THE STATE OF PALESTINE
NATIONAL EXPORT STRATEGY

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SERVICES

SECTOR EXPORT STRATEGY 2014-2018

فلسطين
وزارة الاقتصاد الوطني الفلسطينية
Ministry of National Economy

International Trade Centre

PALTRADE
مركز التجارة الفلسطيني - بال تريد
PALESTINE TRADE CENTER

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Layout: Jesús Alés (sputnix.es)

The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations

Street address: ITC 54-56, rue de Montbrillant 1202 Geneva, Switzerland
Postal address: ITC Palais des Nations 1211 Geneva 10, Switzerland
Telephone: +41-22 730 0111
Fax: +41-22 733 4439
E-mail: itcreg@intracen.org
Internet: http://www.intracen.org

Ministry of National Economy (MONE)

Address: Ramallah – Im Al-Sharayet
Tel: + 970 2 2981218
Fax: + 970 2 2981207
P.O.Box: Ramallah 1629
Email: info@met.gov.ps

Palestine Trade Center (PalTrade)

Head Quarters (Ramallah Office): Alwatanieh Towers Bldg | 5th floor, Albireh
P.O. Box: 883 | Ramallah | Palestine
Tel: + 970 2 240 8383
Fax: + 970 2 240 8370
Email: info@paltrade.org

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This document represents the ambitions of the private and public stakeholders who dedicated long hours to define the enhancements and future orientations for the sector to increase its export performance and growth (full list of stakeholders in Appendix 1).

Guidance and support were provided to the project by the following key personnel.

Sector Strategy Team

- **Murad Tahboub**
  ASAL Tech.
- **Hussein Yassien**
  Nasher
- **Mohammed Alameh**
  Amaar Group
- **Anas Abu Sara**
  PalTrade
- **Muhannad Hijjawi**
  PalTrade
- **Ramadan Badaha**
  Ministry of National Economy
- **Ahmed El Farra**
  Palinvest
- **Bashar Skaik**
  PalTrade
- **Nahed Jaber**
  Palestinian Standards Institution
- **Florid Zurba**
  Ministry of Telecommunication and Technologies
- **Isra'a Milhem**
  Ministry of National Economy
- **Rayan Darwish**
  Ministry of National Economy
- **Muhanna Manasrah**
  Babilsoft
- **Maher Al-Tabbaa**
  GCCI
- **Laith Kasis**
  Team Coordinator
- **Anan Ghazi**
  MTIT
- **Yaser M. Waheidi**
  Ministry of Telecommunication and Technologies
- **Hassan Qasem**
  Dimensions
- **Abeer Hazboun**
  PITA
- **Rami Wehidi**
  Consultant
- **Muhammed Musleh**
  PITA
- **Ala Aladdin**
  Intertech
- **Tareq Maayah**
  EXALT
- **Sireen Sabi**
  Reach
- **Yousef Jabr**
  Reach
- **Saeed Zidan**
  Ultimit
- **Rasha Salahiden**
  2isoftware
- **Jawad Abdelkarem**
  Ministry of Telecommunication and Technologies
- **Dalia Qumseh**
  Ministry of National Economy

Ministry of National Economy (MoNE):

- **Mohammad Hmaidan**
  Head of Trade in Services Unit
- **Manal Farhan**
  NES Navigator
- **Nahid Qudsi**
  Assistant Navigator

Ministry of Telecommunication and Information Technology:

- **Florid Zurba**
  Director
- **Maysa' Almonayer**
  Engineer

Palestine Trade Center (PalTrade):

- **Hanan Taha**
  Chief Executive Officer
- **Shawqi Makhtoub**
  Trade Policy Manager
- **Samir Maree**
  NES Specialist
- **Mohammed Al Ram'ah**
  NES Coordinator
- **Mayada Diab**
  Program Coordinator
- **Mohanad Hijjawi**
  Head of Trade in Services Unit

