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JORDAN INVESTMENT COMMISSION

IT UPGRADING PLAN 2015 – 2017

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Author: Vatche G. Dakessian

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PREFACE

The **Investment Commission** is the lead governmental agency promoting Jordan as an investment destination and exporter. It provides the highest possible levels of service and support to investors and guides those investors through the nation's legislative and institutional framework. The **Investment Commission** aims to be the body that drives forward Jordan's vision as a global investment destination, a leading exporter and an attractive, accessible business environment.

The strategic objectives of the **Investment Commission** are:

- ◆ Attract local, regional and global investors
- ◆ Promote Jordanian exports on the global stage through a program of exhibitions
- ◆ Stimulate growth and ensure the distribution of development across all governorates of the Kingdom
- ◆ Encourage the growth of a modern and attractive investment environment

The **Investment Commission** was formally established when the Investment Law No (30) for 2014 entered into force. The Law unified the various investment related legislations and administrative frameworks by merging the **Jordan Investment Board** (JIB) and the **Development Zones** with the **Free Zones Commission** (DZFC) under its umbrella and assumed the responsibility for export promotion formerly under the purview of the **Jordan Enterprise Development Corporation** (JEDCO). The Law also formally establishes the **Investment Window** to provide one-stop-shop services and issue licenses for investments. The **Investment Commission's** IT infrastructure is the result of the merger of the three entities mentioned above which consists of mostly old low end servers running multiple separated stand alone applications (without proper technical and functional documentation) for each directorate that are not integrated with each other. Additionally, the **Investment Commission** also requires a unified web portal that will allow it to undertake its investment promotion and services functions and activities as well as those needed for the operating of the Investment Window.

Responding to a request for support from the **Investment Commission, JCP- DAI** has engaged an IT Consultant with experience and qualifications to provide targeted technical assistance to the **Investment Commission** to perform a **3 Year IT Strategy** for the **Investment Commission** aimed at determining constraints and risks - from the **Investment Window** perspective- while building on existing IT investments wherever possible.

A number of global objectives have been set for the **3 Year IT Strategy**:

- ◆ Upgrade and enhance the **Investment Commission's** IT capabilities by improving both the quality and quantity of services.
- ◆ Compile and make available up to date information that is necessary to implement the mandate, services and operations of the **Investment Commission**.
- ◆ Improve the operational efficiency.
- ◆ Increase transparency in management and operating procedures.
- ◆ Implement the **Investment Window** concept in full.

Additionally, a number of specific objectives have been set for the **3 Year IT Strategy**. The order of listing is not significant:

- ◆ Upgrade current LAN and WAN infrastructure and functionality. The LAN will cover within the head office building; the WAN will connect with branches, stakeholders and overseas locations (Jordan Embassies).
- ◆ Upgrade and enlarge server room by re-organizing the wiring and communications cabinet, installing a UPS with remote monitoring systems and services for all critical components (electrical power, environmental and information technology) based on site management products and technology.
- ◆ Migrate current information systems to a new Virtualization Server based platform; improve functionality by using a more up to date development technology together with their associated design and tools.
- ◆ Improve access to information systems across all departments on a need to know basis.
- ◆ Improve access to information systems across all stakeholders on a need to know basis.
- ◆ Implement a new Fixed Asset Management System with barcode capabilities.
- ◆ Implement a new Electronic Document Archiving and Management System
- ◆ Implement a new Workflow (BPM) System
- ◆ Implement a new Board Meetings, Calendar, Decisions and Documentation System
- ◆ Design and implement a Disaster Recovery and Business Continuity Center
- ◆ Ensure the incorporation of "smart building" design concepts in the redesign of any new premises (branches, new buildings) likely to be deployed in or moved into in the future.
- ◆ Fully implement and activate the virtual **Investment Window** concept and accept electronic applications from investors.
- ◆ Implement a consolidated **Investment Map** Database using GIS.
- ◆ Start implementation of the **Virtual Commissioner** concept.

The **Investment Commission** seeks to enhance and improve its services through the implementation of new applications and/or upgrading existing ones by procuring hardware, applications software, networking and communications equipment together with their associated support and training facilities.

