NATIONAL ICT STRATEGY PROGRESS REPORT-Q3 2007

October 16, 2007

NATIONAL ICT STRATEGY PROGRESS REPORT Q3 2007

SUSTAINABLE ACHIEVEMENT OF
BUSINESS EXPANSION AND QUALITY (SABEQ)

CONTRACT NUMBER: 278-C-00-06-00332-00

BEARINGPOINT, INC.

USAID/JORDAN
ECONOMIC OPPORTUNITIES OFFICE (EO)

OCTOBER 16, 2007

AUTHOR: ABED SHAMLAWI, Y-CONSULT

DELIVERABLE N$^{\underline{O}}$: 4.8.4.26.7.2

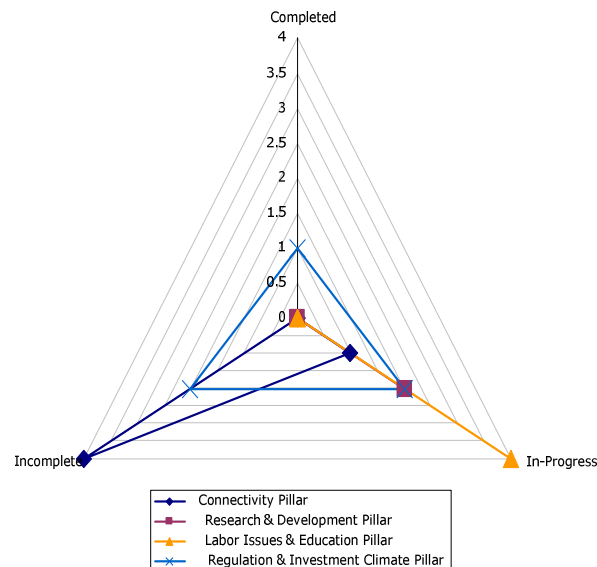# CONTENTS

1.0   EXECUTIVE SUMMARY

During the first half of 2007, int@j, the Jordanian ICT Private Sector, Jordanian Government, and other stakeholders have collaborated on developing the National ICT Strategy for 2007-2011, which was officially approved and published with the goals of achieving:

- Internet usage penetration to reach 50% (from the current rate of 11%)

- ICT sector revenues to reach USD 3 billion (from the current USD 1.5 billion)

- ICT sector employment to reach 35,000 jobs (from the current 16,000)

The Strategy implementation progress varied between the different pillars during the third quarter of 2007 according to the targets set in the Strategy. Under the Connectivity Pillar, the Ministry of ICT is expanding the National Broadband Network to enhance connectivity and increase competition on the internet backbone, and the TRC drafted a framework to establish a universal access/service fund to develop the infrastructure in disadvantaged areas of Jordan. The TRC is to further develop its capacity to act on anti-competitive market actions in the broadband market, and to take more aggressive efforts to establish the universal access/service fund and to un-bundle local loops effectively and fairly.

A National R&D Strategy has been developed under the Research & Development pillar, and int@j is working with MoICT and MoE to activate an R&D fund to finance projects in the ICT sector. The Prime Ministry is to endorse the newly developed R&D Strategy.

Under the Labor Issues & Education pillar, int@j and the German-Jordanian University is mapping the gap between the ICT sector requirements and academia, int@j and Princess Sumaya University are launching a six-month incubation program for ICT graduates as well as a Human Capital Development fund to enhance the cooperation and collaboration between academia and the private sector, the Ministry of ICT is also launching an initiative to provide university students with laptops.

The Regulation & Investment Climate pillar maintained income tax exemption on ICT exports, and is working with MoICT to formalize the ICT Advisory Counsel, in addition to developing an awareness campaign for ICT Companies to better realize the value of quality and professional certifications to their business. The Call Centers sub-sector has also been added to the sectors benefiting from the investment law allowing more opportunities for FDI in this area. The Ministry of ICT is yet to take a more aggressive effort in activating the ICT Advisory Counsel with int@j and other players.