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ACRONYMS

B2B	Business to Business
BPO	Business Process Outsourcing
ERP	Enterprise Resource Planning
ESCWA	Economic and Social Commission for Western Asia
EU	European Union
EuroMed	Euro-Mediterranean
FDI	Foreign Direct Investment
GAFTA	Greater Arab Free Trade Area
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GIZ	German Agency for International Development
ICT	Information and Communication Technology
ISOC	Internet Society
ITC	International Trade Centre
IPR	Intellectual Property Rights
ISP	Internet Service Provider
IT	Information Technology
MENA	Middle East and North Africa
MNE	Multinational Enterprise
MoC	Ministry of Culture
MoEHE	Ministry of Education and Higher Education
MoF	Ministry of Finance
MoJ	Ministry of Justice
MoL	Ministry of Labour
MoNE	Ministry of National Economy
MoTIT	Ministry of Telecommunications and Information Technology
NEC	National Export Council
NES	National Export Strategy
PALTEL	Palestine Telecommunications Company
PalTrade	Palestine Trade Centre
PCBS	Palestinian Central Bureau of Statistics
PEC	Palestinian Export Council
PICTI	Palestine Information and Communications Technology Incubator
PIPA	Palestinian Investment Promotion Agency
PITA	Palestinian Information Technology Association of Companies
PNA	Palestinian National Authority
PoA	Plan of Action
PSI	Palestine Standards Institution
PTRA	Palestine Telecommunications Regulatory Authority
QA	Quality Assurance
R&D	Research & Development
RoW	Rest of the World
TIS	Trade in Services
TRIPS	Agreement on Trade Related Aspects of Intellectual Property Rights
TSI	Trade Services Institution
TSN	Trade Services Network
UAE	United Arab Emirates
USAID	United States Agency for International Development
WTO	World Trade Organization

Source: © PalTrade

EXECUTIVE SUMMARY

The ICT services sector, ranging from software development to ICT outsourcing and telecommunications, accounts for approximately 6% of the State of Palestine's gross domestic product (GDP). The steady growth registered by the ICT sector in general, and ICT exports in particular, has allowed the sector to gain a significant place in the national economy. Investing in the consolidation and expansion of this sector thus holds a solid promise of national growth, particularly since the ICT industry can crucially contribute to the emergence of a knowledge-based economy while allowing the State of Palestine to become fully engaged in one of the fastest growing economic sectors of the 21st century. The State of Palestine is currently exporting to diverse destinations including the Gulf, Israel, Europe and the United States of America, yet an expansion and consolidation of its export and product range is bound to improve both its economy and governance.

CURRENT CONTEXT

There are approximately 250 ICT companies in the State of Palestine. Most of them are small enterprises primarily oriented towards the domestic market and engaging in hardware assembly, software development, enterprise consultancy, Internet services or automation equipment. Total sector revenue is estimated to be somewhere between US$350 million and US$1 billion. The ICT sector in the State of Palestine grew from a scant 0.8% to approximately 5% of total global GDP between 2003 and 2008, and to over 5% of GDP in 2010. This growth is a dramatic change away from traditional industries.

The Palestinian education system, while producing over 2,000 ICT graduates annually, does not supply the sector with the necessary amount of adequately skilled workers. In spite of the fact that labour costs in the State of Palestine are lower than in their direct competitors' markets, Palestinian companies have difficulties competing because their labour productivity is low due to insufficient technical, business and project management skills. The sector's development and operations are further constrained by low levels of capital investment and short supply of appropriate and innovative financing instruments. Innovation in the State of Palestine suffers from a lack of research and development (R&D) and a poorly developed information society, as well as Israeli-imposed constraints on ICT infrastructure and connectivity. Finally, legal and administrative hurdles to foreign direct investment (FDI) in the State of Palestine hinder the establishment of business relations.

The trade support network (TSN) available to the ICT sector includes the Palestinian Information Technology Association of Companies (PITA), the Palestine Information and Communications Technology Incubator (PICTI), ICT centres of excellence in universities, and initiatives such as Fast Forward, Leaders and Peeks, as well as the Ministry of Telecommunications and Information Technology (MoTIT), the Ministry of National Economy (MoNE) and the Palestine Trade Centre (PalTrade). The capacity of both private and public sector TSN actors to respond to the sector's needs is perceived to suffer from limitations.

The State of Palestine has put in place a modern legal regime establishing a fair system of regulated competition. MoTIT is committed to allowing an open, competitive telecommunications market to operate but certain hurdles, such as the Israeli refusal to grant 3G and 4G licenses to Palestinian mobile operators, or challenges related to data protection, prove difficult to eliminate. Incentives such as tax exemptions or tax rebates are available, but more are needed.

EXPORT PERFORMANCE

Total ICT sector revenues were estimated to range from US$350 million to US$1 billion in 2012, of which exports are estimated to range from US$20 million to US$50 million. Outsourcing services to North American and Israeli multinational enterprises (MNEs) and packaged products for Middle Eastern and North African (MENA) countries make up the bulk of Palestinian ICT exports.