Existing hardware and networks are relatively old and will require extensive technical as well as functional upgrades. Most of the applications software in current operation have been developed and supported locally and a very small number licensed from external developers. The locally developed applications will require gradual replacement, while the externally developed ones will need functional upgrades and/or enhancements or in some cases possible replacement.

A radical improvement in the quality and type of services is expected by automating operations (approval cycles) on a centralized basis in order to produce a fully automated and highly integrated set of on-line applications covering all the current (and future) functions and services dictated by the **Investment Commission's** mandate and requirements.

Enhanced services will be of particular benefit to all stakeholders including members, the Board of Directors, the Ministry of Industry and Trade (**MIT**), the Greater Amman Municipality (**GAM**) and other relevant government departments and ministries, the international venture capital community, local and international potential investors and the general public as a whole.

Enhancing services will also have the following effects:

- ◆ Provide speedy, accurate and convenient access to information.
- ◆ Improve operational efficiency, planning and introduce more controls.
- ◆ Sustainable development due to a general improvement and simplification of services and procedures.
- ◆ Timely introduction of new services.
- ◆ Rationalization, streamlining and consolidation of the various IT systems and services deployed at the **Investment Commission's**. This is particularly applicable to the systems and services inherited by the **Investment Commission** due the recent merger.
- ◆ Alignment of the IT systems and services with international best practices.
- ◆ Secure the **Investment Commission's** services as part of the G2B and G2C components of Jordan's e-government program.

ABBREVIATIONS

<i>BPM</i>	<i>Business Process Management</i>
<i>CCTV</i>	<i>Closed Circuit Television</i>
<i>CFGI</i>	<i>Current , Future Gap, Implementation</i>
<i>CRM</i>	<i>Customer Relationship Management</i>
<i>CTO</i>	<i>Chief Technology Officer</i>
<i>DAI</i>	<i>Development Alternatives Inc.</i>
<i>DB</i>	<i>Database Server</i>
<i>DLS</i>	<i>Department of Lands & Survey</i>
<i>DVR</i>	<i>Digital Video Recorder</i>
<i>DZFC</i>	<i>Development Zones & Freezones Corporation</i>
<i>FOC</i>	<i>Fiber Optic Cable</i>
<i>G2B</i>	<i>Government to Business</i>
<i>G2C</i>	<i>Government to Consumer</i>
<i>GAM</i>	<i>Greater Amman Municipality</i>
<i>Gbps</i>	<i>Giga Bits Per Second</i>
<i>GIS</i>	<i>Geographic Information System</i>
<i>COBIT</i>	<i>Control Objectives for IT standard</i>
<i>IC</i>	<i>Investment Commission</i>
<i>IFC</i>	<i>International Finance Corporation</i>
<i>IT</i>	<i>Information Technology</i>
<i>IS</i>	<i>Information Security</i>
<i>ISC</i>	<i>Information Security Controls</i>
<i>ISO</i>	<i>International Standards Organization</i>
<i>ISP</i>	<i>Internet Service Provider</i>
<i>JCP</i>	<i>Jordan Competitiveness Program</i>

<i>JEDCO</i>	<i>Jordan Export Deveelopment Corporations</i>
<i>JIB</i>	<i>Jordan Investment Board</i>
<i>LAN</i>	<i>Local Area Network</i>
<i>MGT</i>	<i>Management Server</i>
<i>MIT</i>	<i>Ministry of Industry & Trade</i>
<i>NITC</i>	<i>National Information Technology Center</i>
<i>PKI</i>	<i>Public Key Infrastructure</i>
<i>PV</i>	<i>Photo Voltaic</i>
<i>RFP</i>	<i>Request for Proposals</i>
<i>SAN</i>	<i>Storage Array Network</i>
<i>SGN</i>	<i>Secure Government Network</i>
<i>SOP</i>	<i>Standard Operating Procedures</i>
<i>STTA</i>	<i>Short Term Targetted Assistance</i>
<i>UPS</i>	<i>Uninterruptible Power Supply</i>
<i>VM</i>	<i>Virtual Mahcine</i>
<i>WAN</i>	<i>Wide Area Network</i>
<i>WAP</i>	<i>Wireless Access Point</i>
<i>WLAN</i>	<i>Wireless Local Area Network</i>

EXECUTIVE SUMMARY

METHODOLOGY

Many business organizations and government institutions are now demanding diversified and better services from their Information Technology Departments. These organizations are finding their systems, or lack of them, to be a bottleneck to improvements in the products and/or services they offer. Available funds are limited and IT Departments are basically requested to do more for equal or slightly more money. This is nothing special; IT Departments providing services in large organizations all over the world experience such demands. Hence, a business approach is required in order to deal effectively and efficiently with such constraints.

