivered in a more competitive way in Cape Verde. Examples of this include, for instance, call centers, BPO, multimedia content production, software development, web applications, and other associated services. However, only through the implementation of long-term concerted policies will it be possible for Cape Verde to develop the capacity and competitiveness required for seizing such an opportunity.

2.5 The fact that the country does no longer belong to the group of Least Advanced Countries (LAC) may, in time, limit Cape Verde's capacity to obtain external financial support, involving stricter requirements in terms of its endogenous growth. This fact, in the context of the new world economic model and the soon to be created international financial marketplace, further reinforces the urgency and importance of ICTs development in Cape Verde.

2.6 Further, the creation of new business opportunities seeks to create a favourable environment for the development of new ICT businesses and services which will result in attracting investment and ICT high skilled professionals, especially foreign-based Cape Verdeans, in order to boost the private sector and reinforce competition.

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. NOSI is now providing technical assistance to other countries on the continent. The development of 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 centered on the potential of ICTs in leveraging the country's sustainable economic growth. As such, its developmental framework was rooted in promoting the five Cape Verdean development challenges: - good governance; entrepreneurship; development of human capital; social development and basic and economic infrastructure.

(iii) Country's Debt Level and Budget Situation: The country achieved moderately satisfactory economic performance during the period 2009-2012. This was mostly due to a deterioration of the external economic environment, resulting from the international financial crisis which broke out in 2008 and the public debt crisis in the Eurozone. Real GDP growth dropped from 6.2% in 2008 to 3.6% in 2009, the lowest rate of the last 10 years. Tourism receipts, the engine of Cape Verde's economy, fell by 16%, contributing to a decline in fiscal revenue of 9.4%. The ensuing higher deficit was mainly covered by the Bank's budget support operation (PRSSP II). In 2010, Cape Verde adopted countercyclical fiscal measures, primarily in the form of higher capital expenditure outlays. As a result, GDP growth accelerated to 5.2% in 2010. However due to persistent recession in the Eurozone, that adversary impacted on foreign aid and foreign investment, GDP rates dropped up to 5% in 2011 and 4% in 2012.

The expansionary fiscal policy stance taken by the Government to stimulate growth and mitigate the crisis has led to a spiraling budget deficit and indebtedness level increase. The overall budget deficit increased from an average 1.3% of the GDP in the pre-crisis period (2006-2008) to an average 9.9% in the post-crisis period (2009-2012), while the primary surplus passed from a surplus 0.4% of GDP to a deficit 8.1% in the same period. The simultaneous drop in tax revenues and donor grants, the ongoing expenditure demands of the government's public investment program and the limited space for further cuts in recurrent expenditures are responsible for the fiscal situation. The Ministry of Finance and Planning (MFP) intends to raise the tax-to-GDP ratio to 25% in 2016 by reforming tax policy, tax procedures and tax administration.

As a result of the increase in the public sector's borrowing requirements to finance large investments in infrastructure, the total nominal government debt has increased from 69% of the GDP in 2009 to an estimated 81.0% in 2012. The external debt represents 59.8% of the GDP in 2012 although it is predominantly concessional. Contracted mostly from the non-banking sector, the domestic debt represents 21.3% of the GDP. IMF Debt Sustainability Analysis (DSA) indicates a rising risk of debt distress. Cape Verde's public debt should remain sustainable in the long run, but significant vulnerabilities are expected to persist in the short and medium terms.

Even if Cape Verde has been reclassified as a MIC country it is still categorized as a "blend country" and in transition to upper level MIC. It is also a vulnerable country mainly due to physical constraints (insularity, fragmentation of the territory, small population size, dry climate, scarcity of natural resources) in addition to a number of major structural problems that hinder its development in general: low quality infrastructure; unfavorable business climate and dependence on external financial resources (development aid and remittances), and vulnerability to external shocks.

To be able to complete its transition to upper MIC status, Cape Verde still needs to make further priority investments (such as the Technological Park) from external funding. Hence country development partners' support remains very important. In view of Cape Verde's overall strong commitment to the

implementation of Bank-financed projects, the Bank may finance up to 88 % of project costs. The Government counterpart would then be limited to 12%.

B. BACKUP OF THE KEY ARGUMENTS OF THE REPORT

B1 Lessons from Previous Operations

1.1 The Bank had financed a number of ICT projects at national and multinational levels such as the regional ICT centers of excellence in Mali and Rwanda. The Bank has also supported Main One and EASSY submarine cables which have started yielding development results (triggering a bandwidth revolution 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.

B2 Project Components and Costs

Component 1: Construction and equipping of DC and BCP: This component will support: (i) construction of a Data Centre (DC) in an area covering 600 m², including a highly secure safe room of approximately 67.6 m² and Business Continuity Plan (BCP) site (2000 m²); and (ii) equipping of the DC and BCP site and provide the necessary IT (racks, servers, etc.), network equipment (routers, switches, etc.) and energy supply equipment (generators, UPS, etc.) in accordance with the detailed feasibility study and preliminary master plan design and needs of new generation parks. The country has the necessary underlying ICT infrastructure to support the park. Technical Annex C1 shows the agreed preliminary master plan design for the park.

Component 2: Construction and equipping of BC, IC and TQC: The component will support: (i) construction of a Business and Common facilities (BC) Centre (1500 m²) including auditorium (500 m²), conference room (150 m²), foyer (500 m²) and meeting rooms (50 m²); and equipping (PCs, Laptops, Scanners, Printers, Office furniture, etc.) of the BC; (ii) construction of (IC) Incubation Centre (500 m²) including open space building (150 m²), meeting rooms (50 m²); and equipping (Network, PCs, Laptops Scanners, Printers, Office furniture, etc.) of the IC; (iii) construction of Training and Qualification (TQC) Centre (1100 m²); and equipping (Network, PCs, Scanners, Laptops, Printers, office furniture, etc.) of the TQC. A training and qualification programme will be developed during implementation of the TQC.

Component 3: Support to Institutional Strengthening and Capacity building/training: This component will provide the necessary resources to: (i) strengthen the operational and technical capacity of the project management team. The expenses to be borne by the project include: Technical Assistance - Consultancy firm for Real-Estate Management, Event Management, Financial Management, Procurement, Incubation process, Marketing Data center; and Specialized training.

Component 4: Project management: This component will support the: (i) detailed architectural design; and (ii) supervision of works. The expenses to be financed by the project include: (i) IT equipment, (ii) vehicles, (iii) project design and supervision, and (iv) external audit.

Project Costs

The total cost of the Technology Park for the first four years (2013-2017) is estimated at UA 30.7 million. Of this amount, UA 27 million is the proposed ADB loan to the GoCV; UA 6.5 million will be revenue generated yearly by the Park during the first five years. The Park will be fully sustained through services (cloud, hosting and housing) provided by the Data Center after three years. The breakdown is as follows:

Data Center and Business Continuity Plan site:	UA 12.7 million
Business, Incubation and Training & Qualification centers:	UA 9.8 million
Strengthening capacity of the PMT:	UA 0.8 million
Project management:	UA 4.5 million

The Park's strategic goals will be achieved through an infrastructure with four main sub-components: 1) data center, 2) business center, 3) incubation center and 4) training and qualification center, each with specific roles in terms of the Park's activities, described in the following figure.

Figure 2: Technology Park sub-components

In addition, the Park will have a number of other areas and services, such as a library, leisure and athletic areas, commercial areas, among others. The Park will occupy an area of **8 ha** of land and will have **six main buildings**, which will host the four above mentioned components. The expenses to be financed by the project include: Building Construction and Equipping.

Data Center implementation for e-Government solutions

The Government of Cape Verde has a clear strategy to develop the ICT sector focusing primarily on the e-Government and Financial services. It is worth noting that, with the assistance of Portugal and China respectively, the government is implementing a Data Center (DC) for the development of its e-Government solutions. On the other hand, the Data Center to be financed by the Bank will be used primarily to provide services to the Banking, Insurance and other financial services. Additionally, the

DC will provide the latest data storage and processing services such as cloud, hosting and housing to regional and international customers of the Healthcare, Education and other sectors.

Further, the Data Center component to be financed by the Bank will complement the existing Data Center 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.

	Detailed Cost Estimates							
	Description	Unit Base	Number of Units	Unit Cost in (EURO)	Total Cost in (EURO)	Unit Cost in (UA)	Total Cost in (UA)	Total in (CCV)
	Component 1 : Data Center and Business Continuity Plan or Disaster Recovery Site							
1.1	**Data Center**	-						
	IT and Other Equipment	-						
1.1.1	Rack Structure	Pack	1	127,194	127,194	108,712	108,712	14,025
1.1.2	External hardwired connections	Pack	1	652,972	652,972	558,096	558,096	72,000
1.1.3	Rack management hardware	Pack	1	127,194	127,194	108,712	108,712	14,025
1.1.4	IT Equipment	Set	1	781,898	781,898	668,289	668,289	86,216
1.1.5	Routers and switches	Pack	1	43,359	43,359	37,059	37,059	4,781
1.1.6	Lighting	Pack	1	54,414	54,414	46,508	46,508	6,000
1.1.7	Fire suppression system	Pack	1	154,174	154,174	131,773	131,773	17,000
1.1.8	Security, surveillance and access systems	Pack	1	72,552	72,552	62,011	62,011	8,000
1.1.9	Office equipment	Set	1	55,775	55,775	47,671	47,671	6,150
1.1.11	Vehicles	unit	1	25,003	25,003	21,370	21,370	2,757
1.1.12	Satellite Connection	Subscription	1	688,387	688,387	588,365	588,365	75,905
1.1.13	Energy redundancy ring	Pack	1	289,076	289,076	247,074	247,074	31,875
	Buildings and other Construction							
1.1.14	Data Center - building area (m2)	m2	600	979	587,675	837	502,286	64,800
1.1.15	Energy supply equipment and infra-structure	unit	1	1,451,050	1,451,050	1,240,213	1,240,213	160,000
1.1.16	Cooling equipment and infra-structure	unit	1	888,768	888,768	759,631	759,631	98,000
1.2	**Business Continuity Plan Site**	-						
	IT and Other Equipment	-						
1.2.1	Rack Structure	Pack	1	127,194	127,194	108,712	108,712	14,025
1.2.2	External hardwired connections	Pack	1	652,972	652,972	558,096	558,096	72,000
1.2.3	Rack management hardware	Pack	1	127,194	127,194	108,712	108,712	14,025
1.2.4	IT Equipment	Pack	1	1,079,218	1,079,218	922,409	922,409	119,000
1.2.5	Routers and switches	Pack	1	52,419	52,419	44,803	44,803	5,780

1.2.6	Lighting	Pack	1	181,381	181,381	155,027	155,027	20,000
1.2.7	Fire suppression system	Set	1	154,174	154,174	131,773	131,773	17,000
1.2.8	Security, surveillance and access systems	Set	1	72,552	72,552	62,011	62,011	8,000
1.2.9	Office equipment	Set	1	185,916	185,916	158,902	158,902	20,500
1.2.10	Vehicles	unit	1	25,003	25,003	21,370	21,370	2,757
1.2.11	Satellite Connection	Subscription	1	511,087	511,087	436,826	436,826	56,355
	Buildings and other Construction	-						
1.2.12	Business Continuity Center - building area (m2)	m2	2,000	979	1,958,917	837	1,674,288	216,000
1.2.13	Energy supply equipment and infra-structure	Set	1	2,902,099	2,902,099	2,480,427	2,480,427	320,000
1.2.14	Cooling equipment and infra-structure	Set	1	888,768	888,768	759,631	759,631	98,000
	Total Data Center and Business Continuity Plan or Disaster Recovery Site				**14,918,387**		**12,750,758**	**1,644,976**
	Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center							
2.1	**Business Center**	-						
	IT and Other Equipment							
2.1.1	Modem/Router	Packs	6	45	269	38	230	30
2.1.2	Laptop	unit	4	283	1,133	242	969	125
2.1.3	Projector	unit	6	275	1,652	235	1,412	182
2.1.4	White screen (wall mount)	unit	6	80	479	68	409	53
2.1.5	Speakers	unit	6	122	730	104	624	81
2.1.6	White board	unit	14	24	335	20	286	37
2.1.7	Videoconference equipment	unit	3	3,093	9,278	2,643	7,930	1,023
2.1.8	Telephone	unit	11	13	143	11	122	16
2.1.9	Video surveillance equipment	unit	6	120	718	102	614	79
2.1.10	Printer	unit	1	89	89	76	76	10
2.1.11	Fridge	unit	4	130	519	111	443	57
2.1.12	Coffee machine	unit	4	364	1,456	311	1,245	161
2.1.13	Microwave oven	unit	4	44	176	38	150	19
2.1.14	TV	unit	11	405	4,455	346	3,808	491

	Office Equipment							
2.1.15	Cabinets	unit	40	194	7,779	166	6,649	858
2.1.16	Chairs (meeting rooms)	unit	80	93	7,477	80	6,391	824
2.1.17	Chairs (open space areas)	unit	150	86	12,832	73	10,967	1,415
2.1.18	Counters (entrance hall)	unit	2	1,629	3,258	1,392	2,785	359
2.1.19	Meeting room tables, 16 pax)	unit	2	932	1,864	796	1,593	205
2.1.20	Meeting room tables, 8/10 pax)	unit	4	443	1,773	379	1,516	196
2.1.21	Round tables	unit	20	311	6,222	266	5,318	686
2.1.22	Sofas	unit	2	595	1,190	509	1,017	131
2.1.23	Trash bins	unit	45	7	307	6	262	34
2.1.24	Work Desks (round, 4 pax)	unit	20	1,692	33,846	1,446	28,928	3,732
2.1.25	Work Desks (individual)	unit	4	1,154	4,617	987	3,946	509
2.1.26	Vehicle	unit	1	25,003	25,003	21,370	21,370	2,757
	Buildings and other Construction							
2.1.27	Business Center - building area (m2)		4,500	979	4,407,564	837	3,767,148	486,000
	2.2 Technology Park Shared Facilities							
	IT and Other Equipment							
2.2.1	Modem/Router	unit	44	45	1,975	38	1,688	218
2.2.2	Desktop	unit	4	340	1,361	291	1,163	150
2.2.3	Monitor	unit	4	89	355	76	304	39
2.2.4	Laptop	unit	4	283	1,133	242	969	125
2.2.5	Projector	unit	3	275	826	235	706	91
2.2.6	White screen (wall mount)	unit	3	80	239	68	205	26
2.2.7	Speakers	unit	3	122	365	104	312	40
2.2.8	White board	unit	9	24	215	20	184	24
2.2.9	Videoconference equipment	unit	5	3,093	15,463	2,643	13,216	1,705
2.2.10	Telephone	unit	10	13	130	11	111	14
2.2.11	Video surveillance equipment	unit	2	120	239	102	205	26
2.2.12	Printer	unit	1	89	89	76	76	10
2.2.13	TV	unit	9	405	3,645	346	3,116	402

	Office & Other Equipment							
2.2.14	Cabinets	unit	10	194	1,945	166	1,662	214
2.2.15	Chairs (meeting rooms)	unit	350	93	32,713	80	27,960	3,607
2.2.16	Chairs (open space areas)	unit	4	86	342	73	292	38
2.2.17	Counters (entrance hall)	unit	1	1,629	1,629	1,392	1,392	180
2.2.18	Round tables	unit	1	311	311	266	266	34
2.2.19	Sofas	unit	5	595	2,976	509	2,543	328
2.2.20	Stage, sound and lighting system	unit	400	1,773	709,291	1,516	606,232	78,210
2.2.21	Trash bins	unit	20	7	136	6	117	15
2.2.22	Work Desks (individual)	unit	175	1,154	201,995	987	172,646	22,273
2.2.23	Vehicle	unit	1	25,003	25,003	21,370	21,370	2,757
2.2.24	***Buildings and other Construction***							
2.2.25	Auditorium Area (m2)	m2	500	1,469	734,594	1,256	627,858	81,000
2.2.26	Foyer, Conference and Meeting Rooms Areas(m2)	m2	1,425	979	1,395,728	837	1,192,930	153,900
	2.3 Incubation Center							
	IT and Other Equipment							
2.3.1	Modem/Router	unit	22	45	988	38	844	109
2.3.2	Laptop	unit	4	283	1,133	242	969	125
2.3.3	Projector	unit	4	275	1,101	235	941	121
2.3.4	White screen (wall mount)	unit	4	80	319	68	273	35
2.3.5	Speakers	unit	4	122	487	104	416	54
2.3.6	White board	unit	12	24	287	20	246	32
2.3.7	Videoconference equipment	unit	2	3,093	6,185	2,643	5,286	682
2.3.8	Telephone	unit	40	13	519	11	443	57
2.3.9	Video surveillance equipment	unit	2	120	239	102	205	26
2.3.10	Printer	unit	2	89	178	76	152	20
2.3.11	Fridge	unit	2	130	259	111	222	28
2.3.12	Coffee machine	unit	2	364	728	311	622	80
2.3.13	Microwave oven	unit	2	44	88	38	75	10
2.3.14	TV	unit	7	405	2,835	346	2,423	313