National ICT Strategy 2007 - 2011
Count of Outcomes Status

Completed
6%

Incomplete
38%

In-Progress
56%

■ Completed   The item started and completed within the due period
■ In-Progress The item started and is running on schedule
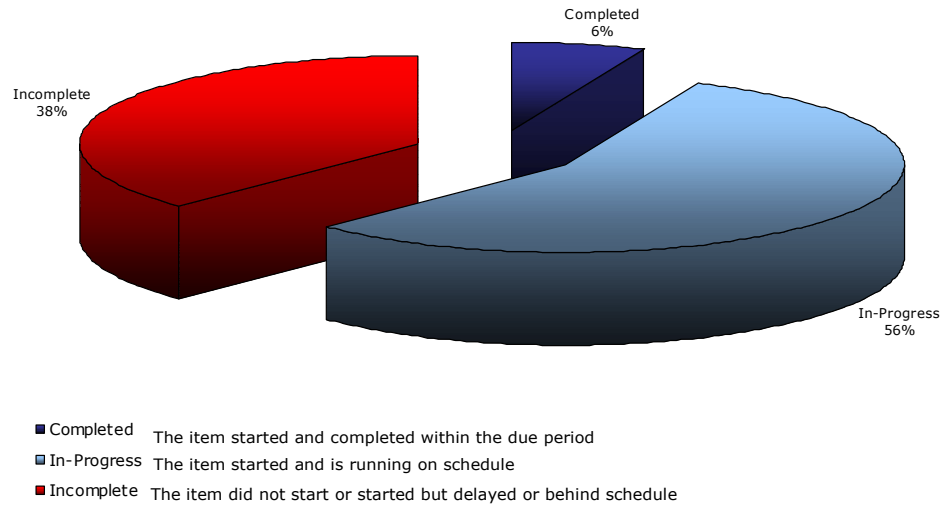■ Incomplete The item did not start or started but delayed or behind schedule

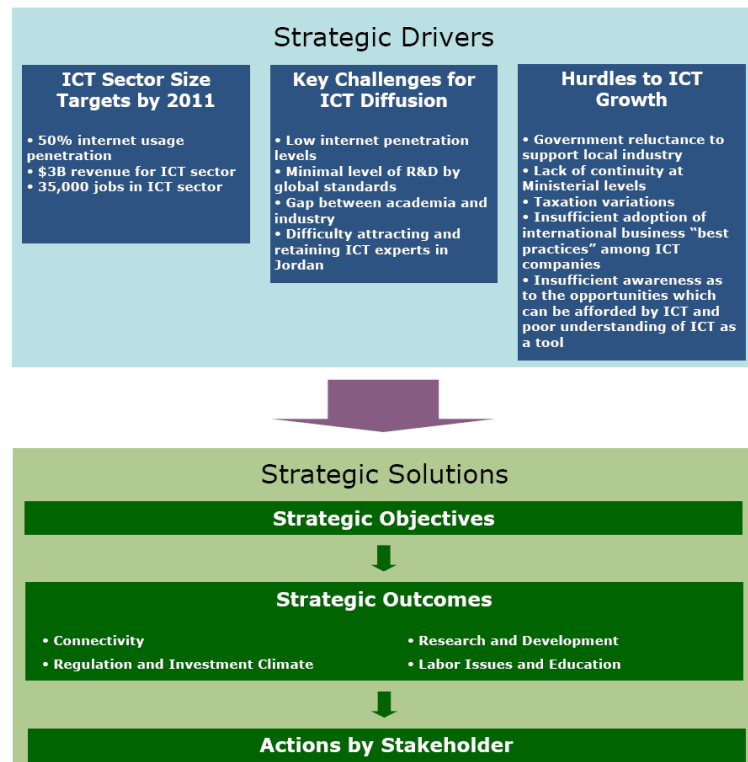**Figure 1 - Overall Strategy Status**

Finally, in order to maintain the momentum in implementing the Strategy actions and deliver the set objectives and outcomes within the target implementation period, the different stakeholders are encouraged to exercise more effective Program and Project Management effort.

2.0 BACKGROUND

Building on its predecessor, the REACH initiative, the National ICT Strategy is devised into four pillars, namely, Connectivity, Research & Development, Labor Issues & Education, and Regulation & Investment Climate pillars.

int@j lead the implementation of the Strategy and established specific committees for each pillar with direct representation from the ICT Private Sector, Ministry of Information and Communications Technology, Ministry of Education, Telecommunications Regulatory Commission, National Information Technology Center, and other stakeholders, allowing parallel implementation of the Strategy actions and maximizing the overall progress.