With the continued local and regional emphasis on e-business and e-government services, IT planning techniques using a business approach have become increasingly important tools in the process of identifying, planning and prioritizing the implementation of new services requirements.

In the traditional IT approach, as this is often still the case in “public sector” Jordan, the pressure to find appropriate solutions is often on the IT managers. This is an unfair and incorrect approach. IT Departments are service departments. The strategic and policy decisions on what services will be supplied and how priorities should be set and resources will be allocated should be **made by the business managers of the organization in co-operation with IT managers**. This requires planning to which both the IT Managers and business managers should contribute and for which both should feel responsible. It is for these reasons that IT Strategies have to be developed and executed jointly by the Business Managers and IT Managers of an organization. This planning approach will be adopted by **Investment Commission** with the objective of **rationalizing, enhancing and consolidating** the currently implemented IT systems and services as well as the future directions of procurement and implementation of new IT systems and services.

The main objective of this task is to advise, guide and assist in developing a **3 Year IT Strategy** for the **Investment Commission** covering various IT systems enhancements necessary – with approximate of costs and priorities - for the efficient functioning of the new IT systems and services in terms of international standards best practices.

A typical **3 Year IT Strategy** development process consists of the same basic four components as any business plan:

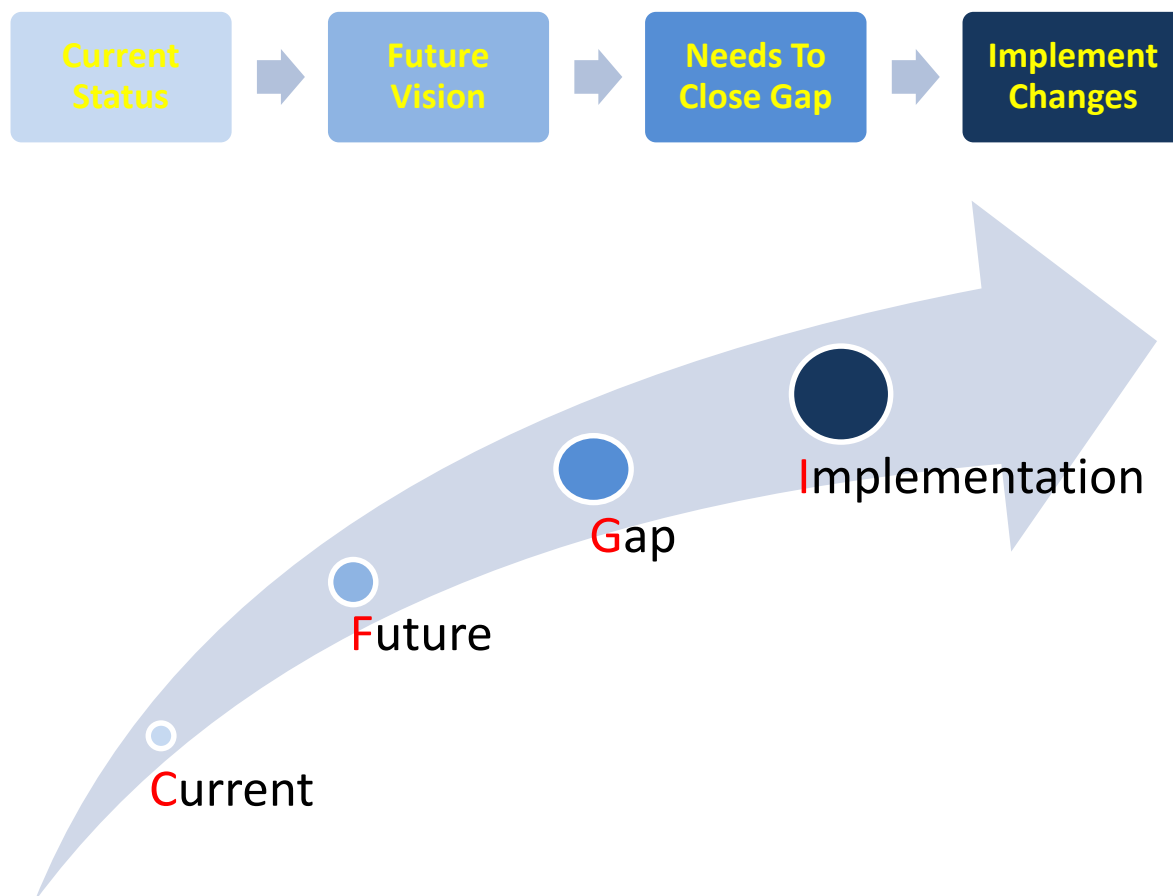
1. Identification of the **current positioning** and organizational status of the **Investment Commission** - this involves an examination of the business environment to answer the question “Where are we now in terms of services provided and best practices implemented” In order to satisfactorily answer that issue, it is necessary to examine the organization both internally and externally – the internal review will highlight the manner in which the organization is currently seeking to achieve its goals, the external examination will reveal what is possible and focus on best practice.
2. Identification of where the **Investment Commission** wants to be in terms of **future positioning** – this process will be organizational responsibility led. The future responsibilities of the organization in meeting its objectives must be the main