	Office & Other Equipment	-						
2.3.15	Cabinets	unit	60	194	11,669	166	9,973	1,287
2.3.16	Chairs (meeting rooms)	unit	50	93	4,673	80	3,994	515
2.3.17	Chairs (open space areas)	unit	100	86	8,554	73	7,311	943
2.3.18	Counters (entrance hall)	unit	1	1,629	1,629	1,392	1,392	180
2.3.19	Meeting room tables, 8/10 pax)	unit	4	443	1,773	379	1,516	196
2.3.20	Round tables	unit	30	311	9,333	266	7,977	1,029
2.3.21	Sofas	unit	3	595	1,785	509	1,526	197
2.3.22	Trash bins	unit	45	7	307	6	262	34
2.3.23	Work Desks (round, 4 pax)	unit	20	1,692	33,846	1,446	28,928	3,732
2.3.24	Work Desks (individual)	unit	4	1,154	4,617	987	3,946	509
2.3.25	Vehicle	unit	1	25,003	25,003	21,370	21,370	2,757
	Buildings and other Construction	-						
2.3.26	Incubation Centre - Total building area (m2)	m2	1000	979	979,459	837	837,144	108,000
	2.4- Training and Qualification Center	-						
	IT and Other Equipment	-						
2.4.1	Modem/Router	unit	4	45	180	38	153	20
2.4.2	Desktop	unit	60	340	20,411	291	17,445	2,251
2.4.3	Monitor	unit	60	89	5,327	76	4,553	587
2.4.4	Laptop	unit	4	283	1,133	242	969	125
2.4.5	Projector	unit	3	275	826	235	706	91
2.4.6	White screen (wall mount)	unit	3	80	239	68	205	26
2.4.7	Speakers	unit	3	122	365	104	312	40
2.4.8	White board	unit	8	24	192	20	164	21
2.4.9	Telephone	unit	4	13	52	11	44	6
2.4.10	Video surveillance equipment	unit	1	120	120	102	102	13
2.4.11	Printer	unit	1	89	89	76	76	10
2.4.12	TV	unit	4	405	1,620	346	1,385	179
	Office Equipment	-						
2.4.13	Cabinets	unit	10	194	1,945	166	1,662	214

2.4.14	Chairs (meeting rooms)	unit	60	93	5,608	80	4,793	618
2.4.15	Chairs (open space areas)	unit	4	86	342	73	292	38
2.4.16	Counters (entrance hall)	unit	1	1,629	1,629	1,392	1,392	180
2.4.17	Round tables	unit	1	311	311	266	266	34
2.4.18	Sofas	unit	1	595	595	509	509	66
2.4.19	Trash bins	unit	5	7	34	6	29	4
2.4.20	Work Desks (individual)	unit	34	1,154	39,245	987	33,543	4,327
2.4.21	Vehicle	unit	1	25,003	25,003	21,370	21,370	2,757
	Buildings and other Construction	-						
2.4.22	Training and Qualification Centre - Total building area (m2)	m2	275	979	269,351	837	230,215	29,700
	2.5 Energy Infrastructure							
2.5.1	Energy Infrastructure	Set	1	2,380,628	2,380,628	2,034,725	2,034,725	262,500
	Total Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center				**11,521,108**		**9,847,101**	**1,270,375**
	Component 3: Support to Institutional Strengthening and Capacity Building							
3.1	**Capacity Building : Technology Park Management Structure**	-						
3.1.1	Real-estate management Consultancy Firm	Consultant/Month	15	4,394	65,909	3,756	56,332.82	7,268
3.1.2	Event Management Consultancy Firm	Consultant/Month	15	4,702	70,535	4,019	60,286.00	7,778
3.1.3	Technical Assistance for Financial management	Consultant/Month	12	4,317	51,802	3,690	44,275.62	5,712
3.1.4	Incubation processes Consultancy Firm	Consultant/Month	12	4,625	55,503	3,953	47,438.16	6,120
3.1.5	Technical Assistance for Procurement	Consultant/Month	15	4,317	64,753	3,690	55,344.53	7,140
3.2	**Marketing of Data Center services**	-						
3.2.1	DC operation management (Pricing of DC services) (Consultancy Firm)	Consultant/Month	15	7,709	115,631	6,589	98,829.51	12,750
3.2.2	Hosting and Housing (Consultancy firm)	Consultant/Month	6	11,563	69,378	9,883	59,297.71	7,650
3.2.3	Cloud Services (Consultancy Firm)	Consultant/Month	6	11,563	69,378	9,883	59,297.71	7,650
3.3	**Specialized training**	-						
3.3.1	Software development	Officer	15	2,544	38,158	2,174	32,613.74	4,208
3.3.2	Database administration	Officer	15	2,544	38,158	2,174	32,613.74	4,208

3.3.3	Project management in IT	Officer	15	2,544	38,158	2,174	32,613.74	4,208
3.3.4	Web applications	Officer	15	2,544	38,158	2,174	32,613.74	4,208
3.3.5	IT Architecture	Officer	15	2,775	41,627	2,372	35,578.62	4,590
3.3.6	Prototyping	Officer	15	2,236	33,533	1,911	28,660.56	3,698
3.3.7	PC/tablet/smartphone convergence	Officer	15	2,544	38,158	2,174	32,613.74	4,208
3.3.8	Cloud infrastructure and services	Officer	10	1,542	15,417	1,318	13,177.27	1,700
3.3.9	Cloud security	Officer	15	1,773	26,595	1,515	22,730.79	2,933
3.3.10	Mobile applications (general)	Officer	15	1,542	23,126	1,318	19,765.90	2,550
3.3.11	Mobile banking applications	Officer	10	2,313	23,126	1,977	19,765.90	2,550
3.3.12	Education content applications	Officer	10	2,313	23,126	1,977	19,765.90	2,550
3.3.13	Social media applications	Officer	10	1,542	15,417	1,318	13,177.27	1,700
3.3.14	E-government services and applications	Officer	10	1,927	19,272	1,647	16,471.58	2,125
3.3.15	Business Planning	Officer	5	1,388	6,938	1,186	5,929.77	765
3.3.16	Elevator Pitch	Officer	5	1,542	7,709	1,318	6,588.63	850
3.3.17	Project Management	Officer	15	1,513	22,693	1,293	19,395.51	2,502
	Total Support to Institutional Strengthening and Capacity Building				**1,012,259**		**865,178**	**111,617**
	Component 4: Project Management Framework							
4.1	**Project Management Unit Staff**							
4.1.1	Project Coordinator	Month	48	3,739	179,459	3,195	153,383	19,788
4.1.2	ITC Specialist	Month	48	2,197	105,455	1,878	90,133	11,628
4.1.3	Civil Engineer	Month	48	2,197	105,455	1,878	90,133	11,628
4.1.4	Monitoring and Evaluation Specialist	Month	48	2,197	105,455	1,878	90,133	11,628
4.1.5	Accountant	Month	48	1,850	88,804	1,581	75,901	9,792
4.1.6	Procurement Specialist - PMT/NQSI	Month	48	1,850	88,804	1,581	75,901	9,792
4.1.7	Procurement Specialist -MoIFME	Month	48	771	37,002	659	31,625	4,080
4.1.8	Environmental and Social Specialist	Month	48	1,773	85,104	1,515	72,739	9,384
4.1.9	Administrative Secretary	Month	48	1,156	55,503	988	47,438	6,120

4.1.10	Driver	Month	48	771	37,002	659	31,625	4,080
4.2	***Vehicles***							
4.2.1	4x4 Vehicle	Unit	1	26,980	26,980	23,060	23,060	2,975
4.2.2	2x2 Pickup	unit	1	12,719	12,719	10,871	10,871	1,403
4.3	***IT Equipment***							
4.3.1	Laptop	unit	12	283	3,400	242	2,906	375
4.3.2	Printers	unit	10	89	888	76	759	98
4.3.3	Cabinets	unit	1	194	194	166	166	21
4.3.4	Chairs (open space areas)	unit	2	86	171	73	146	19
4.3.5	Trash bins	unit	1	7	7	6	6	1
4.3.6	Work Desks (individual)	unit	2	1,154	2,309	987	1,973	255
4.3.7	Vehicle	unit	1	25,003	25,003	21,370	21,370	2,757
4.4	***Project Design and Supervision - Audit & Study***							
4.4.1	Consultancy for Architectural Design	Consultancy	1	409,541	409,541	350,035	350,035	45,158
4.4.2	Works Supervision	Consultancy	1	273,024	273,024	233,354	233,354	30,105
4.4.3	External Audit	Annual Audit	4	17,550	70,200	15,000	60,000	7,741
4.4.4	Development of an Implementation Manual & Accounting Services	Consultancy	1	58,500	58,500	50,000	50,000	6,451
4.5	***Land Acquisition, Buildings and other Construction***							
4.5.1	Parking Lots (m2)	m2	1,200	4	4,625	3	3,953	510
4.5.2	Sports Facility (m2)	m2	1,000	45	44,710	38	38,214	4,930
4.5.3	Green Area (m2)	m2	10,000	2	23,126	2	19,766	2,550
4.5.4	Land Acquisition [opportunity cost (m2)]	m2	80,000	44	3,515,168	38	3,004,417	387,600
	Total Project Management				**5,358,609**		**4,580,007**	**590,867**
	Total Base cost				**32,810,363**		**28,043,045**	**3,617,835**
	Physical Contingencies (5%)				1,623,902		1,387,951	179,060
	Price Contingencies (2%)				1,558,946		1,332,433	171,897
	Total Cost				**35,993,211**		**30,763,428**	**3,968,791**

Tables B.3.1and B.3.2 below present estimated project costs by components, and category. All these costs have been estimated on the basis of data obtained from the detailed feasibility study and preliminary master plan design. Incorporated in the cost estimates are a 5% physical contingency factor and 2% for price escalation on local and foreign currency.

Table B.3.1 (a): Project cost estimates by component (in Euro & UA)

Table 2.3: Project cost estimates by component [fig. in UA equivalents]								
Description	EURO			UA				
	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	10,200,607	2,550,152	12,750,758	80.00%	41%
Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center	9,216,886	2,304,222	11,521,108	7,877,680	1,969,420	9,847,101	80.00%	32%
Component 3: Support to Institutional Strengthening and Capacity Building	809,807	202,452	1,012,259	692,143	173,036	865,178	80.00%	3%
Component 4: Project Management	992,400	4,366,209	5,358,609	848,205	3,731,802	4,580,007	18.52%	15%
Total Base Cost	**22,953,803**	**9,856,559**	**32,810,363**	**19,618,635**	**8,424,410**	**28,043,045**	**69.96%**	
Physical Contingencies (5%)	1,299,122	324,780	1,623,902	1,110,360	277,590	1,387,951	80.00%	5%
Price Contingencies (2%)	1,247,157	311,789	1,558,946	1,065,946	266,487	1,332,433	80.00%	4%
Total Project Cost	**25,500,082**	**10,493,129**	**35,993,211**	**21,794,942**	**8,968,486**	**30,763,428**	**71%**	**100%**

* Contingencies excludes the opportunity cost of land acquisition

Sources of Finance and Schedule of Expenditures

Tables B3.2 and B3.3 show financing by source and schedule of expenditure. The GoCV expects to mobilize UA 759,010.64 during the project period from their own resources to pay salaries of local project staff.

Table B3.2 : Sources of financing (in million UA)

Table 2.4: Table 2.4: Project Source of Financing [fig. in UA equivalents]				
Description	UA			
	Foreign	Local	Total Costs	% Total
ADB - Loan	21,600,000	5,400,000	27,000,000	88%
Government of Cape Verde	0	3,763,428	3,763,428	12%
Total Project Cost	**21,600,000**	**9,163,428**	**30,763,428**	**100%**

Table B.3.3 : Expenditure schedule by component (in million UA) (ADB financing)[1]

Table 2.5: Project cost by category of expenditure [UA equivalents]					
Components	UA				
	2014	2015	2016	2017	Total
Component 1 : Data Center and Business Continuity Plan or Disaster Recovery Site	1,912,614	4,462,765	5,737,841	637,538	**12,750,758**
Component 2: Business Center, Shared Facilities, Incubation Center and Training/ Qualification Center	1,477,065	3,446,485	4,431,195	492,355	**9,847,101**
Component 3: Support to Institutional Strengthening and Capacity Building	129,777	302,812	389,330	43,259	**865,178**
Component 4: Project Management Framework	687,001	1,603,003	2,061,003	229,000	**4,580,007**
Total Base Cost	**4,206,457**	**9,815,066**	**12,619,370**	**1,402,152**	**28,043,045**
Physical Contingencies (5%)	208,193	485,783	624,578	69,398	**1,387,951**
Price Contingencies (2%)	199,865	466,351	599,595	66,622	**1,332,433**
Total Project Cost	**4,614,514**	**10,767,200**	**13,843,543**	**1,538,171**	**30,763,428**

* Contingencies excludes the opportunity cost of land acquisition

B3. Implementation Arrangements

3.1 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)[2]", 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 various ICT projects, and managed the feasibility study of the proposed Technology Park Project. NOSI/PMT will be responsible for delivering the project outputs within the agreed timeframe.

3.2 An assessment made by the Bank on the capacity of the PMT determined that it had the necessary core skills. The team already includes; one (1) project manager; one (1) Civil Engineer, three (3) ICT specialists but require other additional skills to be sufficient to implement the Project. Therefore, additional technical staff will be added to the existing members of the PMT namely: one (1) Monitoring and Evaluation Specialist; one (1) Accountant; one (1) Procurement Specialist; one (1) Environmental and Social specialist. All members of the PMT will be engaged as local consultants paid by the Government. It is worth mentioning that the proposed project will add considerable increase to projects being implemented by NOSI. This is anticipated to be met with adequate development in NOSI operational capacity, through component 3 financed by the project, designated to support institutional strengthening and capacity building. In addition, a reputable international firm will be responsible for the supervision of the construction of works and the installation of equipment being carried out by the different contractors and suppliers to ensure the proper implementation of the project.

3.3 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 (ii) oversee the implementation of the project, (ii) ensure the project alignment with national development policies and strategies. Members of the PSC will be composed of designated representatives from Ministries of: (i) Finance and Planning; (ii) Communications and Infrastructure; (iii) 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; and the Chamber of Commerce.

Roles and Responsibility of the PMT:

3.4 Under the direct oversight and technical guidance of NOSI, the PMT will be in charge of the following roles and responsibilities:

- Entirely responsible for the supervision, management, and the implementation of project's components;
- Maintain the project accounts and financial records, process disbursement requests;
- Reports in accordance with the requirement of the GoCV and the Bank.
- In liaison with the Bank, the PMT shall carry out the procurement of goods and services.
- Coordinate the preparation of Annual Work Plans and Budgets, Quarterly Progress Reports and any other technical reports on project activities.
- Liase between all agencies, suppliers, and contractors which will be carrying out project implemntation.

3.5 Further, in accordance with the Legal Regime of Public Works Contracts[3], the procurement of all Works is to be carried out through the Ministry of Infrastructure and Maritime Economy. At the meantime, the procurement of Goods and Services, are to be carried out by NOSI/PMT. The PMT shall coordinate the procurement of works carried by the Ministry of Infrastructure and Maritime Economy.

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[2] Núcleo Operacional para Sociedade de Informação (NOSi)

[3] Decree Law No. 54/2010 of November 29, 2010

Operational Nucleus for Information Society "NOSI"

3.6 The Council of Ministers of Cape Verde in July 7, 2003, by resolution n: 15/2003, created the Inter-ministerial Commission for Innovation and Information Society (CIISI)4. This Commission was set directly under the Prime Minister's Office and had the following main objectives:

- ✓ To propose integrated development strategies for innovation, information society and e-government in Cape Verde;
- ✓ To develop and implement electronic governance.

3.7 According to this Resolution, Operational Nucleus for Information Society (NOSI) was established as an executive and operational arm of the government to coordinate the achievement of CIISI objectives. It is directly reporting to the Prime Minister's Office (Minister of State Reform). NOSI has no legal personality, financial, or administrative autonomy and depends in full on the Government's budget.

3.8 Throughout the last ten years NOSI has achieved the targets for which it was created. It has been developing integrated e-government solutions, implementing several ICT projects, and managing different type of studies. See table 3.1 for detailed list of projects. NOSI is currently in charge of developing, and implementing seven (7) ICT projects in the Cape Verde, along with three (3) projects being already delivered. It has developed technical and managerial capabilities to successfully execute large projects, with the most recent example being the ICT projects financed by China Exim Bank and the Government of Portugal of approximately USD 19 million (95% physical implementation rate). In the meantime, NOSI is managing the government existing Data Center installed at the ministry of finance; and National Government Network interconnecting all public institutions (i.e. fiber optics links, microwave infrastructure, Wimax infrastructure, and Public WI-FI Hot Spots infrastructure), as well as developing a wide variety of e-Government applications.

3.9 Consequently, based on the level of achievements, the Government is in the process of transforming NOSI to become a corporate public entity fully owned by the Government. It will have an independent legal personality and enjoying financial and administrative autonomy which is required to run the ICT business/infrastructure entirely on commercial basis. In addition to that, by year 2014, NOSI will have the responsibility of overseeing public investments in the areas of information society and e-government, so as to further develop Cape Verde's successful strategy towards the development of Information Society.

[4] Comissão para a Inovação e Sociedade de Informação (CIISI)

Table 3.1 : List of Projects Implemented by NOSI

Implementing Agency	Donor	Project Name	Type of Finance	Date of loan approval	Value	Completion date
NOSI/PMT	China Exim Bank	E-government upgrade Project	Loan	September 2008	USD 17,000,000	Ongoing: Dec-2013
NOSI	Investment Climate facility for Africa- ICF	Business registration and Licensing Project - Phase I	Grant	2009	USD 1,400,000	Completed: 2011
NOSI	Investment Climate facility for Africa- ICF	Tourism Licensing Project	Grant	2010	USD 409,988	Completed: 2011
NOSI/PMT	AfDB	Feasibility Study - Preparation of the technology Park	MIC Grant	December 2011	UA 297,188	- Feasibility study: Completed - TA : ongoing
NOSI/PMT	Government of Portugal	Upgrade of the national ID and authentication system Project	Loan	December 2011	EURO 1,600,000	Ongoing
NOSI/PMT	Government of Portugal	Acquisition of Hybrid Cloud Solution Project	Loan	December 2011	EURO 3,000,000	Ongoing
NOSI	World bank	Land management Project	Loan	2012	CVE 43,836,530	Completed : May 2013
NOSI	World bank	Business registration and Licensing Project - Phase II	Loan	2012	CVE 15,000,000	July 2013
NOSI	United Nations	Institutional strengthening and Capacity Building -	Grant	January 2012	USD 283,430	Ongoing
NOSI	Investment Climate facility for Africa- ICF	Integrated Licensing – Tourism, Industry, Commerce	Grant	2013	USD 1,331,138	Ongoing

NOSI Management Structure

3.10 NOSI is carrying out its activities through a well-equipped Headquarter situated in the Center of Praia. It is managed by a General Manager (former Minister) assisted by a Team of Departmental and Project Managers, responsible for the implementation of different type of ICT/e-government projects. They are also in charge of setting up the strategic goals and policies of the ICT sector. NOSI currently has 185 staff of which 80% are in the professional category while 18% and 2% are classified as skilled and unskilled categories respectively. 42% of staff is women, and 90% under the age of 35. NOSI staffs are generally qualified and the staff mix is appropriate. It has comprehensive training programs for all categories, with sufficient budget being allocated from the government to undertake its activities. Over 57 staff was trained in 2012 within the country and abroad. NOSI organization structure is adequate, with additional reinforcement required to the PMT proposed to be in charge of managing the proposed project. See figure 3-2 for the detailed organizational structure of NOSI.