Strategic Drivers

ICT Sector Size Targets by 2011	Key Challenges for ICT Diffusion	Hurdles to ICT Growth
• 50% internet usage penetration • $3B revenue for ICT sector • 35,000 jobs in ICT sector	• Low internet penetration levels • Minimal level of R&D by global standards • Gap between academia and industry • Difficulty attracting and retaining ICT experts in Jordan	• Government reluctance to support local industry • Lack of continuity at Ministerial levels • Taxation variations • Insufficient adoption of international business "best practices" among ICT companies • Insufficient awareness as to the opportunities which can be afforded by ICT and poor understanding of ICT as a tool

Strategic Solutions

Strategic Objectives

Strategic Outcomes

• Connectivity
• Regulation and Investment Climate
• Research and Development
• Labor Issues and Education

Actions by Stakeholder

int@j is also in the process of institutionalizing a Program Management Unit (PMU) to coordinate and follow up on the different tracks and actions of the Strategy; the PMU will be housed within int@j and will work with the different players.

3.0 METHODOLOGY

While compiling the National ICT Strategy progress report, information and status were gathered from the following sources:

- National ICT Strategy document, outcomes, actions, and plans.
- National ICT Strategy pillars, pillar heads, and pillar participants' implementation progress.
- Data gathered from the management and board of int@j.
- The Ministry of Information and Communications Technology updates on the National ICT Strategy implementation and projects.

The information and status gathered from these sources have been later mapped to provide a detailed picture of the National ICT Strategy progress against achieving its targets and to provide a framework for future progress reports.

While National ICT Strategy implementation status has been articulated on the action level, reporting has been done on the outcome level to provide a consolidated and unified reporting structure across the National ICT Strategy pillars and as a guideline for future reporting as well.

Finally, the progress status has been articulated in the report as achievements, which reflects outcomes completed during the due period and outcomes running in-progress according to schedule, and pending items, which reflects delayed or behind schedule outcomes and actions.
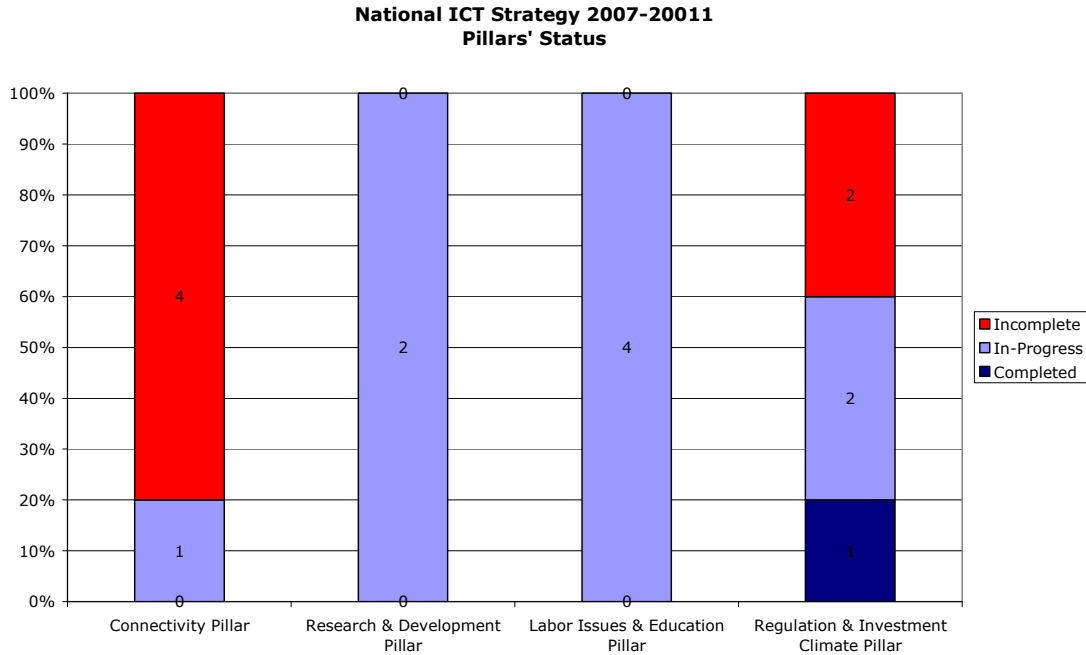
The National ICT Strategy Program Management Unit (PMU) is advised to employ more coordination and careful tracking of actions and implementation by partners and stakeholders, strong Project Management and implementation skills, and to keep track of unplanned activities and their progress for future reporting.