The Palestinian ICT sector is involved in back office support services, data cleaning, consulting, geospatial information systems, training, turnkey solutions, mobile applications and quality assurance and testing. Africa, Europe, Israel and the MENA region are the top export destinations for Palestinian ICT products, with regional markets being the most important for exports.

Exporting ICT companies feel that their geographic location, common business language, low input and labour costs, and high innovation abilities put them on the ICT map ahead of other competitors, while other factors such as time zones, exchange rates, labour legislation and development competencies are also crucial in surpassing competitors. However, the State of Palestine's political situation, lack of intellectual property rights (IPR) protection and inadequate financial infrastructure are clear competitive disadvantages.

OPTIONS FOR FUTURE DEVELOPMENT

ICT stakeholders agree that their vision for the sector can be phrased as follows:

> *Palestine is an innovative hi-tech hub leading the transformation to an export-led knowledge-based economy*

To achieve this vision, the strategy will reduce the binding constraints on trade competitiveness and capitalize on strategic options identified for the Palestinian ICT sector. The strategic orientations for the next five years aim at developing key markets in the short and medium terms for Palestinian exporters and facilitating structural changes in the value chain to increase its efficiency and value generation.

1. The ICT strategy vision will be achieved through the implementation of the Plan of Action (PoA) for the sector. This PoA revolves around the following five strategic objectives, each spelling out specific sets of activities intended to address both challenges and opportunities facing the ICT services sector in the State of Palestine:
2. Enhance the business environment for the ICT sector to support and enable the industry;
3. Enhance the ICT business supply-side to better enable the industry to export;
4. Enhance ICT business development and market entry to better enable the industry to export;
5. Build the entrepreneurial capacities of the sector;
6. Build the capacity to successfully conduct trade-in-services negotiations on ICT with Israel, the EU, the Greater Arab Free Trade Area (GAFTA) and other countries.

ROADMAP FOR SECTOR EXPORT DEVELOPMENT

The ICT market is genuinely international, and distance and physical and administrative obstacles to movement play a largely subordinate role as many services can be exported cross-border by electronic means. Export market development in the Palestinian ICT sector will focus on exploiting the general capabilities of the industry to develop and innovate, as well as on market requirements that will support Palestinian exports

In the short term Jordan, Israel, Libya and Sudan have been identified as promising destinations. In the medium term, Europe, Gulf countries and Iraq will be targeted. In the long term, Egypt, Algeria, South America and North America appear to offer potential. In addition to new markets, the strategy will focus on diversifying into new products such as e-commerce, e-government, and multilingual digital content or mobile software technology.

Key structural changes to the sector's value chain will include:

- Effecting policy changes to provide reliable market access conditions and meet regulatory requirements in target markets;
- Strengthening intra – and cross-industry linkages;
- Creating strategic industry clusters to generate synergies and meet critical mass requirements;
- Developing requisite standards and e-legislation; and
- Strengthening cooperation between educational institutions and the industry to foster R&D and generate specialized human resources for the sector.

IMPLEMENTATION MANAGEMENT

The achievement of these ambitious targets will require continuous and coordinated efforts from all relevant private and public stakeholders as well as support from key financial and technical partners, donors and investors. Several institutions are designated to play a leading role in the implementation of the sector PoA and bear the overall responsibility for successful execution of the strategy. They will be assisted by a range of support institutions that are active in the ICT sector. Each institution mandated to support the export development of the ICT sector is clearly identified in the strategy PoA. Moreover, the proposed Palestinian Export Council (PEC) and its Executive Secretariat will play a coordinating and monitoring role in the implementation of the ICT strategy in the overall framework of the National Export Strategy (NES). In particular, PEC will be tasked with coordinating the implementation of activities in order to optimize the allocation of both resources and efforts across the wide spectrum of stakeholders.

Box 1: Methodological note

The approach used by ITC in the strategy design process relies on a number of analytical elements such as value chain analysis, trade support network (TSN) analysis, problem tree, and strategic options selection, all of which form major building blocks of this sector export strategy document.