Figure 3-2 : Organizational Structure of NOSI

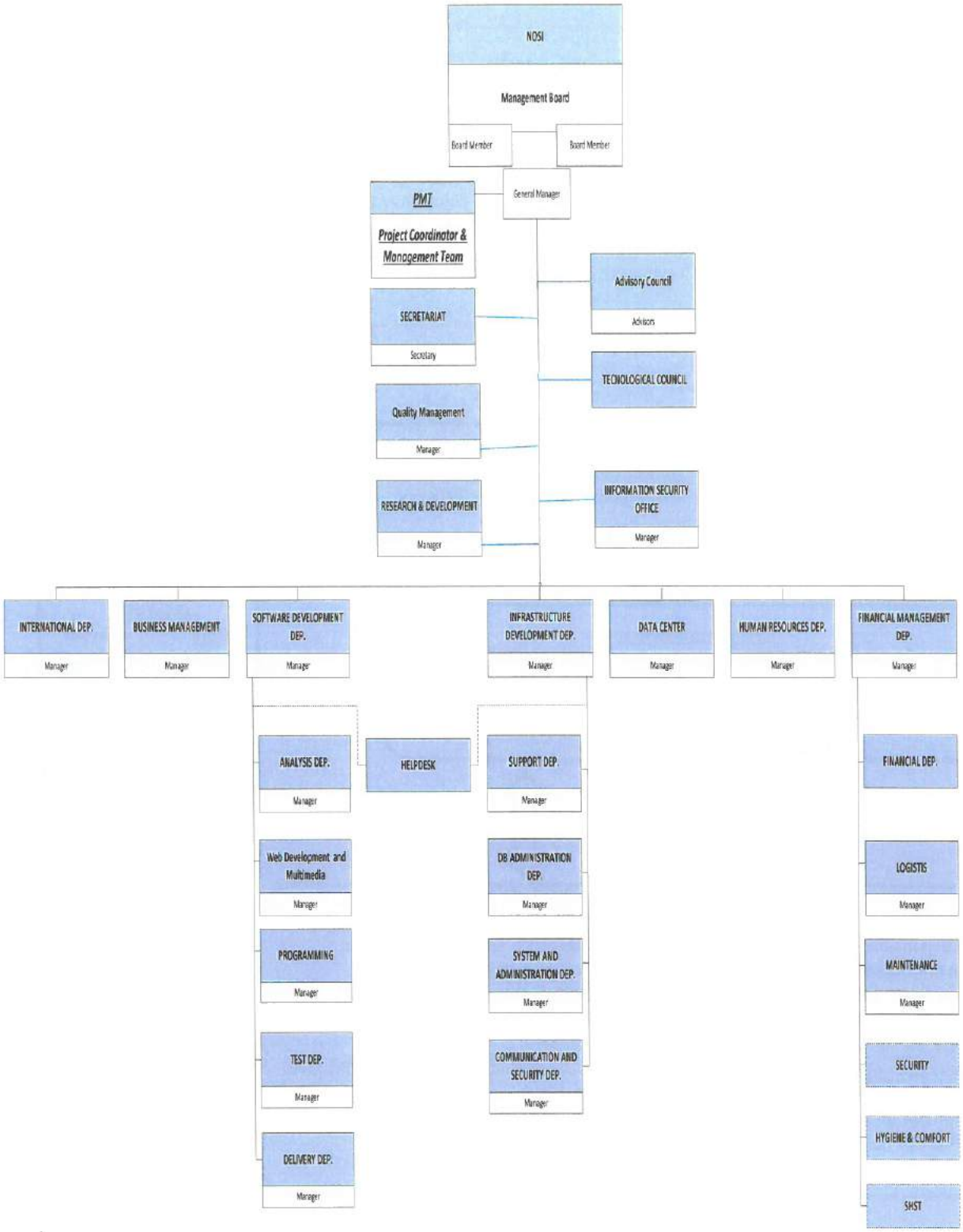
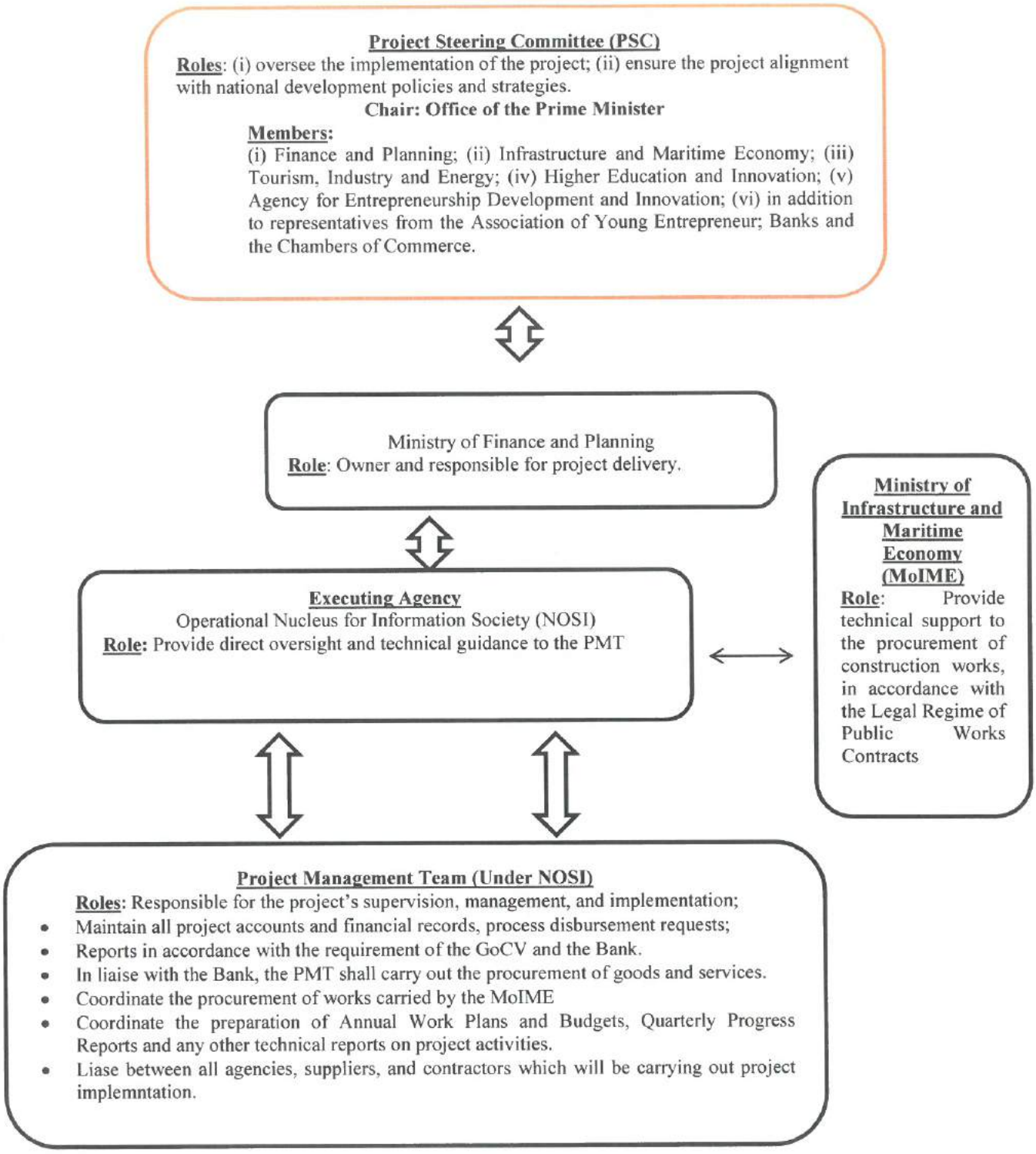


Figure B3.1 : Implementation Arrangement



B4. Financial Management and Disbursement Arrangements

An evaluation of the financial management (FM) capacity of the Operational Nucleus for Information Society (NOSi), the executing agency of the Technology Park Project (TPP), placed under the supervisory authority of Cape Verde's Office of the Prime Minister, was conducted in Praia on 17 and 18 April 2013. Its objective was to verify if NOSi has the financial management capacity consistent with Bank requirements and capable of ensuring that: (i) project funds will be used for the intended purpose and in an efficient and economical manner; (ii) project financial statements will be prepared in a reliable manner and within the required time-limits and (iii) project assets will be safeguarded.

This evaluation concluded that there was a need to build NOSi's financial management capacity to enable the latter to achieve the three objectives. It also established that the project's overall financial management risk would be moderate if the following measures are taken, as soon as possible, after project start: (i) creation and establishment of the steering committee; (ii) preparation of an administrative, financial and accounting procedures manual; (iii) development/procurement and establishment of a private-type autonomous commitment accounting system in three integrated modules: budgetary, cost and general; (iv) the recruitment of a qualified and experienced accountant in private-type accounting management.

Apart from accounting and external auditing, the project's financial management will use the country financial management system through the Integrated Budgetary and Financial Management System (SIGOF). Consequently, apart from the project Coordinator and Accountant, the Project's resource mobilization and expenditure will involve NOSi's Department of Administration and Finance. The integrated accounting system to be developed/procured should help ensure accountability, in line with the provisions of the Procedures Manual approved by the Bank. During the project launch mission, the capacity of financial management staff will be developed in Bank disbursement and financial management rules and procedures. Funds will be disbursed by the Bank through the direct payment and reimbursements guarantee method. Financial statements will be audited yearly by external audit firms, based on terms of reference approved by the Bank. The audit report must be forwarded to the Bank not later than six months, following the end of the audited year.

The table below summarizes the actions to be taken by NOSi:

Actions to be taken	Period	Responsible entities
Creation of the Steering Committee	Negotiations	Office of the Prime Minister
Preparation of an administrative, financial and accounting Procedures Manual	Within 3 months following start	NOSi
Development/Procurement of an integrated accounting system separate from that of the executing agency	Within 3 months following start	NOSi
Establishment of an accounting system (configuring where applicable, training of staff, accounting assistance…)	Within 6 months following start	NOSi
Preparation of audit terms of reference and recruitment of an external auditor	Within 4 months following start	NOSi/AfDB
Capacity building for project management team (PMT) fiduciary staff	Project Launch	AfDB

I. Project Description Summary

The project's development goal is "to contribute to positioning Cape Verde as an international service centre and a gateway to Africa". It will boost the country's economic growth as well as the efficiency and competitiveness of other economic sectors. It will also promote innovation and entrepreneurship in the ICT sector and contribute to improved quality of, and access to, IT and Internet services.

The project has four components: (i) construction and equipping of a Data Centre & Business Continuity Plan or Disaster recovery site worth UA 12.7 million; (ii) construction and equipping of Business center, Incubation Centre & Training and Qualification Centre to the tune of UA 9.8 million and (iii) Support to Institutional strengthening and capacity building/training amounting to UA 0.8 million and project management of UA 4.5 million. The Bank's contribution will stand at UA 27 million and the counterpart contribution at UA 3.7 million, bringing the total cost to UA 30.7 million.

II. Issues Relating to Cape Verde's Public Finance Management

Cape Verde has, since 2008, undertaken reforms in its public finance management system. The PEFA report prepared that same year noted progress in the areas of budget credibility and exhaustiveness. It however, indicated persistent weaknesses in internal and external control, and multi-year budgeting through the MTEF. It concluded that there was need for Cape Verde to improve the efficiency of its Inspectorate General of Finance (IGF) and further empower the Court of Auditors (TdC).

In June 2011, a new Public Expenditure Management and Financial Accountability Review (PEMFAR) was conducted, with support from technical and financial partners (TFPs), with a view to refocusing the reforms. The Bank provided support in the area of public expenditure and public procurement system review. The results of the review helped to update the 2009-2012 PFM reform Action Plan.

Regarding governance and corruption, the State has modernized its operation thanks to the Operational Nucleus for Information Society (Núcleo Operacional de la Sociedad de la Información – Nosi). All modules of the integrated budget and financial management system (SIGOF) for central and local administration have been established. This has led to improved budget planning and execution and a more homogenous application of administrative procedures.

The implementation of PFM reforms has scaled down corruption. In relation to international governance indicators, the country is ranked among the leaders: (i) fourth out of 48 sub-Saharan countries in the Mo Ibrahim 2010 governance index in Africa; (ii) 45th out of 178 countries in the 2010 corruption perception index calculated by Transparency International (third best performance in this sub-region of Africa). In addition, in its 2010 Country Policy and Institutional Assessment, the AfDB awarded Cape Verde a score of 4.50 for its governance, considering the country as the most efficient among 40 countries eligible for African Development Fund (ADF) resources.

III. Financial Management Risks

The table below identifies the main risks that project management might face in achieving its objectives. It also defines the mitigating measures associated with identified risks.

Table 1

Risk Type	Risk Rating	Risk mitigating measures included in project design	Risk after mitigation
Inherent Risk			
Country Unsatisfactory implementation of ongoing PFM reforms. Non-consolidation of governance and anti-corruption achievements. Weaknesses in internal (IGF) and external (TdC) controls.	**M**	Continued implementation of the ongoing PFM reform strategy, despite the fact that its scope goes beyond the Technology Park Project.	**L**
Executing Agency Concentration of teams on activities linked to NOSi's institutional missions, to the detriment of those linked to project implementation	**M**	Awareness raising during the project launch mission	**L**
Project Non-mastery by the PMT of Bank disbursement and financial management rules and procedures.	**M**	Capacity building for PMT staff and that of NOSi's Department of Administration and Finance by the Bank's fiduciary teams (project launch mission, supervision mission, Fiduciary Centres).	**L**
Inherent risk	**Moderate**		**Low**
Non-control Risk			
Accounting system Absence/late establishment of a private-type commitment accounting system, separate from that of the Executing Agency	**S**	Establishment of the above action plan Procurement/development of the accounting system, configuring of the said software (in line with the procedures manual) and training of financial management staff in the use of this tool. Recruitment of a qualified and experienced accountant	**M**
Internal control Absence of formal administrative, financial and accounting procedures that could lead to misuse of funds	**M**	Preparation of an administrative, financial and accounting procedures manual. Effective application of the said procedures. Development of the integrated budget and financial management system (SIGOF)	**L**
Financial Flows Late disbursements for contractors/consultants.	**M**	Capacity building in disbursement rules and procedures, based on the direct payment method Close monitoring of disbursement requests made to the Bank. Regular conduct of external audits.	**L**
Financial Reports Production of pointless financial reports.	**S**	Agreement on the model and frequency of financial reports during negotiations.	**L**
External Audit Lateness in the production of financial statements and/or validation of audit reports. Weak capacity of external audit firms.	**M**	Notice of non-objection by the Bank of audit terms of reference. Recruitment only of audit firms evaluated as efficient.	**L**
Non-control risk	**Moderate**		**L**
Overall residual risk			**L**

Key: H-High S-Significant M-Moderate L-Low

The identified mitigating measures, when implemented, would thus reduce the **overall residual risk from Moderate to Low.**

IV. Executing Agency

Under the supervisory authority of the Office of the Prime Minister, NOSi will be in charge of implementing the Technology Park Project. It will implement project activities through a PMT, which will be part of the Department of Projects (Gestao de Negocios), under the supervision of NOSi's General Manager. The PMT will have a staff comprising: (i) a coordinator; (ii) a technical assistant; (iii) a civil engineer; (vi) a procurement expert; (v) an accountant; (vi) an environmental scientist (vii) an IT specialist; and (viii) a monitoring-evaluation expert. They will work in synergy with NOSi's other departments and, especially as concerns financial management, with the Department of Administration and Finance.

V. Budget

The project's budget, which includes identification and cost of the main activities to be implemented, will be appended to the appraisal report. The project will adopt the budgetary procedure in force within NOSi. All project activities financed by Bank and counterpart contribution resources will be included in NOSi's programme budget and, consequently, that of the Office of the Prime Minister. Before the beginning of each year and in line with the provisions of the Procedures Manual, NOSi will prepare an Annual Work Programme and Budget (PTBA), which will first be submitted to the Steering Committee and then to the Bank for validation. The budget so approved will be accessed into the project's accounting system. The periodic activity reports that will be submitted to the Bank must take into account the PTBA's variance analysis and state of execution.

Accounting

NOSi will establish a developed/procured autonomous accounting system for the project. The latter, for various reporting needs, should comprise the following integrated modules: funds management, general ledger accounting, cost accounting, asset management and disbursement monitoring. The Accountant will keep project accounts and ensure that annual financial statements are produced well on time to allow for the conduct of audits and the timely forwarding of audit reports to the Bank. This will be a commitment accounting system, taking into account the specific nature of development projects. In the case where the software is procured, the accounting system will be configured, with accounting assistance from the consultant or firm that prepared the Procedures Manual. Whatever the case, this configuring must take into consideration the accounting principles, accounting plan and accounting entry systems described in the Procedures Manual. In view of NOSi's environment marked by financial management practice in the public finance context, on the one hand, and Bank requirements for an essentially private-type accounting system, on the other hand, it would be advisable to envisage, in addition to the accounting system's establishment, one-year accounting assistance from the consultant or firm selected for preparation of the project's Procedures Manual, at least up to the production of the initial financial statements.