This Progress Report does not validate nor guarantees whether the actions and outcomes if completed will deliver the objectives of the strategy. The Report's focus is on the achievement, progress, pending items and required actions from participants and stakeholders'.

4.0   NATIONAL ICT STRATEGY PILLARS STATUS

The following diagram provides an overview of the progress of the four pillars under the strategy, the status has been summarized as completed to refer to outcomes and actions completed during the due period, in-progress to refer to outcomes actions running on schedule, and incomplete to refer to outcomes delayed or behind schedule.

The numbers in the below diagram represent the number of outcomes under each pillar.

**National ICT Strategy 2007-20011
Pillars' Status**

Completed	Item started and completed within the due period
In-Progress	Item started and is running on schedule
Incomplete	Item did not start or started but delayed or behind schedule

The following sections present more details on each pillar of the National ICT Strategy and the progress under each pillar. Next quarter reporting should address the progress according to the Strategy actions scheduled for next quarter in addition to any pending or delayed actions from this quarter.
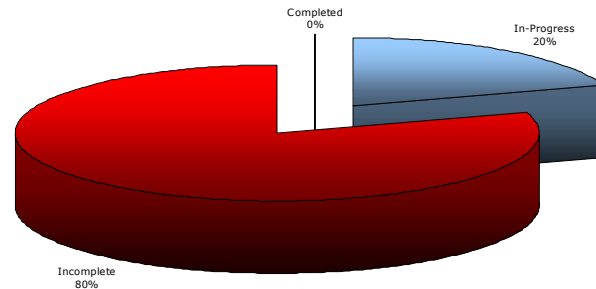
4.1 CONNECTIVITY PILLAR

Although Jordan's connectivity and infrastructure have developed quiet well in recent years and are considered advanced in comparison to the region, the cost of local phone calls, and broadband internet access, are still high.

Cost as well as access, are a direct result of the competitive landscape and regulatory environment. Until these issues are resolved, the effectiveness of the ICT sector will continue to remain limited, and until low internet penetration rates and PC ownership rates are combated, the effectiveness of the sector will be negatively impacted.

**National ICT Strategy 2007 – 2011
Connectivty Pillar 2007 - Q3**

Completed
0%

In-Progress
20%

Incomplete
80%

The Connectivity Pillar encompasses access to and availability of the internet; affordability, quality and reliability; sector policy; and security, as well as connectivity and infrastructure.

The following section presents a breakdown of the activities scheduled for the third quarter of 2007 under the Connectivity Pillar.

4.1.1 Accomplishments

- (1.1.5) The Ministry of Information and Communications Technology is expanding the National Broadband Network project and to increase connectivity between Aqaba and Amman as a step into increasing competition at the internet backbone. As such MoICT is working with MoE to utilize the schools as broadband integration points. In addition, MoICT is working with the Royal Air Force, who in turn awarded an RFP to a contractor to lay down Fiber Cables between Amman and Aqaba.

4.1.2 Pending items and required actions

- (1.1.1) In order to improve the effectiveness of the Telecommunications Regulatory Commission to promote a functioning competitive environment for fixed-line internet access, TRC needs to ensure its mandate and operating procedures are consistent with a principle to promote market competition, the TRC capacity needs to be built to act on this item and to employ more aggressive effort to accomplish this activity.

- (1.1.2) The TRC and Jordan Telecom need to un-bundle local loops effectively and fairly, as a first step, Bit-Stream unbundling needs to be launched, in effect the connectivity pillar sent letters to the TRC and Jordan Telecom suggesting to define bit stream unbundling as it is defined in the prevailing interconnection instructions from the TRC to launch this activity, to which no response has been received to date.

- (1.1.4) Preventing anti-competitive behavior in the broadband market is one of the targets addressed under the Connectivity Section of the National ICT Strategy, the Connectivity Pillar sent a letter to the TRC to create a competition board within the TRC so that market competition would be the main directive for TRC actions and plans, the TRC is yet to respond to int@j request.
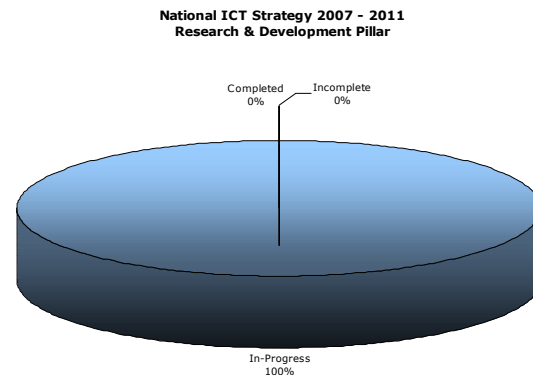
- (1.1.6) The TRC in cooperation with the Ministry of ICT drafted a framework to establish a Universal Access/Service Fund to develop the infrastructure in disadvantaged areas of the country; the TRC is to further finalize the draft and issue a clear regulation establishing this fund.