Value chain analysis

A comprehensive analysis of the sector's value chain is an integral part of the strategy development process. This analysis results in the identification of all players, processes and linkages within the sector. The process served as the basis for analysing the current performance of the value chain and for deliberating on options for the future development of the sector. The analysis charts the main stages involved in the sector's export process, from inputs sourcing to distribution in market segments. This is followed by the identification of key stakeholders who include not just the primary players (e.g. producers, processors, distributors etc.) but also those fulfilling support functions with direct linkages to the primary players. These support services include input providers (equipment suppliers, hardware suppliers etc.), transportation service providers and financial service providers, among others.

TSN analysis

The trade support network comprises the support services available to the primary value chain players discussed above. It is constituted of policy institutions, trade support organizations, business services providers and civil society. An analysis of the quality of service delivery and constraints affecting the constituent trade support institutions (TSIs) is an important input to highlight gaps in service delivery relative to specific sector needs. A second analysis of TSIs assessed their level of influence (i.e. their ability to influence public policy and other development drivers in the country and therefore make things happen or change) and their level of capacity to respond to the sector's needs.

Problem tree analysis

The problem tree analysis used is based on the principles of root cause analysis and the Pareto principle. The reason for using the problem tree exercise is to gain a deeper understanding of what is causing the high level constraints, and where solution-seeking activities should be directed. This exercise involves a two-step process:

- First, the value chain analysis, surveys and consultations with key public and private stakeholders identify constraints affecting sector-specific export value chains. These constraints are abstract and a more thorough breakdown is required to identify the specific root causes of constraints. Multiple levels of root causes are identified for each high-level constraint.
- Second, the problem tree uses the Pareto principle to identify critical root causes in the problem tree. This is especially important for resource limitations that usually exist during the strategy implementation phase. Therefore focus is needed on the 20% of the root causes which result in 80% of constraints affecting the sector. Critical paths through the problem tree are charted to discover the most significant root causes constraining the sector.

These steps resulted in a comprehensive problem tree detailing the constraints affecting the sector's export value chain, along with characterisations related to the types, granularity and intensity of the root causes. The problem tree then guided the design of the solution-seeking phase of the strategy.

Defining where we want to go

The strategic options for the development of the sector are reflected in the future value chain, which is the result of consultations, surveys and analysis conducted as part of the sector strategy design process. The future perspective has two components:

- A market-related component involving identification of key markets in the short and medium – to-long terms for Palestinian exporters, and;
- Structural changes to the value chain that result in either strengthening of linkages, or introduction of new linkages.

Both components are integral parts of the future value chain, which is the basis of the strategic plan of action developed for the sector.

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INTRODUCTION

The analysis and strategy for ICT services presented in this document forms an integral part of the NES of the State of Palestine. The ICT services sector, ranging from software development to ICT outsourcing to telecommunications, has gained a very significant place in the national economy over the past years, now accounting for well over 6% of GDP,[1] with a general upward trend. Moreover, the development of an information society and of a local ICT sector in the State of Palestine, as elsewhere, is contributing significantly to the improvement of labour productivity in the rest of the economy.

The State of Palestine's ICT sector is active, with export destinations ranging from the Gulf to Israel to Europe to the United States (and beyond), but estimates of current and future (potential) volumes suggest that much more can be done. In fact, exports of ICT services may represent perhaps the single most significant potential in the NES. This strategy document aims to sketch pathways towards harnessing that potential.

The export potential and strength of the ICT industry forms part and parcel of a bigger picture: the role of the ICT industry in the development of the country more broadly. From a policymaker's perspective it displays two functions and challenges.

- The ICT industry is an important, in many cases indispensable, ***enabler*** for business and government functions and citizen engagement, which plays an essential infrastructural role for the development of a knowledge-based economy, a declared goal of the Palestinian government.
- As an ***industry*** it is one of the fastest growing sectors worldwide, with great importance for many economies and significant potential for others, including the State of Palestine.

Because many ICT services are provided through phone lines and Internet connections, distance and borders play a much-reduced role (when compared to exports of goods), and the differences between serving local and international markets are often much smaller. Building export potential is thus closely related to developing local capacity and markets, and constraints on the former are very similar to, or identical with, constraints on the latter. In fact, fixing issues that in other industries may be considered local will, in the ICT industry, often directly translate into export potential.

Conversely, developing exports will often benefit local service availability, quality and price, and hence contribute in turn to the *enabling* function of ICT capacity in the State of Palestine. Developing ICT export capacity and channels, in other words, is not just one of many ways to improve the national balance of payments through exports, although that potential is significant enough to merit policymakers' full attention. It also contributes in the most significant way to the development of the Palestinian economy, society and governance as a whole.