VI. Internal Control

NOSi will prepare the project's manual of administrative, financial and accounting procedures, including budgeting procedures, expenditure execution procedures (procurement of goods and services), asset management procedures (capital, stocks…), financing mobilization procedures (requests for funds, direct payments,…), accounting, financial and budgetary information procedures, and audit and internal control procedures.

As the executing agency, NOSi will be responsible for conducting all other necessary controls to ensure: (1) the use of project funds only for the intended purpose, by giving due importance to economy and performance considerations; (2) the preparation of accurate and reliable information, within the required time-limits for periodic financial reports and (3) the safeguard of project assets. Each year, the audit will evaluate the project's internal control system.

VII. Financial Reporting and Financial Statements

Budget execution statements will be generated from the accounting system's budgetary module, to be established by NOSi. Annual financial statements generated from general ledger accounting or cost accounting modules will include all project activities and consolidate data from the project's two financing sources (ADB and Government).

VIII. Financial Flow and Disbursements

The estimated cost of the entire project, net of taxes and customs duties, stands at UA 30.7 million. The project will be financed jointly by the Bank to the tune of UA 27.00 million (88%) and the Government in the amount of UA 3.7 million (12%).

The direct payment and reimbursement guarantee methods will be used for Bank disbursements. NOSi will keep all expenditure supporting documentation and make it easily accessible for Bank supervision missions and auditing missions by the project's external auditors. The Bank will present the "Disbursement letter" during loan negotiations. The letter will state further instructions and the detailed procedures to comply with for withdrawal of funds from the Bank through the direct payment or reimbursement guarantee methods. The Bank reserves the right to take protective measures, in conformity with general conditions, to, inter alia, suspend the disbursement of funds, if its fiduciary requirements are not fulfilled.

IX. Strengths and Weaknesses of the System

Cape Verde's fiduciary environment is overall solid. All modules of the Integrated Budgetary and Financial Management System (SIGOF) for central and local administration have been established. The outcome has been improved budget planning and execution and a more homogenous application of administrative procedures. In addition, the implementation of PFM reforms has scaled down corruption, to the extent that Cape Verde has been ranked as one of the most efficient countries in this respect. These strengths will certainly underpin the project's financial management system.

On the other hand, the non-mastery of Bank disbursement procedures and financial management requirements, coupled with inexperience in private-type commitment accounting in a public finance context, might be a handicap to be necessarily overcome so as to fulfil the Bank's accountability requirements.

X. Conditionalities

No conditionality has been recommended for project effectiveness.

XI. Borrower's Financial Obligations

The Borrower, represented by the Ministry of Finance, in addition to ensuring the implementation of the above financial management action plan, will have the obligation to maintain an acceptable financial management system, as described in this financial management annex.

XII. Project Implementation and Supervision Support Plan

The project will be supervised using a risk-based approach. With a residual risk evaluated as low, yearly financial management supervision is planned within the framework of sector supervision missions.
The project financial management support plan will also be based on risks and especially on the conclusions of annual financial statements and internal control audit reports (letter to the department) as well as the timely follow-up of issues raised during project supervision missions.

Period	Focus	Necessary expertise	Estimated resources	Role of partners
The first 12 months	Verification of effective implementation of risk mitigating measures and effective operation of the planned financial management system Identification of implementation issues at project start. Training of project staff	1 FMS	2 weeks of field visit	N/A
13th-48th last months	Verification of relevance of financial management mechanisms and related risks as well as the efficiency of their operation	1 FMS	6 weeks and 3 field visits	Joint mission, if possible

B5. Procurement Arrangements Details

B.5.1 National Procedures and Regulations - Use of Country Procurement System

The legal and regulatory framework in Cape Verdean procurement is governed by an Act dated September 10 17/VII/2007. The National procedures for procurement by AON are broadly consistent with the Bank Rules and Procedures. The Act sets out the main principles of the system, including those of access and participation in markets equality, transparency and publicity, economy and efficiency, impartiality or the good faith. It prohibits the splitting of acquisitions as a means to evade the open tender, which is the reference method. It sets up a regulatory body (ARAP), also including a Dispute Resolution Commission (DRC).

Consistent with the provisions of its rules and procedures clause 3.3, the Bank may allow the use of National Competitive Bidding (NCB) procedures, as the most appropriate way of procuring goods or works which, by their nature or scope, are unlikely to attract foreign competition. To be acceptable for use in Bank-financed procurement, these procedures shall be reviewed and modified[5] as necessary to assure economy, efficiency, transparency, and broad consistency with the provisions included in Section I of the Rules and Procedures. In this regard, the Bank's assessment of the National Procurement Procedures of Cape Verde carried out in 2011 concluded that the legal framework (Pillar I) for procurement is globally consistent with international standards, good practices and the Bank's procurement rules and procedures. However, some deviations still

[5] Any such modification shall be reflected in the Financing Agreement.

remain, as detailed in the Global Action Plan (B.5.7) which require further review and reforms of certain provisions of the Act, Regulation and national bidding documents. Furthermore, implementation of the Global Action Plan (GAP) will improve the procurement system thus achieving; (i) compliance with the Bank's fiduciary obligations; and (ii) compliance with internationally accepted best practice. The following are the deviations which have been identified : (i) the eligibility of bidders for construction contracts is subject to the issuance of a permit by the Permit Board, (ii) the participation of foreign firms is not allowed for NCB, (iii) the evaluation criteria specified in the bidding document have flexibility regarding their definition, (iv) non-monetary evaluation criteria can be used for evaluation of bids, and (v) the absence of clauses on fraud and corruption in the bidding document. All of the discrepancies identified in the NCB report and which have been summarized in the GAP presented in Section B.5.7, will be reflected in an annex of the Financing Agreement of the Project.

B.5.2 Procurement Arrangements

Procurement of ICB contracts and Consulting services for the proposed project would be carried out in accordance with the Bank's Rules and Procedures: "Rules and Procedures for Procurement of Goods and Works", May 2008 Edition, Revised July 2012; and "Rules and Procedures for the Use of Consultants", May 2008 Edition, revised July 2012, using the relevant Bank Standard Bidding Documents, and the provisions stipulated in the Financing Agreement. For the proposed project, in reference to Section B.5.1, procurement of NCB contracts would be carried out in accordance with the national procurement law, Law No. 17/VII/2007 dated September 10, 2007 and updated on January 5, 2009, using the national Standard Bidding Documents, subject to the following additional provisions and as stipulated in the Financing Agreement.

1) Eligibility: No bidder, foreign or domestic, shall be precluded from participating in the bidding process for reasons unrelated to their eligibility or capability to perform the contract. Examples of reasons that may not be used to preclude a bidder from so participating include the following: proof that the bidder is not under bankruptcy proceedings in the territory of the Recipient; appointment by the bidder of a local representative in the territory of the Recipient; prior registration by the bidder in the territory of the Recipient; or license or agreement /permit allowing the bidder to operate in the territory of Recipient.

2) Bidding Documents. Bidders shall use standard national bidding documents for the procurement of goods, works and services, consistent with the provisions of the Bank's Rules and Procedures.

3) Qualification. Bidders shall be post-qualified unless the Procurement Plan explicitly provides otherwise. Irrespective of whether post qualification or prequalification is used, both national and foreign bidders who meet the qualification requirements stated in the bidding documents shall be allowed to participate in the bidding process. The contract award will be to the bidder meeting the minimum post qualification requirements whose bid has been determined to be (i) to be substantially responsive to the bidding documents and (ii) to be the Lowest Evaluated Bid;

4) Bid evaluation. The qualification criteria shall be clearly specified in the bidding documents, and all criteria so specified, and only such criteria so specified shall be used to determine whether a bidder is qualified; the evaluation of the bidder's qualifications should be conducted separately from the technical and commercial evaluation of the bid. Evaluation of bids shall be made in strict adherence to the criteria set forth in the bidding documents; criteria other than price should be quantified in monetary terms. A contract shall be awarded to the qualified bidder offering the lowest technically responsive evaluated bid. Bidders shall not be eliminated from detailed evaluation on the basis of minor, non-substantial deviations.

5) Fraud & Corruption Clauses: Each bidding document and contract financed out of the proceeds of the Financing shall have provisions relating to F&C as contained in the Banks Rules and Procedures.

6) Right to Inspect/Audit: Each bidding document and contract financed out of the proceeds of the Financing shall provide that the bidder, supplier or contractor, and any subcontractor, shall permit the Bank, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have these accounts and records audited by auditors appointed by the Bank. An act by the bidder, supplier, contractor or subcontractor intended to materially impede the Bank's exercise of its inspection and audit right constitutes an Obstructive Practice.

B5.1.3 In addition, the national standard bidding document maybe used subject to modification of the following conditions which are deviations from those of the Bank at (i) Instructions to Bidders and (ii) General Conditions of Contract and detailed in Section B5.7.

The various items under different expenditure categories and related procurement arrangements vis-à-vis the use of the NPP (or CPS) are summarized in Table 2.1 below. Each contract to be financed by the Loan, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior-review requirements, and time frame are agreed between the Borrower and the Bank project team and are provided in the Procurement Plan (see section B.5.5).

Table 2.1 : Summary of Procurement Arrangements vis-à-vis the use of Country Procurement System

Project Categories	UA			
	Use of NPP	Use of Bank's procedures	Non-Bank-Funded	Total
1. Civil Works				
1.1Buildings				
Data Center (incl. cooling equip)		1,428,425.00		1,428,425.00
Business Continuity Plan		2,588,946.00		2,588,946.00
Business Center		3,767,148.37		3,767,148.37
Technology Park Shared Services		1,820,788.38		1,820,788.38
Incubation Center		837,144.08		837,144.08
Training and Qualification Center		230,214.62		230,214.62
1.2 Energy Infrastructure (incl. energy redundancy ring		6,064,372.00		6,064,372.00
Total for Civil works		**16,737,038.45**		**16,737,038.45**
2. Goods				
2.1 IT Equipment		4,311,284.00		4,311,284.00
2.2 Office Equipment		994,087.00		994,087.00
2.3 Office furniture		226,423.00		226,423.00
2.3 Vehicles	183,524.00			183,524.00
2.4 Fire Suppressant System		263,545.00		263,545.00
2.5 Video Surveillance System	125,147.00			125,147.00
Total for Goods	**308,671.00**	**5,795,339.00**		**6,104,010.00**
3. Consulting Services				
4. Technical assistance and capacity Building: Technology Park Management Structure		361,104.00		361,104.00
4.2Design & Construction Supervision		583,389.00		583,389.00
4.3Technical Assistance - Implementation Manual & Accounting Assistance		60,000.00		60,000.00
4.4 Financial Audit Services		50,000.00		50,000.00
4.5 Training		384,076.00		384,076.00
Total for Services		**1,438,569.00**		**1,438,569.00**
TOTAL	**308,671.00**	**24,279,617.50**		**24,279,617.50**

B.5.2.1 Civil Works

- Procurement of civil works above UA 1.5 million per contract will be carried out under International Competitive Bidding (ICB) procedures, using the Bank's Standard Bidding Documents (SBDs). Works procured under this method, would include construction works of the Business Continuity Plan, Business Center, Technology Park Shared Services and the energy infrastructure energy ring.

- Contracts of works valued at less UA1.5 million will be carried out under National Competitive Bidding (NCB) procedures, using the National Standard Bidding Documents (NSBDs), subject to the revisions B.5.7 below. Works procured under this method, would include construction works of the Data Center, Incubation Center, Training and Qualification Center.

B.5.2.2 Goods

- Procurement of contracts for goods above UA 200,000 per contract will be carried out under International Competitive Bidding (ICB) procedures, using the Bank Standard Bidding Documents (SBDs). Goods procured under this method, would include: IT Equipment (servers, routers, switches, satellite connections, video conferencing equipment, laptops, printers and related software and licenses) and office equipment (televisions, projector screens, electrical appliances etc).

- Contracts for goods valued below – UA200, 000 and above UA 100,000 each will be awarded under NCB procedures and using the National Standard Bidding Documents (NSBDs), subject to additional provisions cited in B.5.2 above. Goods procured under this method, would include: vehicles, and video surveillance equipment. NCB is recommended because the value and nature of the goods may not attract international suppliers, in addition the goods are readily available in the local market.

- For goods valued less UA 100,000, per contract, shopping or other procedures will be used. Goods procured under this method, would include: vehicles. Shopping is recommended because the value and nature of the goods may not attract international suppliers, in addition the goods are readily available in the local market.

B.5.2.3 Consulting Services

These services comprise (i) Technical Assistance and Capacity Building for the Technology Park Management Structure (UA 361,104), (ii) Design and Supervision services (UA 583,389), (iii) Accounting Technical Assistance (UA 60,000) and (iv) Audit Services (UA 50,000).

- Capacity Building Technical Assistance, Design and Supervision Services and Accounting Technical Assistance shall be procured using Shortlist with Quality and Cost Based Selection (QCBS).

- Financial Audit services shall be procured through a shortlist using Least Cost Selection (LCS) method.

- Short lists of consultants for services estimated to cost less than UA200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Rules and Procedures for the Use of Consultants", dated May 2008 Edition, Revised July 2012.

When the amount of the contract is less than UA 200,000, the Borrower may limit the publication of a Specific Procurement Notice (SPN) requesting for expressions of interest to national or regional newspapers. However, any eligible consultant, being regional or not, may express their desire to be short-listed.

B.5.2.4 Training

Training and capacity building valued at **UA 384,076.00** will be carried out over the four years of the project implementation. A training plan and budget will be submitted to the Bank annual for prior review and approval. The training plan will identify the general framework of training and similar activities for the year,

including the nature, relevance and objectives of training and study tours/ conferences/workshops/academic programs, the number of participants, cost estimates, and the translation of the knowledge gained in the actual implementation of project components.

B.5.2.5 Miscellaneous

Other miscellaneous expenses such as office stationery, vehicle maintenance, petrol, travel tickets will be procured through the Government of Cape Verde administration/accounting procedures acceptable to the Bank.

B.5.3 Assessment of the Executing Agencies

NOSi, a project implementation agency for all IT project implemented by the Government of Cape Verde, will be the Executing Agency for this project. However, in accordance with the Cape Verdean Law[6] which requires that all procurement activities related to construction works be carried out by the General Infrastructure Directorate (GID) within the Ministry of Infrastructure and Maritime Economy, NOSi will delegate procurement activities related to construction works and related services to the GID. NOSi will be responsible for the procurement of goods and consulting services and training activities only. The coordination under this Project will be agreed upon between NOSI and the Ministry of Infrastructure and Maritime Economy. The Project shall be implemented by a Project Management Team (PMT), under NOSi. Currently, the PMT staff comprises a Civil Engineer, Finance/Admin Director and three (3) IT Specialists.

An assessment of the capacity of both the Agencies to implement procurement actions for the project has been carried out by the Bank. The assessment reviewed the organizational structure for implementing the project and the interaction between the project's staff responsible for procurement activities and both NOSi and the Ministry of Infrastructure and Maritime Economy.

B.5.3.1 NOSi

NOSi has a Project Management Team (PMT) which includes a Finance/Administration Officer, a Civil Engineer and three (3) ICT Specialists. The assessment of NOSi revealed that the resources, capacity, expertise and experience of NOSi are currently inadequate to carry out procurement activities under the project. The current organizational structure of NOSi does not include a dedicated Procurement Officer. Procurement activities are carried out by Finance and Administration Officer. In addition, NOSi has no operating tools such as implementation guidelines or manuals and requires strengthening for the staff of NOSi to ensure effective service delivery of the Agency.

In order to strengthen the PMT, additional staff will be added to the PMT namely: Project Coordinator; M&E Officer; Accountant; Procurement Officer; Environmental and Social Officer. As much as possible, the Government intends to identify competent staff within who may fit the vacant positions within NOSi. Where positions are not filled, positions will be filled through a competitive process. ToRs and CVs of individuals recruited shall be submitted and approved by the Bank.

B.5.3.2 General Infrastructure Directorate /Ministry of Infrastructure and Maritime Economy

The General Infrastructure Directorate (GID) under the Ministry of Infrastructure and Maritime Economy is responsible for carrying out procurement activities related to construction. The Ministry of Infrastructure and Maritime Economy has extensive experience with the rules & procedures of multilateral donors, as well as national procurement procedures. In addition, the GID has experience in implementing Bank Funded Projects and carrying out the related procurement activities; Phase I of the construction of the Praia Airport

[6] [6] Decree Law No. 54/2010 of November 29, 2010

funded by the Bank and completed in 2005 and the Sector Support Program road financed by the World-Bank were implemented by the GID. The GID is headed by the Director General and has a total of fifteen other staff members, of which eleven have been certified by ARAP to carry out procurement activities. The GID will nominate one experienced and qualified staff member to be dedicated to carrying out procurement activities related to this Project. The ToR and CV of the individual to be assigned to carry out procurement activities within the GID shall be submitted and approved by the Bank.

B.5.3.3 Risks and Mitigation Measures

Envisaged risks are associated with lack of capacity within NOSi to prepare all the required tools to ensure successful project implementation. To mitigate against procurement risks, funds have been prepared to provide technical assistance and capacity building for procurement staff within the PMT and GID to ensure proper handling in procurement activities.