4.2 RESEARCH & DEVELOPMENT PILLAR

Although there have been success stories of effective R&D implementations, they have not been widespread and R&D still lag behind Jordan's desired achievement levels, this is primarily is a result of insufficient local capabilities, focus, and spending on nationwide R&D.

**National ICT Strategy 2007 – 2011
Research & Development Pillar**

Completed 0% Incomplete 0%

In-Progress 100%

As a country, Jordan comprehends the significant role which R&D can play in its economic growth and its value to sustainable development. In order to reach the objectives set by the National ICT Strategy, the ICT sector must make a conscious commitment to developing R&D capacity and output.

The following section presents a breakdown of the activities scheduled for the third quarter of 2007 under the Research & Development Pillar.

4.2.1 Accomplishments

- (2.4.1) The National ICT Strategy has set a target to Institutionalize R&D in the culture of ICT firms, in effect the Ministry of Information and Communications Technology developed in cooperation with int@j the National R&D Strategy, and the Strategy is pending Prime Ministry endorsement.
  In addition, int@j in cooperation with local players is developing an awareness campaign to increase R&D spending by the private sector, and promote innovation in the ICT sector, thus contributing to improving Jordan's international competitiveness.

- (2.4.3) The National ICT Strategy has also called to activate the R&D Fund to finance projects in the ICT sector, in this regard; in@j is currently coordinating with the Ministry of Information and Communications Technology and Ministry of Education to agree on the scope and mechanisms to activate the Fund.

4.2.2 Pending items and required actions
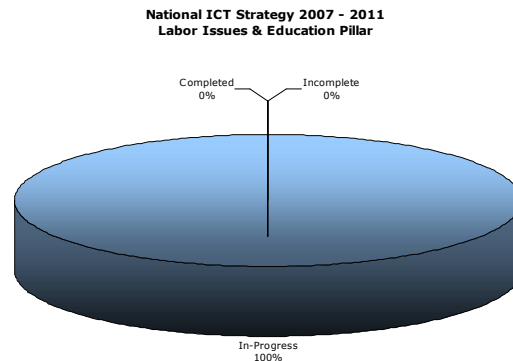
- No pending actions.

4.3 LABOR ISSUES & EDUCATION

Jordan has thrived in many aspects of the society during the past decade; however, many challenges remain to complete the transition to an information society. There have been an increasing number of people graduating from ICT related fields, and the lack of close cooperation and alignment between universities and the private sector is causing a gap between the industry's needs and the skill sets of fresh graduates.

National ICT Strategy 2007 - 2011
Labor Issues & Education Pillar

Completed 0%

Incomplete 0%

In-Progress 100%

Nonetheless, Jordanians have exceedingly become a sought-after workforce in the region and in the world. As a result, Jordan suffers from an emigration of its highly qualified workforce to other countries.

In addition, continued skills update and improvement of professionals already in the workforce is required to keep Jordan moving forward in the ICT sector and a transfer of world-class technology and knowledge is necessary to ensure that Jordan keeps pace with the world.

The following section presents a breakdown of the activities scheduled for the third quarter of 2007 under the Labor Issues & Education Pillar.

4.3.1 Accomplishments

- (1.3.3) In order to provide university students with laptops and improve affordability of internet access and personal computers, the Ministry of Information and Communications Technology launched a program to provide each university student with a laptop, MoICT is working with MoF to finance the program and is in the process of issuing and awarding an RFP before November 15, 2007 for a pilot of 10,000 laptops to be distributed to students in the first semester in preparation for a wider rollout in the second semester, the price of the laptop will be paid through 7JDs monthly installments for the students of the first year, and the program is open for public and private universities participation and up to the students desire.