This strategy is about the development of exports of services from the State of Palestine to foreign markets. It therefore deliberately focuses primarily on ICT services and those communication services directly related to ICT (such as Internet Service Provider (ISP) services), rather than on telecommunications services in the narrower sense, i.e. the transmission of signals. While the latter are of course also often exported the structure of the services, the providers and their markets arguably do not lend themselves easily to this type of strategy exercise.

1. Available numbers vary, depending on the source (and presumably the sector definition). According to the Portland Trust (2012), based on PCBS sources (in Arabic), in 2011 the sector contributed 6.4% to Palestinian GDP, up from 0.8% in 2008. According to PITA, as of 2007, the ICT sector represented about 7% of the Palestinian GDP (see Palestinian Information Technology Association of Companies (PITA) (2012). ICT Sector Profile. Available from http://www.pita.ps/content/ict-sector-profile). The 2013 Diagnostic Study (Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors* (prepared for PalTrade under the EU-funded Trade in Services Project at PalTrade and MoNE)) (relying on UN ESCWA (2010), Regional Profile 2009) finds that the sector grew by 0.8% to approximately 5% of total global GDP between 2003 and 2008 and to over 5% of GDP in 2010.

Box 2: A trade-in-services perspective

The NES and Trade in Services projects

This strategy document is part of a larger effort: the generation of a National Export Strategy for the State of Palestine. At the same time, it is part of the efforts of the EU-financed Trade in Services project, under which a diagnostic study,* was developed, covering *inter alia* ICT and tourism services.

Trade in services is a key element of the State of Palestine's economic present, and much more so of its economic future. Services account for around two-thirds of worldwide GDP. Trading services internationally is thus not just an option, but an imperative. The ICT and the tourism sectors are obvious places to start, as both are already heavily involved in trading their services. The trade in services project focuses on two more priority sectors: business-related services (especially professional services) and financial services. The State of Palestine's present and future in services exports encompasses many more sectors and subsectors, from education to construction to environmental services.

The trade policy context

The services sector undoubtedly must and will form a major piece of the country's future trade policy. Trade policy, both autonomous and in the specific context of negotiating trade (in services) agreements, should and can make not only a significant direct contribution to exports – that is its main raison d'être – by securing market access and regulatory disciplines in target markets through commitments of trading partners, but also to imports of the services and goods needed to develop the industry and its export potential. For example, facilitated imports of other services (e.g. legal, consulting, financial or communication) and goods (e.g. computer hardware) are necessary for the success of the ICT industry and its ability to export.

Horizontal and vertical perspectives

A key feature of many services is their close integration with other parts of the economy and society. While many goods have a reasonably confined space in economic life, both with respect to their production (olives grow on olive trees) and their use (one eats olives or not), services often feed into, and build on, other economic activities. This is particularly true for ICT services, which form a key input into virtually all other economic and many social and societal activities, including government and administration, and benefit from (and sometimes depend on) inputs of others. Importantly, again more than for most goods, services are often best traded in clusters, and/or can reinforce each other when thus traded. For example, combining ICT and/or financial and/or accounting services can serve all those involved. This triggers a need for heightened coordination and flexibility, not least in choosing business models for upstream and downstream success.

The same is true within the sector, both within and among subsectors. Obviously communication services (Internet, telephone etc.) are a major input into ICT services, from data processing to software development and sales, and vice versa. General software development and mobile applications development, of course, reinforce – and sometimes depend on – each other. This strategy aims to integrate these horizontal and vertical perspectives into its approach. As is the case for any aspects of this strategy its users, from government to business services organizations to businesses, are encouraged to take ideas contained herein as a starting point, not a finite catalogue, and explore and develop these and other horizontal and vertical linkages vigorously.

* Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors* (prepared for PalTrade under the EU-funded Trade in Services Project at PalTrade and MoNE) (hereinafter referred to in the main text as the 2013 Diagnostic Study). The very valuable chapter on ICT was drafted by Laith Kassis, who also performed the role of local Team Coordinator for the development of this strategy. Many subsections draw heavily on the Diagnostic Study, on occasion in the form of verbatim or quasi-verbatim quotes, which are usually but not always made explicit, for purposes of readability. They are acknowledged here.