determinant of the IT direction. So, in determining where we want to be in an IT context, we first have to determine what the organization wants to do and then rationalize IT proposals accordingly.

3. Identify the **IT gap** between “current” and “future”.
4. Identify how required enhancements to the IT systems, e-services and infrastructure will be **implemented**.

This 4-stage process, referred to as the **CFG I Framework** (Current, Future, Gap and Implementation) is the core of any IT Strategy. There are some variations to the theme, but the central requirement is that all issues be addressed in a consistent and structured manner in advance.

THE FOUR PHASES OF AN IT STRATEGY

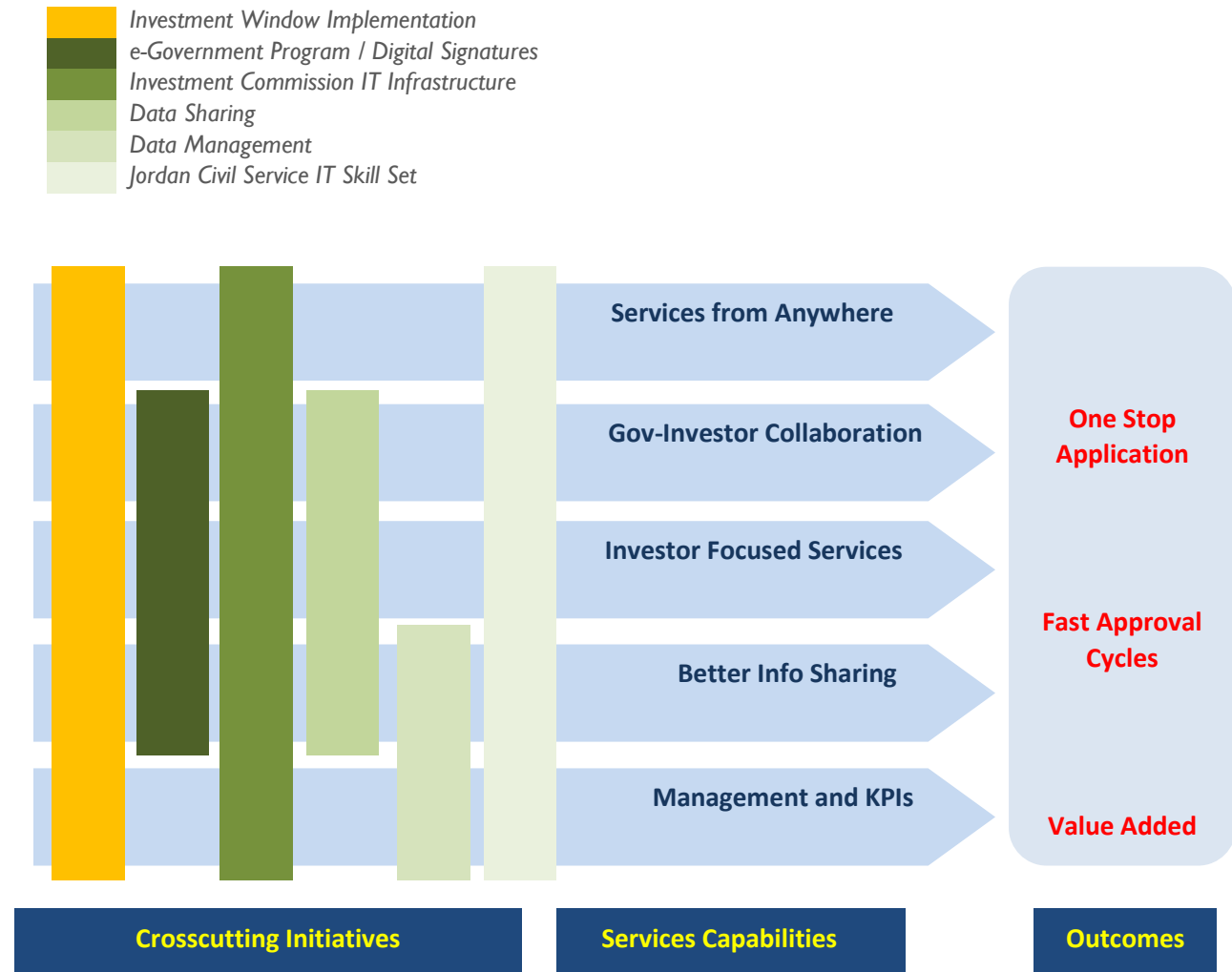


The flows in this process are therefore to first clarify the future business operating vision of the **Investment Commission**, (business in this context and subsequently, refers to the full array of organizational responsibilities and e-services). Organizational business objectives then define the framework for the IT mission, objectives, strategies and ultimately the technical architecture. Once those determinants have been specified all that remains is to compare existing IT systems and infrastructure

with what is needed and to devise appropriate implementation programs and resource allocations over a typical period of three years.

Although there will be other ongoing initiatives/actions that will impact the **3 Year IT Strategy**, the focus of this task is mainly on IT Systems and Services.