The issues concerning the procurement component for implementation of the project have been identified and the corrective measures which have been agreed are indicated in Table 2.2 below:

Table 2.2 : Summary of Issues and Corrective Measures

	Issue	Risk Mitigation/Corrective Measure	Responsible	When
1	Lack of segregation of duties and conflicting roles	Recruitment of a dedicated experienced and qualified Procurement Expert to carry out procurement activities related to goods and works	NOSi	Launching
2	Delays in procurement processing	Nomination of an experienced Procurement Staff to carry out procurement activities related to the procurement of civil works	GID	Launching
3	Ambiguous or unclear procedures, roles and responsibilities under project implementation	Development of an implementation manual Memorandum of Understanding.	NOSi and GID	Three months within Project effectiveness Negotiation

The Project Implementation Manual will include, in addition to the procurement procedures, the SBDs to be used for each procurement method, as well as model contracts for works and goods procured. To further mitigate the risk of procurement delays, the Project has made an allowance for the recruitment of Procurement Technical Assistance which will assist in finalizing the implementation manual for NOSi and the GID.

B.5.4 General Procurement Notice

The text of a General Procurement Notice (GPN) has been agreed with and it will be issued for publication[7] in UNDB online and in the Bank's Internet Website, upon approval by the Board of Directors of the Financing Proposal.

B.5.5 Procurement Plan

The Borrower, at appraisal, developed a Procurement Plan for project implementation which provides the basis for the procurement methods. This plan has been agreed between the Borrower and the Project Team and is available at NOSi, NOSI-Nucleo, Operacional Sociedade Informacao, Avenida Cidade Lisboa, Praia; Cabo Verde. The Procurement plan will also be available in the Project's database and in the Bank's external website. This Procurement Plan will be updated by the Borrower's Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Any revisions proposed to the Procurement Plan shall be submitted to the Bank prior no objection. The Borrower shall implement the Procurement Plan in the manner in which it has been agreed with the Bank.

B.5.5.1 Goods and Works

Review Procedures: The following documents are subject to prior review and approval by the Bank before promulgation: (a) Specific Procurement Notices, (b) Prequalification Invitation Documents, where appropriate, (c) Tender Documents or Requests for Proposals from Consultants including shortlist, (d) Tender Evaluation Reports or Reports on Evaluation of Consultants Proposals, including recommendations for Contract Award, (e) Draft contracts, if there have been amended from the drafts included in the tender invitation documents, (f) modifications of signed contracts.

Prior Review Threshold: Procurement Decisions subject to Prior Review by the Bank as stated in Appendix 1 to the Rules and Procedures for Procurement of Goods and Works:

N°	Procurement Method	Prior-Review Thresholds UA	Post-Review Threshold UA	Frequency of Review
1.	ICB (Goods)	Above 200,000		All
2.	ICB (Works)	Above 1.5 million		All
3.	NCB (Goods)		Below 200,000	First (3) contracts[8]
4.	NCB (Works)		Below 1.5 million	First (3) contracts
5.	Shopping		Below 100,000	All

[7] *The General Procurement Notice is prepared by the Borrower and submitted to the Bank, which will arrange for its publication in the United Nations Development Business (UNDB online) and in Bank's Internet Website.*

[8] After (3) contracts, any further contracts will be subject to post review

B.5.5.2 Selection of Consultants

Prior Review Threshold: Selection decisions subject to Prior Review by Bank as stated in ***Appendix 1 to the Rules and Procedures for the Use of Consultants, dated May 2008, revised July 2012).***

	Selection Method	Prior-Review Thresholds (UA)	Post-Review Threshold UA	Frequency of Review
1.	Competitive Methods (Firms)	Above 200,000		All
2.	Competitive Method (Individual)	Above 50,000		All
3.	Single Source (Firms/Individual)	-	-	All
4.	Competitive Methods (Firms)		Below 200,000	First (4) contracts[9]
5.	Competitive Method (Individual)		Below 50,000	First (4) contracts

B.5.6 Frequency of Procurement Post Review Mission

In addition to the prior review supervision to be carried out from Bank offices, the capacity assessment of the Implementing Agency has recommended two procurement supervision missions to visit annually for project.

Procurement documents, including solicitations of price quotations, evaluation sheets and contract awards will be kept at the PMU for periodic review by the Bank's supervision missions.
The procurement post review audits to review the correctness of the procurement activities will be carried out during the supervision mission after the procurement activities are completed. However, the Bank reserves the right to conduct its procurement audits at any time during the project implementation. This review will determine the need for modifications and improvement of the procurement arrangements. Information on procurement processing for all procurement activities including those carried out will be collected by the NOSi quarterly and shall be included in detail in the Project Quarterly Progress Report to be submitted to the Bank

B.5.7 Global Action Plan for improvement to National Procurement Procedures.

The following discrepancies with the Bank's Rules and Procedures: "Rules and Procedures for Procurement of Goods and Works", dated May 2008, revised July 2012, have been identified in the national procurement law and Regulation Law No. 17/VII/2007 dated September 10, 2007 and updated on January 5, 2009, and shall not be used for procurement activities financed by the Bank. The Bank will continue the ongoing dialogue on constructive reforms with Cape Verdean authorities for the implementation of this action plan)

[9] After (4) contracts, any further contracts will be subject to post review

CONCERNS	REQUIRED CHANGES
Discrepancies identified in the National Procurement Act and its Regulations	
Principle of Transparency: (i) The criteria for evaluation of tenders indicated in NSBD have flexibility regarding their definition (ii) The absence of clauses on fraud and corruption in the NSBD	(i) Review Article 95, which states that the formulation of evaluation criteria "must be established in an accurate form, but must have the necessary flexibility to avoid an artificial situation". (ii) The NSBD should have special clauses on fraud and corruption.
Principle of Equity (i) The participation of foreign companies are not allowed for NCB ii) The eligibility of bidders for works contracts is subject to the issuance of a permit by the Commission Permits. (iii) Criteria for non-monetary assessments can be used for the evaluation of bids.	(i) Review the Regulation to allow for participation of foreign nationals. (ii) Review the Act to allow for firms to participate without requiring a permit to be issued. (iii) Review the Regulations to remove the use of a merit system for evaluation of criteria related to goods and works.
Discrepancies identified in the National Standard Bidding Documents	
Principle of Economy (i) No provision on the right of the buyer to modify the quantities at the time of contract award (ii) No provision on the right of the Client to accept any offer and reject any offer or all offers **Principle of Eligibility** Principle of eligibility: (i) Eligibility criteria related goods and services (ii) Absence of certain eligibility criteria for bidders	Revision of the SBD for Goods to include appropriate standard Clauses on: (i) A clause giving the buyer the right to change the amount at the time of contract award (ii) Provide a clause allowing the buyer to reserve the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior contract award, without thereby incurring any liability whatsoever vis-à-vis the affected bidder or (i) Revise the NSBD to take into account the origin of goods and services related criteria in case of ADB financing and NTF (ii) Review the eligibility criteria to take into account the following parts of the corresponding clauses of the Bank SBD: (i) the exclusion by the Bank, (ii) the eligibility criterion for the member countries (in case of financing Nigeria Trust Fund and ADB) and open to all nationalities in case of ADF financing, (iii) the exclusion by the Security Council of the United Nations, and (iv) participation Foreign companies

CONCERNS	REQUIRED CHANGES
(iii) Criteria and documentary evidence of the eligibility of the goods and related services	(iii) Revision of NSBDs to require documents proving the eligibility of the goods in connection with the Bids, in the case of ADB financing and NTF.
Principle of Transparency: (i) Absence of the possibility of suspension of loan	(i) Provide for the suspension of the loan by the Bank
(ii) Absence of the possibility of Inspection and Audit	(ii) Provide for inspection and audit by the Bank
(iii) Absence of provisions on fraud and corruption	(iii) Include provisions relating to corruption and fraud in NSBD
(iv) Contact the buyer	(iv) Provide that apart from the request for clarification of bids, no bidder will enter into contact with the Buyer, from the time of bid opening to the time the contract is awarded, result in rejection of its submission without prejudice to any further action that may be taken Buyer against him.
(v) Confidentiality Procedure	(v) Provide for the confidentiality of information contained in the tenders
Principle of Efficiency: (i) Modification and Withdrawal of Bids	(i) Provide for the modification and withdrawal of a bid, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of tenders
(ii) Clarification of tenders	(ii) Provide the opportunity to ask the Bidder for clarification of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the Bid shall be sought, offered or permitted
(iii) No provision on notification of the offer and Price Schedule	(iii) Provide a clause allowing the Purchaser, before the expiration of the period of validity of bids, to notify the successful Bidder in writing by registered mail or telex confirmed in writing that its tender has been accepted.
Discrepancies identified in the General Conditions of Contract	
Principle of Efficiency **(i)** Definitions	(i) Provide the definitions of the various elements present in the NSBD
(ii) Country of origin	(ii) Include a clause in the GCC property for the goods delivered and / or services under the contract are from the countries and territories eligible under the rules of the Bank
(iii) Standards (Specifications and Standards)	(iii) Provide a clause on specific standards and codes to be met by the supplies and equipment to be provided or tested.

B6. Audit Arrangements

The project's annual financial statements and the internal control system will be audited each year by an independent external audit firm, based on Bank-approved terms of reference. The accounting and internal audit reports (Management Letter) will be forwarded by NOSi to the Bank within six months, following the end of the audited year. Audits will be conducted in conformity with international standards of auditing (ISA). The first audit will cover more than 12 months and up to the first 18 months, if the first disbursement is made in the second semester of the year. Audit terms of reference (TOR) must always be submitted to the Bank for approval.

B7. Economic and Financial Analysis

Currency	: The analysis has been done in EUR.
Exchange Rates	: 1 UA is equivalent to EUR 1.17
	1 EUR is equivalent to CVE 110.265
Project Life	: 25 years life span is assumed.

I- Introduction

The Ministry of Finance and Planning as the Executing Agency, owner and responsible of the project will delegate the responsibility of implementing the project to Operational Nucleus for Information Society - (NOSi)". NOSI was established in year 2003, according to Council of Ministers resolution n: 15/2003 for July 7, 2003, as an executive and operational arm of the government to the ICT sector. It has no legal personality, financial, or administrative autonomy and depends in full on the Government's budget. NOSI is not producing any financial or income statements, as a result, it was not possible to undertake analysis to the agency's financial results.

II- Economic Analysis

Investment Costs: The project total cost is estimated at UA 30.76 million (EUR 35.99 million), of which 12%, and 88% are in local and foreign currency respectively. These are estimated investment costs related to the construction of buildings, equipping of park facilities and the installation of ICT hardware. The Investment cost is net of salaries that will be paid to the PMT staff in local currency by the Government. Meanwhile, as stressing factor, the following assumptions were applied in calculating the Investment Cost of the project (i) no shadow pricing/conversion factor (ii) 100% of contingencies are considered as investment cost, and (iii) the opportunity cost of land acquisition is considered at 100% of its value.

Reinvestment Cost: The value of upgrading and renovating the park's facilities is based on the following assumptions:

(i) 40% of the investment cost of data centre (component 1) is considered every 6 years for the renovation and upgrade of ICT equipment. This cost is converted to economic cost using a standard conversion factor of 85%.

(ii) 10% of the total investment cost of business centre, shared facilities, incubation and training/qualification centre is considered every 10 years for the renovation, and replacement of tools and equipment installed in the park shared facilities. This cost is converted using a standard conversion factor of 85%.

Operation and Maintenance Costs: O&M cost was calculated per each of the Park Component, with a total average of 16% p.a. over the project life span. It accounts to an average of EURO 5.6 million p.a. for the estimated project's 25 years of operation. These are the incremental costs of (i) salaries, (ii) energy supply, (iii) maintenance inputs, (iv) telecommunication, (v) licensing and other related expenditure. It is worth

noting that the cost involving in energy consumption of computer equipment and cooling tend to account for a significant portion of the O&M cost. It represents 85% of the total O&M expenses accounted to the Data Center and the Business Continuity Plan alone, and 69% of the total O&M expenses of the Park.

Residual Value/Salvage Value: 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. Some other components would have reached the end of their economic live, such that the salvage values would be negligible and would not make an impact on the evaluation of the project EIRR. Thus, no residual value has been considered for racks, drivers, vehicles, modems, along with other IT and equipment at the end of the project's life span. See table 7.1 for the detailed calculation of the residual value of the project.

Table 7.1: Residual Value of the project *(Fig. in EUR currency)*

Item	Total Investment	Estimated Residual (%)	Net Residual Value
Data Center - building area	587,675	40%	235,070
Energy supply equipment and infra-structure	1,451,050	20%	290,210
Cooling equipment and infra-structure	888,768	20%	177,754
Business Continuity Center - building area	1,958,917	40%	783,567
Energy supply equipment and infra-structure	2,902,099	20%	580,420
Business Center - building area	4,407,564	40%	1,763,025
Auditorium Area	734,594	40%	293,838
Foyer, Conference and Meeting Rooms Areas	1,395,728	40%	558,291
Total building area	979,459	40%	391,783
Total building area	269,351	40%	107,740
Energy Infrastructure	2,380,628	25%	595,157
Land Acquisition [opportunity cost]	3,515,168	100%	3,515,168
Net Residual Value of the Project in UA			9,292,024
Equivalent in EUR @ 1.17			10,871,668

Benefits:

1- **Direct benefits**: are based on parameters set in the feasibility study prepared in Dec-2102, through a MIC Grant financed by the Bank. These include revenues generated from the following activities:

i) Providing Housing, Hosting and Cloud Services through the data centre and business continuity plan/disaster recovery Site;
ii) Leasing of open and corporate offices;
iii) Charging fees on Incubators using the incubation centre;
iv) Providing certified training, certification tests and training rooms rental;
v) Fees and Charges on using auditorium, foyer , conference and meeting rooms;
vi) Concessions granted for restaurant, gymnasium, and stores.

(i) Data Centre and Business Continuity Plan/Disaster Recovery Site:

The revenues stream of the Data Centre is generated from (i) Housing Services, (ii) Managed Hosting and (iii) Cloud Services:

Housing Services: It involves the rental of space in the DC for the installation of customer servers (i.e. banks, financial institutions and backup for regional governments) , ranging from leasing of complete racks to space within a rack, ensuring an uninterrupted power supply and high-speed network access. This service is targeted at customers needing dedicated servers with high levels of stability and cost savings in terms of power supply, cooling and security. The revenue breakdown is as follows:

(Fig. in EUR currency)

Table 7-2 : Housing Services	2017	2018	2019	2020	2021
Filled area (m2)	144	179	212	243	273
Price per m2	25,393	25,393	25,393	25,393	25,393
Total (per year) (approx.)	**3,656,645**	**4,545,413**	**5,383,395**	**6,170,589**	**6,932,390**

Managed Hosting: It involves the shared leasing of data storage in DC servers, particularly responding to organizations need to store high quantities of data at secured and convenient IT facilities. The revenue breakdown is as follows:

(Fig. in EUR currency)

Table 7-2 : Managed Hosting	2017	2018	2019	2020	2021
Filled area (m2)	20	32	46	64	83
Price per m2	11,790	11,790	11,790	11,790	11,790
Total (per year) (approx.)	**235,796**	**377,273**	**542,330**	**754,546**	**978,552**

Cloud Services: The concept of cloud services refers to the use of the storage and processing capacities of shared servers and computers interconnected through the Internet. Data is stored via services that can be accessed from anywhere at any time, with no need to install programs or store data. The revenue breakdown is as follows:

(Fig. in EUR currency)

Table 7-2 : Cloud Services	2017	2018	2019	2020	2021
Filled area (m2)	20	45	77	118	167
Price per m2	7,074	7,074	7,074	7,074	7,074
Total (per year) (approx.)	**141,477**	**318,324**	**544,688**	**834,716**	**1,181,336**

(ii) Open and Corporate Offices:

It essentially focuses on two types of services (i) leasing of office space, and (ii) condominium management. The base of assumptions for each of the offices type is summarized as follows:

- Open offices: the market price is estimated at an average of EUR 5/m2/month. The following are the detailed assumptions:

- ✓ The cost per m2 is net of a price discount of 20% comparing to the average market rental price to encourage the installation of national and regional Micro and Small enterprises in the Park.
- ✓ It is also estimated that in the first 5 forecasted years an occupancy rate of 75% can be reached in year 2017, which will evolve to 95% in year 2021.

(Fig. in EUR currency)

Table 7-3 : Open Offices	2017	2018	2019	2020	2021
Market Price (EUR/m2/month)	5	5	5	5	5
Marketable Area (m2)	600	600	600	600	600
Occupation rate	75%	80%	85%	90%	95%
Open Offices total (per year) (approx.)	**27,000**	**28,800**	**30,600**	**32,400**	**34,200**

- Corporate offices: the market price of renting Corporate Offices is estimated at an average of EUR 8/m2/month based on the following assumptions:

- ✓ A discount of 20% used to encourage the involvement of Medium-sized domestic and regional offices. This discount will tend to decrease the Technology Park gains recognition and the general occupancy of the business centre increases.
- ✓ It is estimated that in the first 5 forecasted years an occupancy rate of 60% in year 2017, which will evolve to 95% in year 2021.

(Fig. in EUR currency)

Table 7-4 : Corporate Offices	2017	2018	2019	2020	2021
Market Price (EUR/m2/month)	8	8	8	8	8
Marketable Area (m2)	3,050	3,050	3,050	3,050	3,050
Occupation rate	60%	75%	85%	90%	95%
Corporate Offices total (per year) (approx.)	**175,680**	**219,600**	**248,880**	**263,520**	**278,160**

Incubation Center: The first years of existence of a new company or project are marked by a high degree of uncertainty in terms of its potential success and financial return. It is in this initial phase that companies and projects need extra support and dedication in order to be able to survive and grow. The purpose of the Incubation Centre of the Technology Park is to provide this support. Its main goal is to encourage the creation and development of micro and small-sized enterprises to support all business areas. It will provide physical space especially built to temporarily house companies in their launch and consolidation phase, and offers a series of support services such as courses and training in business education, advice, consulting, project guidance, market access, strategic information and other areas.