- (3.1.1) To map the gap between ICT sector requirements and academia, and introduce corrective measures to bridge this gap, the German-Jordanian University in cooperation with Int@j and the Ministry of Information and Communication Technology is in the process of carrying out a comprehensive baseline survey and analysis of needs and requirements in the ICT industry in Jordan. The survey captures the industry general information, technical information, educational backgrounds of employees, and research and capacity building requirements. The survey results are expected to be published by the end of Q4 2007

- (3.1.2) To enhance cooperation between the ICT private sector and academia, and encourage incubators and other types of internships in the ICT industry for university students, int@j in cooperation with Princess Sumaya University

initiated a training program for ICT graduates through incubation at the university campus, Eskadenia will be the first ICT firm to enroll in the program and will train 30 graduates for 6 months starting Oct 16, 2007 in order to enhance their skills to enter the market, int@j will seek other interested parties to enroll in the program and to establish similar programs.

- (3.1.3) In order to increase formal collaboration between universities and the ICT industry, int@j in cooperation with Princess Sumaya University initiated a Human Capital Development endowment in order to support applied research and R&D in ICT. The endowment will be launched in November 15, 2007 and Eskadenia will be the first to donate 10,000 JD to participate in the fund and to raise the interest of the private sector to participate.

4.3.2 Pending items and required actions

- No pending actions

4.4 REGULATION & INVESTMENT CLIMATE PILLAR

While general Foreign Direct Investment (FDI) has been on the rise, the ICT sector has seen little positive impact. Current regulations and laws are not designed to facilitate creation and closure of businesses and protection of intellectual property. As a result, other alternatives become more attractive.

National ICT Strategy 2007 - 2011
Regulation & Investment Climate Pillar

Completed 20%

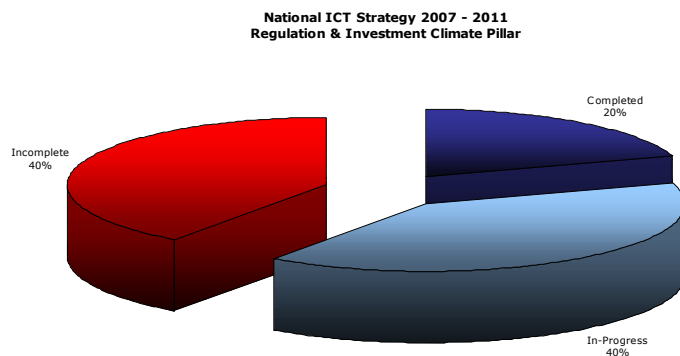Incomplete 40%

In-Progress 40%

Improving the effectiveness of the TRC and focusing on market competition are major prerequisites to allow market outcomes to reduce the prices of internet access, and thereby increase internet penetration, as well as forming the foundation for internet-based sub-sectors.

Addressing the high and variable taxation rates of ICT activity in Jordan, and improving classification of industry activities are major aspects to be addressed.

The following section presents a breakdown of the activities scheduled for the third quarter of 2007 under the Regulation & Investment Climate Pillar.

4.4.1 Accomplishments

- (1.5.1) To increase the number of relevant government-to-business and government-to-citizen services delivered electronically, the Ministry of ICT is working on launching new e-Government services including vocational licenses issuance, e-payment gateway, boarders and residency, civil service bureau and passports, health insurance renewal, and building permits e-services. MoICT is also about to launch an awareness campaign in November 2007 on the use of ICT in improving Jordanians quality of life.

- (2.2.2) The National ICT Strategy calls for more Focus on the contact center/outsourcing sub-sector, MoICT in cooperation with JIB and other players

have successfully added the Call Centers industry to the industries benefiting from the Investment law, MoICT is also coordinating on attracting investments in this area and a large call center project is expected to be launched in the following months.

- (2.6.7) To maintain income tax exemption on ICT exports, int@j in cooperation with ICT player successfully advocated and maintained the status quo of income tax exemption on ICT exports.

4.4.2   Pending items and required actions

- (2.5.2) In order to promote quality certification of ICT firms, int@j is developing an awareness campaign in cooperation with the USAID-funded SABEQ Program and local players for ICT Companies to better realize the value of quality and professional certifications to their business, the campaign is planned to be launched in Q1 2008.

- (2.6.8) In order to ensure that the ICT sector continues to be represented on

Sustainable Achievement of Business Expansion and Quality
Salem Center, Sequleyah Street
Al Rabieh, Amman
Phone: +962 6 550 3050
Fax: +962 6 550 3069
Web address: **http://www.sabeq-jordan.org**