POTENTIAL ACTIONS IMPACTING THE IT STRATEGY

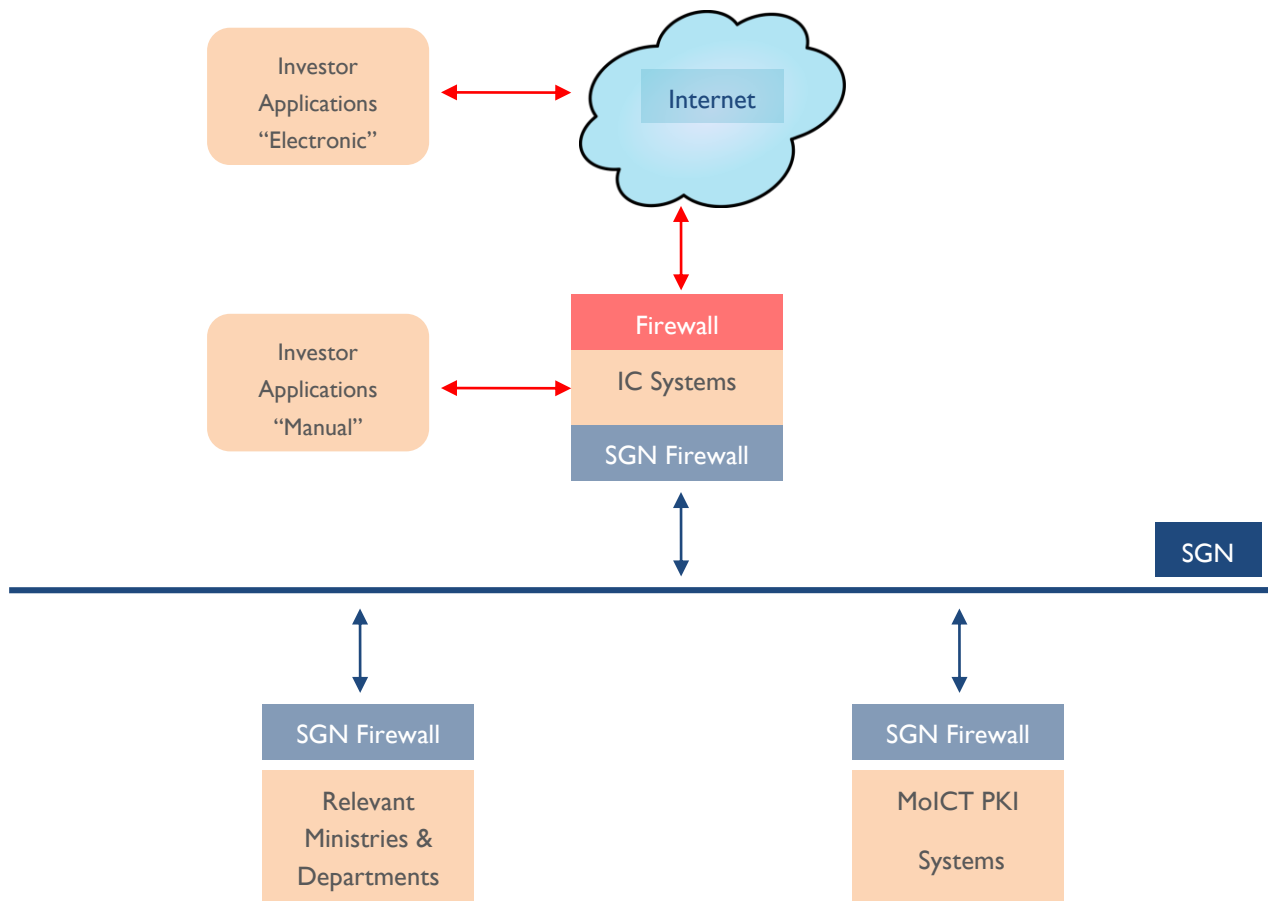


MAKING FULL USE OF THE SECURE GOVERNMENT NETWORK

Form an **Investment Window** context, the successful and timely implementation of the various projects listed in this **3 Year IT Strategy** hinges primarily on:

1. Making full use of Jordan's existing but largely underutilized Secure Government Network (SGN) which links all government ministries and departments, including the **Investment Commission**, on a single wide area network.

2. The timely availability from the **Ministry of Information and Communications Technology** (MoICT) of **Public Key Infrastructure** (PKI) services required to implement and use digital signatures.
3. The development of a number of simple Web Server applications for the **Investment Commission** to meet the data interchange requirements of the various Commissioners to and from their own respective ministries and departments and on a “case by case basis” information retrieval from other relevant ministries and departments.
4. Processing on investor applications should allow both “e- applications” as well as regular “manual applications”.



TIMESCALE AND COSTS

IMPLEMENTATION TIMESCALE

		2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Data Center Hardware												
2	Server Room & Office Space												
3	Network Upgrade												
4	IT Department Organization												
5	ARC / GIS System												
6	SAGE CRM Online Approvals Portal												