The estimated revenues for the incubation center followed a similar logic to that of the business center. It is based on the available marketable area, multiplied by the average rental prices per 8-EUR 8/m2/month. To make the incubation centre accessible to start-up MSMEs a discount of 50% is projected all over the project lifetime. It is estimated that the occupancy rate in year 2017 will be 60%, which will evolve to 100% in year 2021.

(Fig. in EUR currency)

Table 7-5 : Incubation Center	2017	2018	2019	2020	2021
Market Price (EUR/m2/month)	3	3	3	3	3
Marketable Area (m2)	600	600	600	600	600
Occupation rate	60%	70%	80%	90%	100%
Number of month	**12**	**12**	**12**	**12**	**12**
Total in EUR p.a. (per year) (approx.)	**12,960**	**15,120**	**17,280**	**19,440**	**21,600**

(iii) Training and Qualification Center

The purpose of the Technology Park's Training & Qualification Centre (TQC) is to provide intermediate and higher-level ICT technical certifications and training courses to bridge the current gap in these types of services in Cape Verde and the region. Revenues will be originated from the following three main activities:

Certified training: The estimated revenues generated from the certified training results are based on the calculation of the average price of one course for domestic &/or international trainees per year. The average price of training below is net of a 50% & 30% discount for domestic and international trainees respectively.

(Fig. in EUR currency)

Table 7-6 : Certified Training	2017	2018	2019	2020	2021
Average price of one Course for Domestic trainees	1,758	1,758	1,758	1,758	1,758
Domestic trainees	216	216	216	216	216
Number of International trainees	48	58	69	83	100
Average price of one Course for International trainees	2,462	2,638	2,813	2,989	3,165
Total in EUR p.a. (approx.)	**498,900**	**532,677**	**575,237**	**628,741**	**695,863**

Certification Tests: The demand and price of the specialized certification tests are determined on the assumption that it will only be dedicated to domestic trainees only.

(Fig. in EUR currency)

Table 7-7 : Certification Tests	2017	2018	2019	2020	2021
Average price of Domestic Students certification	148	148	148	148	148
Number of Domestic Students	72	72	72	72	72
Total in EUR p.a. (approx.)	**10,645**	**10,645**	**10,645**	**10,645**	**10,645**

Training Room Rental: Revenues are projected based on the average market price. It is based on the estimated rental days multiplied by the average market rental price. This will only target domestic market being (i) ICT companies, (ii) local banks, (iii) public administration, and (iv) the private sector.

(Fig. in EUR currency)

Table 7-8 : Training Room Rental	2017	2018	2019	2020	2021
Room Rental average price (EUR per day)	200	200	200	200	200
Total days of Room Rental	140	210	280	310	380
Total in EUR p.a. (approx.)	**27,933**	**41,899**	**55,865**	**61,851**	**75,817**

(iv) Auditorium, Foyer , Conference and meeting rooms;

Auditorium: The idea of Auditorium is unique in Cape Verde for its seating capacity of 400 persons, high quality, and installation of the latest art of technology. Hence, the rental cost was based on the international standards. It is projected that it will be rented for 24 days in year 2017 that evolve to reach 72 days in year 2021.

(Fig. in EUR currency)

Table 7-9 : Auditorium	2017	2018	2019	2020	2021
Average cost of rent (per day)	2,213	2,213	2,213	2,213	2,213
Number of rental days (per year)	24	36	48	60	72
Total in EUR p.a. (approx.)	**53,119**	**79,679**	**106,238**	**132,798**	**159,358**

Foyer: It will be utilized as an exhibition room or to hold receptions and other business events. The rental cost is based on the international standards of EUR 133/per day. It is projected that the auditorium will be rented for 24 days in year 1 of operations that evolve to reach 72 days in year 2021.

(Fig. in EUR currency)

Table 7-10 : Foyer	2017	2018	2019	2020	2021
Average cost of rent (per day)	133	133	133	133	133
Number of rental days (per year)	24	36	48	60	72
Total in EUR p.a. (approx.)	**3,183**	**4,774**	**6,366**	**7,957**	**9,548**

Conference Room: The average cost of rent is based on a market price of EUR 499/per day. It is projected that the conference room will be rented for 60 days in year 2017 of operations that evolve to reach 144 days in year 2021.

(Fig. in EUR currency)

Table 7-11 : Conference Room	2017	2018	2019	2020	2021
Average cost of rent (per day)	499	499	499	499	499
Number of rental days (per year)	60	96	120	132	144
Total in EUR p.a. (approx.)	**29,954**	**47,927**	**59,909**	**65,900**	**71,891**

Meeting Rooms: The four (4) meeting rooms will be utilized to hold meetings, seminars, and workshops with a capacity of 40 people each. The average cost of renting is based on a market price of EUR 177 per day. It is projected that the meeting rooms will be rented for 60 days in year 2017 of operations that evolve to reach 144 days in year 2021.

(Fig. in EUR currency)

Table 7-12 : Meeting Rooms	2017	2018	2019	2020	2021
Average cost of rent (per day)	177	177	177	177	177
Number of rental days (per year)	60	96	120	132	144
Number of meeting rooms	4	4	4	4	4
Total in EUR p.a. (approx.)	**42,437**	**67,899**	**84,874**	**93,362**	**101,849**

(v) Concessions granted for Restaurant, Gymnasium, and stores:

The concession will be managed and awarded by the future Park Management. Though this component is not a part of the park's core business, it makes the park more complete and attractive for domestic and international partners/clients.

Restaurant: The restaurant is considered to be permanently occupied. The applicable price is EUR 4/m2/month.

(Fig. in EUR currency)

Table 7-13 : Restaurant Concession	2017	2018	2019	2020	2021
Price applicable to space (EUR/m2/month)	4	4	4	4	4
Space area (m2)	300	300	300	300	300
months	12	12	12	12	12
Total in EUR p.a. (approx.)	**14,512**	**15,549**	**16,585**	**17,622**	**18,659**

Gymnasium: The Gymnasium is also considered to be permanently occupied. The applicable price is EUR 4/m2/month.

(Fig. in EUR currency)

Table 7-14 : Gymnasium Concession	2017	2018	2019	2020	2021
Price applicable to space (EUR/m2/month)	4	4	4	4	4
Space area (m2)	200	200	200	200	200
months	12	12	12	12	12
Total in EUR p.a. (approx.)	**9,675**	**10,366**	**11,057**	**11,748**	**12,439**

Stores Concession: The stores are considered to be permanently occupied. The occupied area is estimated at 60 m2 in year 2017 that will increase to 160 m2 in year 20210.

(Fig. in EUR currency)

Table 7-15 : Stores Concession	2017	2018	2019	2020	2021
Price applicable to space (EUR/m2/month)	4	4	5	5	5
Space area (m2)	60	100	130	150	160
months	12	12	12	12	12
Total in EUR p.a. (approx.)	**2,902**	**5,183**	**7,187**	**8,811**	**9,951**

2- Indirect Economic Benefits: are based on parameters collected during meetings and consultation with main project's stakeholders. It includes revenues generated from (i) the reduction in costs and (ii) jobs created. The detailed assumptions are as follows:

Reduction in cost and time spend on overseas training and certifications– Cost and time savings will be made through reduction in number of population spending time and money to participate in overseas training. Currently, engaged population in overseas training is estimated at yearly average of 281 people, spending an average of EUR 1.755 million per year (including perduims, & air tickets) and wasting approximately 844 working days per year on travel. When the project is realized time devoted to overseas training will be reduced by 75% as trainees will no longer be in need to travel. It is projected that the total time and cost savings will amount to EUR 954,728 in year 2017 and will reach EUR 1,414,412 in year 2021.

Job Creation: Newly created employment are grouped into two categories: (i) direct; and (ii) indirect. As a conservative approach, the calculation is based only on the 1,014 new jobs directly tied to the business of the Park, in addition to 150 jobs that will be temporary created during the construction phase of the project. The direct jobs created include, park management, resident companies, incubated companies and general park services. The estimated 1,217 indirect jobs created are services not directly tied to the park's activities, such as marketing, accounting, tourism, audit, security, cleaning, renovation etc....

Conclusion:

Based on the above, the Economic Internal Rate of Return is estimated at 18.08 %, which is higher than the opportunity cost of capital in Cape Verde estimated at 12%. The Net Present Value (NPV) is estimated at EUR 16 million, based on a discounting rate of 12%[10]. Sensitivity analysis carried out indicated that the economic aspect of the project is moderately sensitive to increases in project costs and reduction in benefits. It shows that an increase of 10% in project investment cost leads to a drop of the EIRR to 15.61 %, while a 10% reduction in benefits would cause the EIRR drop to 15.36 %. A combination of both factors will cause EIRR to decline to 12.96%. In all cases, the EIRR remains greater than or equal to the opportunity cost of capital in Cape Verde estimated at a conservative rate of 12%. The computation of the EIRR is shown in table 7-17 below:

EIRR Sensitivity Analysis:

(fig in EUR 000's)

Table 7-16 : 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

[10] 10.91% average debit interest rate - Central Bank of Cape Verde 7 days to more than 10 years
9.75% average discounting rate – Central Bank of Cape Verde
4.25% rate of return on 364 days treasury bills – Central Bank of Cape Verde
5.47% credit interest rate applied on Time Deposits – 1 to 2 years – Central Bank of Cape Verde

Year	Investment	Operations		Total Cost	Park Direct Revenues		Indirect Economic Revenues		Total Revenues	Net Cash Flow
		Data Center & BCP	BC, Shared Facilities, Incubation & TQC		Data Center & BCP (Housing)	Offices rental, TQC, IC & CF	Job Creation	Reduction in Cost of Training		
2014	5,265,775			5,265,775			90,000		90,000	(5,175,775)
2015	12,286,809			12,286,809			240,000		240,000	(12,046,809)
2016	15,797,326			15,797,326			360,000		360,000	(15,437,326)
2017	1,755,258	2,943,266	857,556	5,556,080	4,033,918	907,628	450,000	954,728	6,346,274	790,195
2018		3,379,487	898,766	4,278,254	5,241,010	1,078,960	1,774,050	1,237,610	9,331,631	5,053,377
2019		3,816,616	983,572	4,800,188	6,470,412	1,229,566	2,128,860	1,281,811	11,110,649	6,310,460
2020		4,244,676	1,050,459	5,295,135	7,759,851	1,353,522	2,838,480	1,326,011	13,277,864	7,982,729
2021		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2022		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2023	5,072,252	4,681,805	1,099,026	10,853,082	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	4,700,301
2024		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2025		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2026		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2027	979,294	4,681,805	1,099,026	6,760,125	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	8,793,259
2028		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2029	5,072,252	4,681,805	1,099,026	10,853,082	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	4,700,301
2030		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2031		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2032		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2033		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2034		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2035	5,072,252	4,681,805	1,099,026	10,853,082	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	4,700,301
2036		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2037	979,294	4,681,805	1,099,026	6,760,125	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	8,793,259
2038		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2039		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2040		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2041		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	9,772,553
2042	(10,871,668)	4,681,805	1,099,026	(5,090,837)	9,092,278	1,498,594	3,548,100	1,414,412	15,553,383	20,644,221
									EIRR	18.08%
									NPV	€ 14,058,299.54

Table 7-18: Economic Rate of Return *(fig. in EURO)*

III-Financial Analysis:

As early stated in the EIRR section, the project total cost is estimated at UA 30.76 million (EUR 35.99 million), of which 12%, and 88% are in local and foreign currency respectively. The reinvestment cost for the upgrading and renovating the park's facilities are estimated at 40% to total investment every 6 years for ICT equipment, and 10% every 10 years for the other parks components. The actual operation is projected to start in year 2017 and the project economic life is assumed at 25 years, with residual value (salvage) estimated at 30% (See table 7.1 above for the detailed calculation of the residual value).

The cost streams of the project consist of:

- ✓ 100% of the investment cost; it includes the cost of executing construction of buildings, equipping of park facilities and the installation of ICT hardware. Along with the cost of land acquisition and salaries to be paid by the Government to the PMT staff.
- ✓ O&M expenses estimated at an average of 16% of the total investment cost, calculated individually for each of the project's components based on the feasibility study. It includes costs of (i) salaries, (ii) energy supply, (iii) maintenance inputs, (iv) telecommunication, (v) licensing and other related expenditure.

The financial benefits of the project are based on parameters set in the feasibility study prepared in Dec-2102, through a MIC Grant financed by the Bank. These include revenues generated from the following activities:

i) Providing Housing, Hosting and Cloud Services through the data centre and business continuity plan/disaster recovery Site;
ii) Leasing of open and corporate offices;
iii) Charging fees on Incubators using the incubation centre;
iv) Providing certified training, certification tests and training rooms rental;
v) Fees and Charges on using auditorium, foyer , conference and meeting rooms;
vi) Concessions granted for restaurant, gymnasium, and stores.

Conclusion:

Based on the above, the Financial Internal Rate of Return (FIRR) is estimated at 7.98%. The net present value of the project calculated at a conservative rate of 5% (higher than the cost of the ADB loan). Sensitivity analysis carried out indicates the reflection of any increase or decrease in project's revenues and costs (Table 7-18). The computation of the FIRR is shown in table 7-19 below.

fig in EUR 000's

Table 7-18 : 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

Year	Operations			Total Cost	Direct Financial Revenues		Total Revenues	Net Cash Flow
	Investment	Data Center & BCP	BC, Shared Facilities, Incubation & TQC		Data Center & BCP (Housing)	Offices rental, TQC, IC & CF		
2014	5,398,982			5,398,982				(5,398,982)
2015	12,597,624			12,597,624				(12,597,624)
2016	16,196,945			16,196,945				(16,196,945)
2017	1,799,661	2,943,266	857,556	5,600,482	4,033,918	907,628	4,941,546	(658,936)
2018		3,379,487	898,766	4,278,254	5,241,010	1,078,960	6,319,970	2,041,717
2019		3,816,616	983,572	4,800,188	6,470,412	1,229,566	7,699,978	2,899,790
2020		4,244,676	1,050,459	5,295,135	7,759,851	1,353,522	9,113,373	3,818,238
2021		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2022		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2023	5,967,355	4,681,805	1,099,026	11,748,185	9,092,278	1,498,594	10,590,872	(1,157,314)
2024		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2025		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2026		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2027	1,152,111	4,681,805	1,099,026	6,932,941	9,092,278	1,498,594	10,590,872	3,657,930
2028		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2029	5,967,355	4,681,805	1,099,026	11,748,185	9,092,278	1,498,594	10,590,872	(1,157,314)
2030		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2031		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2032		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2033		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2034		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2035	5,967,355	4,681,805	1,099,026	11,748,185	9,092,278	1,498,594	10,590,872	(1,157,314)
2036		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2037	1,152,111	4,681,805	1,099,026	6,932,941	9,092,278	1,498,594	10,590,872	3,657,930
2038		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2039		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2040		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2041		4,681,805	1,099,026	5,780,830	9,092,278	1,498,594	10,590,872	4,810,041
2042	(10,871,668)	4,681,805	1,099,026	(5,090,837)	9,092,278	1,498,594	10,590,872	15,681,709
							IRR	7.98%
							NPV	€ 13,636,721.75

Table 7-19: Financial Rate of Return *(fig, in EURO)*

B8. Environmental and Social Analysis

Environmental Review, key findings and recommendations

The Project is expected not to produce any significant adverse environmental impacts. However, some environmental, safety and health impacts were identified including; loss of top soil and vegetation; generation of dust, noise emissions and vibration; disposal of construction debris and general solid waste; disturbance of the public and hazards posed by construction work; traffic, sanitation and occupational health and safety concerns for construction workers which are typical of construction activities. During the operational phase the impacts of concern include; increase in non-biodegradable and biodegradable waste, mainly due to the heavy use of IT equipment and other short life span appliances, increase in the consumption of fuel used in the backup thermal power generation plants.

In addition, it is known that Cape Verde is highly vulnerable to climate change, with low capacity to adapt. According to the National Adaptation Programme for Action (2008-2012), meteorological models of future climate change suggest that temperature increases of up to 4°C and decreases in rainfall by up to 20% can be expected by 2100. In the more immediate planning horizon (next 10-20 years), climate induced changes include seasonal water shortages at an increasing number of economically important sites and year round shortages at other sites. In addition, climate variability is predicted to increase, with more storms, floods and droughts and a shorter rainy season.

The project's Environmental Management Plan identifies measures to mitigate these impacts and linkages.

The following mitigation measures represent the key areas that would be addressed in the project as part of its mitigation and enhancement measures. In addition this includes the development of detailed ESMPs by the contractor who will be in charge of the construction activities. This contractor ESMP will form part of the procurement criteria.

Environmental and climate change considerations will also be integrated in the procurement of fittings and materials used in the construction and equipping of the project.

The Project Management Team includes the an environmental officer who will be in charge of the day to day oversight on environmental issues during the construction process and would be in charge of developing a comprehensive environmental management system to guide the operational phase of the project.

Construction Phase

Some cautionary measures will be observed during construction activities:

- During construction, land cut and landfill are to be reduced to minimum; in addition, steep slopes will be grassed or lined;
- Top soil will be preserved and affected areas re-vegetated (although most of the land is arid);
- The risk of accidents in the construction phase will be avoided or minimized through on-site signage and equipment of skilled workers by the contractors responsible for the installation of sites.
- Movement of construction trucks and equipment will be limited;
- Trucks carrying sand, cement and soil will be covered;
- Use of sand and crushed stones will be regulated; and
- The construction site will be delimited.

Construction safety

Safety of the workers and communities will be guaranteed through:

- Providing personal protective equipment to the workforce;
- Sensitizing the local communities about construction hazards and possible disruptions of traffic as well as utility services through signage and notices; and
- Making arrangements for the workforce to access sanitation facilities.

Diligence on the part of the contractors and proper supervision during construction are critical in mitigating adverse impacts. The contractors will comply with the relevant legislation stipulating occupational health and safety conditions and they will submit a Construction Site Safety Plan.