HISTORICAL OVERVIEW[2]

2. Based on Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

Source: © PalTrade

ICT activities started in the West Bank and Gaza in early 1980s with a handful of companies selling computers and electronics. These companies were mostly subagents of Israeli dealers and had limited experience in services. Furthermore, the handful of software companies focused on accounting-related packages to serve the local market and came about as a result of the need to have a non-Israeli product.

At the beginning of the 1990s the demand for ICT services increased, with demand coming mainly from the private sector, universities and local government. During the occupation, Israel fully controlled the telecommunications sector, and it was only after the Oslo agreements in 1993 that ICT activities started to grow. The first Palestinian ISP was created, and the Internet became commercially accessible to individuals, companies and universities.

After the establishment of the Palestinian National Authority (PNA) and the arrival of non-governmental organizations, banks and new companies, the ICT cluster started to show further significant growth by the end of 1995. Today the PNA is the biggest end-user of technology products and services, followed closely by municipalities and large companies. Utility companies such as the Jerusalem Water and Electricity Companies are also consumers of ICT products and services. By 1997, the Palestinian telecom sector was 100% privatized with the creation of the Palestine Telecommunications Company (PALTEL). PALTEL, with an exclusivity license, has a complete digital network connecting the West Bank and Gaza and offers a wide range of services such as standard fixed telephone lines, leased lines, and Integrated Services Digital Network (ISDN) connections. It has over 315,000 subscribers for its fixed lines, with 8% penetration, and 11,000 Asymmetric Digital Subscriber Lines (ADSL). Jawwal, the cellular operator, has grown in number of subscribers from 550,000 in 2006 to over 2 million mobile subscribers in 2012.

WHERE WE ARE NOW

CURRENT CONTEXT

This section looks at the domestic supply conditions under which the State of Palestine ICT sector is operating, notably: (1) sector structure, (2) production capacity, (3) employment, and (4) competitive advantages and other industry assets.

SECTOR STRUCTURE

There are approximately 250 ICT companies in the State of Palestine according to PITA, which today represents more than 150 ICT companies. The providers in the ICT sector – as well as their domestic demand – are concentrated in Ramallah, Jerusalem and Gaza. A wide range of Palestinian ICT companies sell hardware products (direct agents or personal computer assemblers), software development, enterprise consultancy, Internet services and office automation equipment.

In 2010 PITA reported that 36% of its members were active in software, 35% in hardware, 18% in telecoms and 11% in training. Palestinian companies are mostly small, particularly in comparison to Indian or Bangladeshi companies. The biggest company in outsourcing has less than 150 employees while the biggest company in packaged products has less than 50. In consequence, they can only operate in and meet the needs of niche markets. However, the vast majority of the software houses still have at least one or more experiences of selling abroad.[3] One reason for this is the small size of the domestic market.

Some Palestinian companies seem to have developed expertise recognized internationally. For instance, ASAL and Exalt, which started out with Cisco, have managed to sign additional contracts with other major ICT companies. According to a 2010 Cisco survey other local firms reported signing new contracts with other regional and international companies, including Oracle and EMC. Of the companies surveyed by Cisco, 57% reported that they had expanded their business abroad since the beginning of 2010. The 22 companies interviewed by Cisco reported a total of 71 contracts, making the median number of international contracts per responding company 2.5. A follow-up interview with all surveyed companies revealed that 14 of the 22 companies had had a much lower number of business contracts in 2008 and 2009. In addition to traditional export markets (the Gulf Region and MENA markets), the 2010 Cisco survey found that at least four new companies had successfully reached out to new markets such as North America and Western Europe.

PRODUCTION CAPACITY

The ICT sector has shown remarkable expansion over the last decade. It has risen from 0.8% to 5% of the State of Palestine's GDP between 2003 and 2008. The sector currently accounts for approximately 7% of GDP. This expansion is expected to continue in the medium term.[4]

In 2006 the United States Agency for International Development (USAID)5 assessed that overall revenues for the ICT cluster amounted to US$87 million in 2003. At that time, some companies had already succeeded in exporting software products and had established business partnerships in regional markets, including the United Arab Emirates (UAE), Saudi Arabia, Yemen, Iraq and Jordan. Some other companies were engaged in the development of niche products serving customers in the United States and Europe as their back-end operations. Only a few companies are entirely or predominantly reliant on international customers. Within the sample of companies in the PalTrade survey, the percentage of sales generated by exports varied from 5% to 100%.