7	IFC Reaktiv Workflow Portal												
8	Applications Compliance												
9	Disaster Recovery Business Continuity												
10	IS Policies & Procedures												
11	IT Policies & Procedures												
12	Wireless IC Board Meetings System												
13	IT Job Functions & Descriptions												
14	Network Penetration Test – LAN												
15	Network Penetration Test – WAN												
16	Technical Training												
17	Migration of Current Applications												
18	MENA ITech HR System												
19	ImageLink Archiving System												
20	Protech ERP												
21	Combined Crosscutting Services												

Tendering & Specification
 Award & Implementation
 Completion

SUMMARY OF COSTS

Cost estimates for the various projects over the three year planning period are as follows:

	Summary of Costs			
	<u>Capital Expenditure</u>	<u>Recurring Costs</u>	<u>Manpower</u>	<u>Total JDs</u>
2015	436,500.000	9,000.000	26,250.000	471,750.000
2016	282,000.000	159,200.000	177,000.000	618,200.000
2017	28,000.000	185,200.000	177,000.000	390,200.000
Total	746,500.000	353,400.000	380,250.000	1,480,150.000

Projects can be completed within the three year planning period after securing the approval of the Board of Commissioners and allocation of necessary funding subject to the various assumptions and risks identified in this **3 Year IT Strategy**.

USAID Jordan Competitiveness Program
King Hussein Business Park
Building 3, GF, Amman, Jordan

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