Operational Phase

A. Waste management

The project will generate waste mainly from increased ICT activities. The project provides capacity building in waste management to identify each waste type in order to be able to store, handle, dispose of and monitor it in consultation with the local municipalities.
Disposal of outdated equipment and other materials will be done in accordance with the National Environmental Policy.
Several initiatives developed by the Project can help address the challenges of increasing amounts of biodegradable and non-biodegradable waste, such as the creation of a recycling programme.

B. Security in offices and other equipment

Project design will include:

- Emergency response facilities/equipment in case of accidents;
- A fire evacuation plan with firefighting equipment and emergency exits;
- Appropriate ventilation systems;
- Pre-treatment facilities for wastewater and sewage before discharge, amongst others.

Legislative Framework

In this context, the analysis on the national legislative framework is aimed at evaluating applicable environmental legislations which are critical for this project and these include:

- The Environment Policy Base Law (Law number 86/IV/93), which defines the principles of the of Cape Verdean environmental policy, which is based on the avoidance, minimization and mitigation of adverse environmental impacts due to development activities. The provisions of this legislation are equivalent to the Bank's Environmental Policy 2001.

- Decree-Law number 29 of March 6, 2006, defines the legal provisions for the evaluation of the environmental impact of development projects as well as the process for the authorization and licensing of such projects. This process must be submitted to the General Directorate of Environment for its evaluation and approval by the government official responsible for the sector. This legislation is equivalent to the Bank's Environmental and Social Assessment Procedure.

In view of these provisions, the project sponsor has carried out an environmental assessment and developed a management plan.

Institutional arrangements and capacity building requirements

The project is designed to operate in a participatory manner. All activities will be implemented in close collaboration with the relevant stakeholders (centralized and local government bodies, agencies and corporate associations, education institutions, telecommunications and ICT companies, etc.) to increase their sense of ownership of the improved facilities to be introduced under the project.

The responsibilities of the Promotor concerning environmental issues are:

a. Compliance with commitments vis-à-vis the AfDB;

b. Effective inclusion of environmental clauses in the bidding documents and the performance report and guarantee documents;

c. Communication of its work plan to EDG services for environmental monitoring.

The responsibilities of contractors in charge of procurement of equipment and installation of sites are:

a. Overall compliance with its commitments vis-à-vis the client;

b. Compliance with commitments regarding implementation of environmental and social measures;

c. Ensuring compliance with commitments by any subcontractors regarding environmental and social measures;

d. Provision of reports and other documents required covering the management of environmental and social measures.

AfDB's responsibilities are:

a. To ensure effectiveness of the inclusion of environmental clauses in the bidding documents for the selection of the contractors and in guarantee documents; and

b. To supervise the status of implementation of the ESMP in the preparation of periodic reports on the implementation of the project.

The Ministry of Environment (EDG) and the Environment Commission of the Local Municipality (ECLM):

a. Provide capacity for external monitoring of the project.

Provide capacity building in waste management to identify each waste type in order to be able to store, handle, dispose of and monitor it in consultation with the local municipalities.

Stakeholders

The conception and operation of the proposed technology park is guided by a participatory and consultation 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 modeling of the project as well as discussions on the strategic vision of the ICT sector in the country.

Stakeholders from the public sector include:

- Government representatives: Ministry of Finance and Planning, Ministry of Infrastructures and Maritime Economy, Ministry of Tourism, Industry and Energy;
- Agencies, directorate generals and public institutes: Cape Verde Investments, National Communications Agency (ANAC), Agency for Enterprise Development and Innovation (ADEI), Strategic Policy Center and National Statistics Institute;
- Corporate associations: Barlavento Chamber of Commerce, Sotavento Chamber of Commerce and Cape Verde Association of Young Entrepreneurs (AJEC);
- Cape Verdean Institute for Gender Equality and Equity;
- Ministries of: Education; Health; and Youth, Employment and Human Resources Development

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.

Gender Analysis: The gender related criteria used in the analysis of the project include its impact on job creation for women, impact on ICT higher education certification for women and its impact on enabling female ICT entrepreneurs.

The impact on job creation is examined during the implementation and operational phases of the project. In this respect the project aims to achieve a 50% target for job opportunities provided to females. This target is more likely to be achieved during the operational phase than during the implementation phase given the nature of physically intensive work entailed during construction activities and the probable unwillingness of unemployed females to take up such opportunities. However, the project proponent is committed to promoting these opportunities and encouraging the participation of women. Historical data from government agencies involved in the ICT sector show an approximate distribution of 40% and 60% for both genders in favour of male employees. This shows a significant potential for women employees to be engaged in this sector.

The impact on higher education certification is examined during the operational phase of the project. This is with respect to the potential of the project to provide certification facilities through its vocational training component. Such a facility is not available within the country at the moment. Therefore the few female candidates, about 22 in number, from the country have to go abroad to obtain these higher qualifications. The implementation of the project would thus make it easier and cheaper for female candidates to obtain these certification in their home country. This would directly improve the number of females with higher level certification in ICT, which would also improve their employment opportunities. Currently of females make up about 30% of graduates from ICT related university undergraduate courses.

The impact on providing an enabling facility for female entrepreneurs in the ICT sector is related to the Incubation Centre component of the project which aims to provide a business incubation facility dedicated to ICT entrepreneurs. This component is especially targeted. In this respect, the analysis aimed to understand the potential and appetite for women to go into the ICT as entrepreneurs. The analysis looked at the gender disaggregation of the level of education in the country, it also looked at the number of graduates from ICT related courses at the university level; it also examined the participation of women at other business incubation facilities.

Statistics from the education sector show a higher proportion of female beneficiaries compared to male especially at higher education levels as shown in the table below:

Schollar Frequency Ratio (Fem/Masc)	
Preschool	1.01
Alphabetized	1.87
Elementary school	0.95
Middle school	1.15
High school	1.46
College	1.33

However, the gender distribution for university graduates in ICT related courses is roughly 70% to 30% in favor of male students. The number of graduates in the ICT course is estimated at 100 per year.

Information from the existing facility that is used for entrepreneurship incubation shows an increasing interest from female entrepreneurs. Currently 50% of the entrepreneurs benefiting from this existing incubation centre are females.

These information highlight the potentials for this project to benefit female entrepreneurs who may be interested in the ICT sector.

During its implementation and operational phase the project is not expected to contribute to any negative gender related impacts on the contrary the project will promote employment opportunities for both genders.

The analysis on gender also examined the enabling environment for enhancing Gender participation in view of government policies and programmes in this area. It is noted that the participatory consultation process in the design of the project has involved the national Institute for Gender Equality and Equity which is the institution with the statutory mandate for mainstreaming gender issues in the development activities in the country.

With respect to the enabling government and policy environment which will facilitate the integration of gender mainstreaming in the project the analysis noted that the government considers the mainstreaming of the gender approach as key to economic growth, poverty eradication. The Government's Development Programme for 2011-2016 as endorsed by the Eighth Legislature considers the issue of gender as one of the "four core elements of the program," as a cross-cutting issue. This position of the government and its strategy of mainstreaming the gender approach is reflected in the agenda for the promotion of gender equality, under the coordination of the national Institute for Gender Equality and Equity; which is responsible for developing policies gender and public articulation between their respective sectors.

Essentially the approach to gender mainstreaming entails its integration at the macro, meso and micro levels of planning and action.

At the macro level, this involves integrating gender considerations in the national and international commitments, enabling women representation and gender disaggregation of national planning data. At the meso level, this entails ensuring the integration of the macro level commitments through pursuing a culture of gender equality at the institutional level in such a way to ensure equal access and benefits to men and women. At the micro level, this will involve areas such as ensuring political equality and promoting entrepreneurship and employment of women in order to subvert the existing framework of profound inequality between the income of men and women's income etc.

Social Analysis

The Analysis on the social impact of the project focuses on health issues of importance such as HIV and the impact of the project on the broader aspect of poverty reduction. As noted before, the project is not expected to exacerbate these health issue nor increase the poverty conditions in the country.

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. This will include the provision of protective health education activities.

Since the first AIDS case diagnosed in 1986, Cape Verde has been experiencing significant progress in combating, prevention and treatment of HIV-AIDS. Over the past 24 years, the Government designated the pandemic as a major national priority, and has benefited from the support of its main international partners.

Thanks to this support, the country has been able to remain in the group of countries with a low prevalence for HIV-AIDS (<1%). The HIV Strategic Plan 2002-2006 has allowed the creation of a single framework of policies, a single coordinating structure, the CCS-SIDA, which is chaired by the Prime Minister, and a unique system of Monitoring and Evaluation, in accordance with the internationally recognized principles for combating HIV-AIDS.

The April 17, 2002, the Government of Cape Verde and the World Bank signed a loan of 9 million dollars for the fight against HIV-AIDS. This multi-sectoral at its Midterm review in 2004, received the classification of very satisfactory, making Cape Verde part of the group of African countries that have implemented their best projects to fight AIDS financed by the World Bank.

The fight against HIV has benefited from various initiatives at different levels with the participation of the government hierarchy including state governors, municipal and local leaders. These initiatives also saw the active participation of civil society organizations, through NGOs and private entities at the national and local level, which raised awareness on HIV and AIDS to unprecedented levels. In parallel, the multi-sector and decentralized approach adopted for the execution of the programmes was also instrumental to the achievements.

Several studies have also been carried out in this area with support of partner organizations including the UNICEF, WHO, UNFPA and UNAIDS, as well as the African Development Bank.

Currently, the process for the preparation of the 2010-2015 strategy on HIV, the third of its kind, has started. In the first step, a workshop for the assessment of the previous strategy and the development the current strategic Plan 2011-2015 was held in July 2010 in Praia, with the participation of partners from the islands of Santiago, São Vicente, Santo Antao, Sal, Fogo and Brava. As an outcome, the workshop recommended the creation of a Technical Working Team composed of representatives from the Ministries of Health, Education and Youth, the WHO / UNAIDS, UNFPA / UNICEF, ICIEG, Uni-CV, the National Association of Municipalities and the Platform of NGO to support the process of preparing the current strategy.

In the second step, various methodological tools were used to encourage good participation of all institutions involved in the fight against HIV-AIDS. Special attention was given to the collection of information from local participants. These collected data served as reference for the elaboration of the response analysis.

With respect to statistics on HIV prevalence, the current demographic survey shows a prevalence rate of infection of 0.8% in the general population. However, this rate shows a wide variation between the sexes and shows that the infection affects more men than women, 1.1% and 0.4% respectively. The data also shows that the urban environment presented a higher rate than rural areas (0.9% and 0.6%, respectively).

The strategic analysis of the HIV problem as contained in the Strategic Plan 2011-2015, also indicated several risk factors that contribute to the problem. The major ones amongst these include :

• The condition of archipelagic country with poor natural resources, a high unemployment (13.1%, INE 2010), migration and rural depopulation and a considerable level of poverty that affects about 25% of Cape Verdeans (Poverty Index in Cape Verde, 2009). This situation is higher in major urban centers, which concentrates most of the country's poor, and households headed by women, representing 56.3% of households.

• Some prevailing social practices that constitute barriers to prevention, such as polygamy, the existence of multiple sexual partners, dependence (economic) of women compared to men and religious inclinations regarding the use of contraceptives and condoms.

• The low level of education which is recorded in some disadvantaged areas of the population, coupled with social and cultural prejudices that interfere with the sexual health of women. In addition, teenage pregnancy is gaining alarming proportions in the country (22.6%) (Statistical Report MS, 2009) and may represent an increased threat of epidemic control.

• The phenomena of urban migration and tourism development also contribute to the populations vulnerability to HIV infection.

Among these elements, major risk factors for HIV infection are linked to unsafe sexual practices and often at an early age, and consumption of alcohol and drugs. Indeed, the survey confirmed this risk factor in 38.5% of the population, 51.6% of males, and 20% of sex workers.

In view of the statistics, the mitigation measures designed in the national Strategic Plan is targeted to the priority group of poor people, in addition to the general population. This will cover such groups as:

• Women, especially pregnant women, for the primary prevention, follow-up and support with breastmilk substitutes, and those belonging to the age group of 45 and over.

• Young people in general, for the primary prevention of HIV infection face of HIV and prevention of early pregnancy;

• Men and sex workers in general, in view of their greater involvement in fire prevention and control of epidemic.

In conclusion the project is not expected to significantly impact the HIV prevalence rate in the country given that it would not involve a high level of migrant population and given the success rate of existing government initiatives and programmes for curtailing HIV spread which would also be available to the project.

Poverty Reduction

The project will contribute to the Government's efforts to develop the country's human resource base, through its support for improvement in the capacity of the university and technical education institutions and especially in trade related skills such as engineering, ICT, electrical and motor mechanic which will facilitate the building of both high and middle level skills in the country.

These skills are needed for promoting sustained economic growth and social development. The project will specifically open up opportunities for the poorer sections of the population by increasing opportunities available in the ICT sector through the establishment of business incubator.

At the household level, the enhanced individual productivity, resulting from improved quality of education could lead to increased earnings and improved quality of life.

The Park will generate at least 55 jobs directly tied to the business of the Park's components. In addition to these, 648 jobs will be created involving companies residing in the business center and startups in the incubation process.

Along with these 703 direct job positions, around 844 indirect jobs will be added in services tied to the Park's activities, such as maintenance, security, cleaning, accounting, marketing, renovation, tourism, etc.

The total number of jobs created is thus anticipated to be more than 1,500. For Cape Verde, ICTs are an opportunity for sustainable socio-economic development.

Knowledge has become the key resource of the 21st century world economy. To this end, the ICT sector is a fundamental part of the strategy for innovation, job creation and for attracting and developing talent and technology, based on the following key goals for Cape Verde:

- Finding new sources of production, exporting, employment and tax revenues in Cape Verde's economy;
- Promoting economic competitiveness in the Cape Verdean business community;
- Promoting the actual integration of Cape Verde's economy in the global knowledge economy, including the increased economic proximity of the diaspora.

The Park is a keystone for speeding up this process, i.e. to rapidly obtain results (borne out by economic indicators) which are sustainable over time. This way, the Government has envisages that the Cape Verdean ICT sector must embrace two distinct – but interconnected – facets:

- **Business by itself**: The ICT sector must become a business that generates its own revenues, with every effort being made to promote the ability to export, since the domestic market is limited.
- **Instrumental for other strategic clusters**: The ICT sector must be instrumental to other strategic clusters in the country – primarily sea, aerobusiness, financial and tourism – to promote increased efficiency in these sectors' businesses.

This is because Cape Verde, as a country, is low in natural resources, with island dispersal that compromises the logistical component of the value chain in any sector for material goods, in a comprehensive manner. In this situation, the ICT sector is an essential link in these value chains, bolstering the potential of their resources and minimizing the handicap stemming from the scarcity of resources.

In this way, one of the ICT sector's goals is to maximize the efficiency of the country's strategic clusters by making them competitive internationally and ensuring value capture for domestic agents.

Around 30% of the population (estimated at around half one million) live below the poverty line, with unemployment rate of around up to 20%; as such, the path to prosperity and economic development is still in an early phase.

Cape Verde has made noteworthy progress in terms of developing the Information Society, a long-time strategic area for sustainable development and reducing poverty.

ICTs have been the major driving force behind the changes in recent years. This consensus is built on the notion of technology-skill complementarity: technical change favors more skilled (educated) workers, replaces tasks previously performed by the unskilled, and increases the demand for skills.

This process in Cape Verde is expected to be amplified, inducing changes in the organization of production, accelerating economic growth and therefore reducing poverty. In a country with such scarce resources (including capital), knowledge is considered to be the most effective way to reduce inequalities, and the Park is a keystone to accelerate this reduction.

The Government of Cape Verde has several programs in place to achieve increased gender equality, although no project-specific actions are considered at this moment. The project implementation team will however make efforts to address this issue, namely by taking actions such as:

- Increasing literacy rates and promoting ICT education among women;
- Increasing women's labor force participation in the Park and strengthening labor policies affecting women;
- Promoting women's participation in the management of the Park.

In conclusion, the Park is expected to contribute to an improved quality of life as consequence of poverty reduction and the reduction of inequalities.

B9. Project Preparation and Supervision

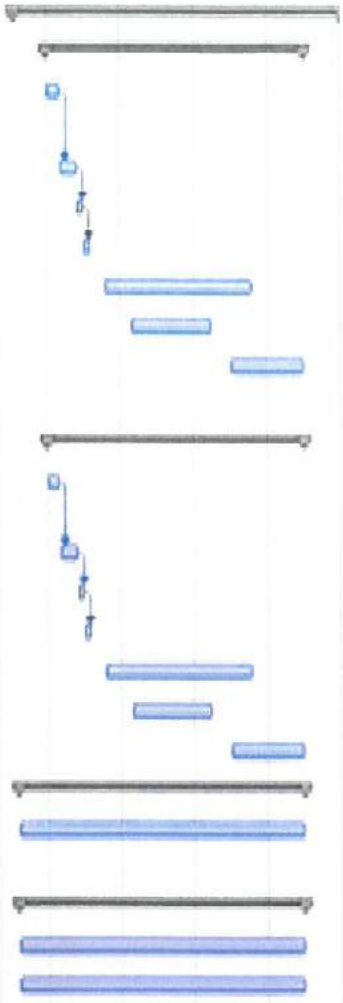
The project will be implemented over a period of four years. The Bank will conduct two field supervision missions per year or more depending on the speed of construction. The SNFO will keep constant touch of the progress. After two years of implementation, a mid-term review will be organized so as to assess achievements, discuss constraints and make necessary adjustments where needed.

The indicative implementation schedule is summarized as follows:
Table B.10: Indicative Summary of the Project Implementation Schedule

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 companies
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

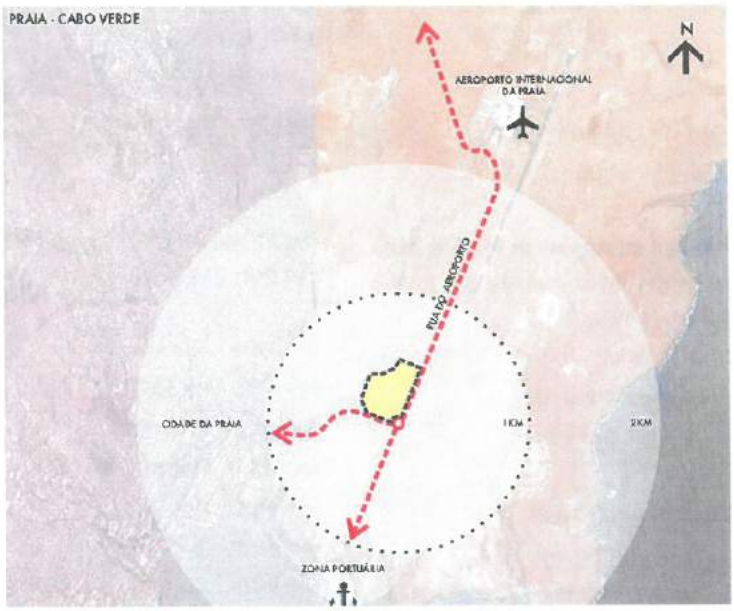
The project overall implementation timeframe is presented hereafter:

1	**Project Cycle Information**	Wed 7/24/13	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
10	**Component 2 – Construction and equipping of BC,IC & TQC**	Wed 1/1/14	Sat 7/1/17
11	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
12	Recruit a firm for detailed arch design & engineering design	Mon 3/3/14	Fri 5/30/14
13	Review and approval of bidding documents	Mon 6/2/14	Mon 6/30/14
14	Tendering and contract award for civil works	Tue 7/1/14	Thu 7/31/14
15	Implementation of works	Wed 10/15/14	Sat 10/15/16
16	Tendering & contract award for equipment	Mon 3/2/15	Thu 3/31/16
17	Delivery, installation & conf. of equipment	Mon 7/4/16	Sat 7/1/17
18	**Component 3 – Capacity Building / Training**	Mon 8/5/13	Sat 7/1/17
19	Launch bidding documents, request of proposals and recruit technical assistance	Mon 8/5/13	Sat 7/1/17
10	**Component 4 Project Management**	Mon 8/5/13	Sat 7/1/17
11	Supervision of works	Mon 8/5/13	Sat 7/1/17
12	Audit of the project	Mon 8/5/13	Sat 7/1/17

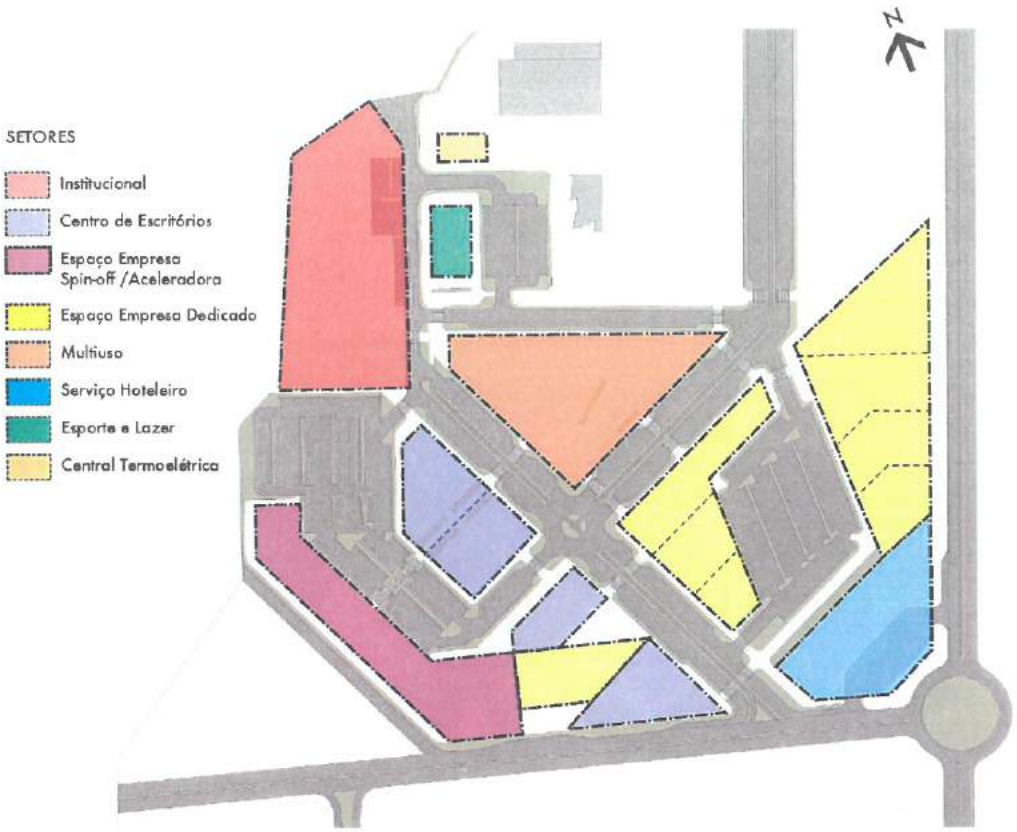


C. OTHER TECHNICAL ANNEXES

C1: Map of project area



MASTERPLAN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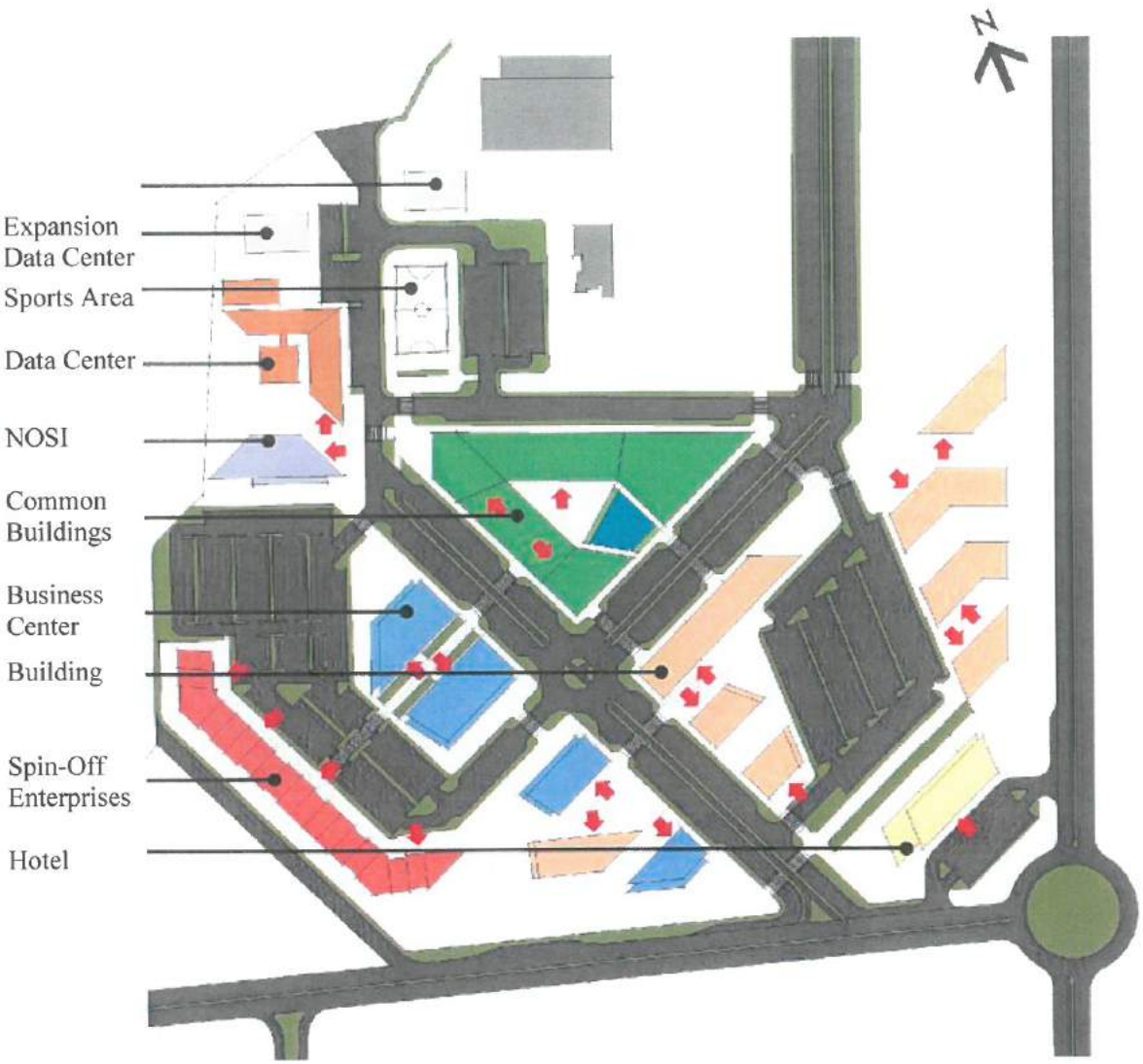
Centro de Escritórios
Espaço Empresa Spin-off /Aceleradora
Espaço Empresa Dedicado
Multiuso
Serviço Hoteleiro
Esporte e Lazer
Central Termoelétrica
N


N
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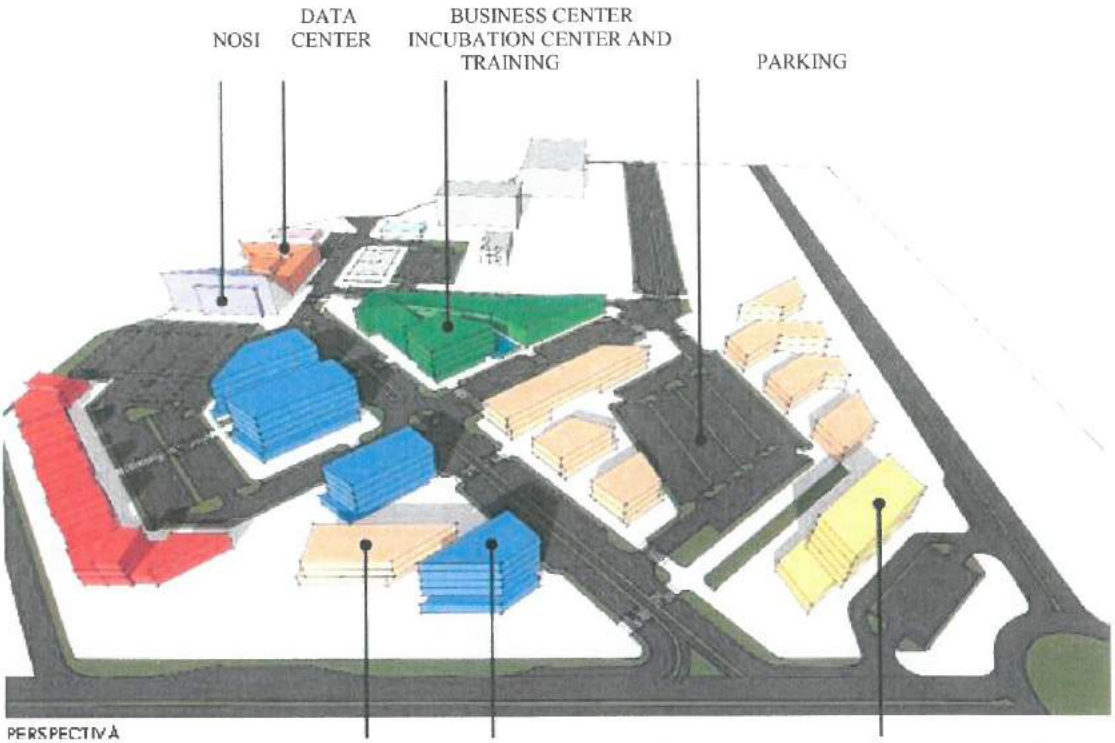
Sports Area
Data Center
NOSI
Common
Buildings
Business
Center
Building
Spin-Off
Enterprises
Hotel

PERSPECTIVE 3D



PERSPECTIVA

C2: Procurement plan

PROCUREMENT PLAN

General

Country/Organisation:	Cape Verde
Project/Programme Description:	Technology Park Project
Project/Programme SAP Identification #:	x
Loan #:	x
Executing Agency:	NOSi
Approval Date of Procurement Plan:	x
Date of General Procurement Notice:	
Advance Contracting:	
Period Covered by these Proc. Plans:	

Prior Review Threshold: Procurement decisions subject to Prior Review by the Bank as stated in Annex B5 of the Appraisal Report

1. GOODS

Goods and Non-Consulting (see Note 1)

Procurement Method	Prior review Threshold (UA equiv.)			Comments
1. ICB	Above 200,000			
2. NPP NCB	below 200,000			

Procurement Packages with Methods and Time Schedule

Description	Lot Number	[illegible]	[illegible]	[illegible]	Estimated Amount in Currency	Procurement Method	Pre-Qualification (Y/N)	Domestic Preference (Y/N)	Prior or Post Review	Bid Closing Date	Plan versus Actual	Bid Documents Received	No Objection Date	PQ Doc Issued	Closing Date	Evaluation Report Received	No Objection Date	Bid Invitation Date	Bid Closing Opening	Bid Evaluation Report Received	No Objection Date	Draft Contract Received	No Objection Date	Contract Amount in Currency	Date of Contract Award	Date of Contract Signature	Start Date	End Date
	BASIC DATA											Bid Documents		Pre-Qualification		Pre-Qualification		Bidding Period		Bid Evaluation		Draft Contract		Contract Award			Contract Implementation	
IT Equipment		Jun 28, 2016	Jul 13, 2016	Jul 27, 2016	4,311,284.03	ICB	N/A	N/A	Prior	Sep 22, 2016	Plan	Jun 28, 2016	Jul 13, 2016	N/A	N/A	N/A	N/A	Jul 22, 2016	Sep 22, 2016	Nov 1, 2016	Nov 13, 2016	Nov 20, 2016	Dec 5, 2016	4,311,284.03	Dec 15, 2016	Jan 1, 2017	Jan 15, 2017	Jul 15, 2017
											Revised																	
											Actual																	
Fire Suppression System		Jun 28, 2016	Jul 15, 2016	Jul 22, 2016	283,545.00	NPP (NCB)	N/A	N/A	Prior	Sep 22, 2016	Plan	Jun 28, 2016	Jul 15, 2016	N/A	N/A	N/A	N/A	Jul 22, 2016	Sep 22, 2016	Nov 1, 2016	Nov 13, 2016	Nov 20, 2016	Dec 5, 2016	283,545.00	Dec 15, 2016	Jan 1, 2017	Jan 15, 2017	Jul 15, 2017
											Revised																	
											Actual																	
Video Surveillance System		Jun 28, 2016	Jul 15, 2016	Jul 22, 2016	125,367.00	NPP (NCB)	N/A	N/A	Prior	Sep 22, 2016	Plan	Jun 28, 2016	Jul 15, 2016	N/A	N/A	N/A	N/A	Jul 22, 2016	Sep 22, 2016	Nov 1, 2016	Nov 13, 2016	Nov 20, 2016	Dec 5, 2016	125,367.00	Dec 15, 2016	Jan 1, 2017	Jan 15, 2017	Jul 15, 2017
											Revised																	
											Actual																	
Office Furniture		Nov 4, 2016	Nov 19, 2016	Nov 26, 2016	224,423.00	NPP (NCB)	N/A	N/A	Prior	Jan 24, 2017	Plan	Nov 4, 2016	Nov 18, 2016	N/A	N/A	N/A	N/A	Nov 28, 2016	Jan 24, 2017	Mar 6, 2017	Mar 18, 2017	Mar 25, 2017	Apr 10, 2017	224,423.00	Apr 28, 2017	May 5, 2018	May 15, 2018	Aug 15, 2017
											Revised																	
											Actual																	
Office Equipment		Nov 4, 2016	Nov 19, 2016	Nov 26, 2016	994,087.00	ICB	N/A	N/A	Prior	Jan 24, 2017	Plan	Nov 4, 2016	Nov 19, 2016	N/A	N/A	N/A	N/A	Nov 26, 2016	Jan 24, 2017	Mar 6, 2017	Mar 18, 2017	Mar 25, 2017	Apr 10, 2017	994,087.00	Apr 28, 2017	May 5, 2018	May 15, 2018	Aug 15, 2017
											Revised																	
											Actual																	
02 Vehicles (Project Implementation)		Jan 4, 2015	Jan 19, 2015	Jan 26, 2015	63,000.00	NPP (NCB)	N/A	N/A	Post	Mar 26, 2015	Plan	Jan 4, 2015	Jan 19, 2015	N/A	N/A	N/A	N/A	Jan 26, 2015	Mar 26, 2015	May 2, 2015	May 13, 2015	May 29, 2015	Jun 3, 2015	33,831.87	Jun 15, 2015	Jul 1, 2015	Jul 15, 2015	Oct 15, 2015
											Revised																	
											Actual																	
04 Vehicles (Park Management)		Aug 4, 2016	Aug 19, 2016	Aug 26, 2016	143,124.00	NPP (NCB)	N/A	N/A	Post	Oct 28, 2016	Plan	Aug 4, 2016	Aug 19, 2016	N/A	N/A	N/A	N/A	Aug 26, 2016	Oct 26, 2016	Dec 2, 2016	Dec 13, 2016	Dec 20, 2016	Jan 5, 2017	128,221.57	Jan 15, 2017	Feb 1, 2017	Feb 15, 2017	May 15, 2017
											Revised																	
											Actual																	
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Total Cost					[illegible]						Plan													[illegible]				
					0.00						Revised																	
					0.00						Actual													0.00				