3. Barreto, E. et al (2013). *Diagnostic Study–Palestine: Export Readiness & Potential of Services Sectors.*

4. *Ibid*.

5. USAID, *The Palestinian ICT Cluster: Assessment Report* (2006).

Hence, local markets were still central for Palestinian ICT companies operating in either software or hardware. The key services were considered to be management or financial/accounting solutions, education and information management solutions, and management information systems. According to the Cisco report, from 2008 onwards the sector began to rebound. However, current data do not allow for an accurate assessment of the economic size of the ICT sector. 'ICT sector revenue is quoted at figures of anywhere between US$500 million and. US$1 billion.[6] More conservative commentators place the figure at around US$350 million, which is probably more realistic.[7] Moreover, the magnitude of ICT sector revenue resulting from exports is difficult to estimate but there is a high probability that it accounts for a small part of total revenues.

EMPLOYMENT

The job creation effect of an industry is a critical indicator of its socioeconomic impact, especially in a country that faces a high unemployment rate (21% in 2011). According to the Palestinian ICT Cluster Assessment Report 2006, the ICT workforce at that time contributed less than 1% of national employment. The 2013 Diagnostic Study estimates employment in the Palestinian ICT sector (and ICT jobs in other branches of the economy) at about 15,300, of which about 5,200 jobs are direct jobs. However, the ICT sector has a multiplier effect on employment. In addition to direct employment in the sector, indirect employment is created in adjacent and supporting industries. In countries like India and the Philippines, one direct job in ICT can create up to four indirect supporting jobs.[8] The Diagnostic Study 2013 estimates that:

Based on recent development and ICT sector growth in Jordan it would be reasonable to assume that the Palestinian ICT sector employment could grow in the range of 3%-4% annually, which translates into 150-200 new job opportunities in the ICT sector annually. These will also generate an additional 400-600 new jobs in the economy as a whole.

COMPETITIVE ADVANTAGES AND INDUSTRY ASSETS

According to the 2013 Diagnostic Survey Palestinian companies believe that their current competitiveness relies in particular on their geographic location; their common business language (with respect to Israel and Arabic-speaking countries); their low input costs; their labour costs; and their innovation abilities. By contrast the respondents did not consider that time zone; exchange rate; quality standards; labour legislation; quality of labour; turnaround time; advantageous trade agreements; or design and development competencies created significant competitive edges. The respondents believe that their major competitive disadvantages lie in the State of Palestine's political alignments (or the lack thereof), as well as the lack of IPR protection and overall logistics, with the current banking and financial infrastructure being another significant handicap.

TECHNOLOGIES FOR OUTSOURCING ACTIVITIES

Nicholas White, in Market Mapping of the Palestinian ICT Sector and the Opportunities for Partnerships in the Region (2010), examined what technologies are available in Palestinian companies that are suitable for the outsourcing business. He found that the most popular technologies were used in a wide range of companies. The most prevalent platforms among Palestinian ICT companies were Microsoft-based, but Java, UNIX and Linux were also well represented. A wide range of software platforms were also present among Palestinian companies, with a focus on Internet as well as other programming environments.

The mobile phone languages and platforms used in Palestinian ICT companies are more fragmented; White found that this technology is still in the early stages of development compared with Internet languages. Besides, with the rapid expansion of smartphones, traditionally web-based software development tools are becoming very important in the mobile phone business. Although not yet widely disseminated in the State of Palestine, White estimated that skills exist locally in the mobile app sector that have the potential to enable the development of outsourcing activities. From his survey it is apparent that a great number of Palestinian companies have years of experience in using the relevant technologies for outsourcing, including those for mobile applications.[9]

6. This figure is given in: GIZ/Solutions for Development (March 2012). *Palestinian ICT Private Sector 3-Year Strategy and Development Plan.* Available from http://www.lacs.ps/documentsShow.aspx?ATT_ID=5644.

7. Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

8. World Bank (2009). *Information for Communications & Development: IC4D 2009 Report on Accessibility, Mobile Networks, Internet Users, IT Services, IT-Related Jobs, Convergence, Government Transformation, and ICT Country Performance Measures.*

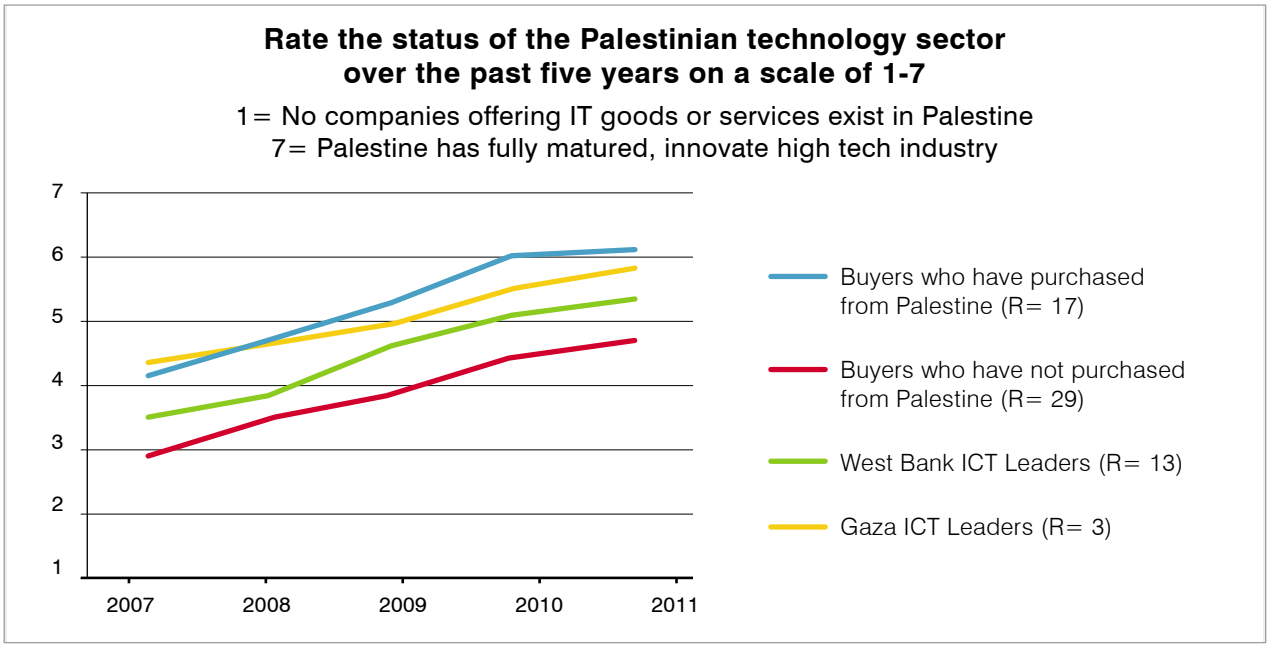
9. White, Nicholas (2010). *Market Mapping of the Palestinian ICT Sector and the Opportunities for Partnerships in the Region, 2nd Edition*. Mercy Corps.

Table 1: *Perceived competitiveness of Palestinian companies exporting ICT services*

Criteria	1 – Very competitive	2	3	4	5 – Not at all competitive
Geographic location	35%	15%	20%	5%	15%
Time zone	30%	15%	35%	0%	10%
Exchange rate	15%	20%	25%	15%	15%
Banking & financial infrastructure	15%	20%	15%	20%	15%
Political alignments	5%	10%	5%	10%	55%
IPR protection	5%	0%	20%	35%	25%
Quality standards	15%	15%	35%	20%	5%
Common business language	30%	25%	20%	10%	0%
Input costs	10%	35%	20%	15%	10%
Labour costs	15%	35%	25%	15%	0%
Labour legislation	5%	25%	40%	15%	5%
Quality of labour	20%	15%	35%	15%	5%
Logistics	0%	25%	10%	20%	30%
Turnaround time	5%	20%	30%	10%	15%
Innovation	10%	45%	20%	15%	0%
Advantageous trade agreements	0%	10%	40%	25%	10%
Design & development competencies	15%	30%	40%	5%	0%

Source: Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

Figure 1: *Status of the Palestinian ICT sector 2007–2011*



Source: Cisco (2012). *Cisco Pioneers Market Development Approach in Palestine.*

CLIENT SATISFACTION

According to a 2012 Cisco report, about 70% of Palestinian firms' clients are open to outsourcing new projects to Palestinian companies – a high rate. Nonetheless, further investigation is warranted about those clients who did not declare that they do not plan to buy Palestinian outsourcing capabilities again. The Cisco report tells an encouraging story for the development of the State of Palestine's ICT exports. It reports that Cisco has moved outsourcing activities from a Palestinian company to an Indian one in order to entrust the Palestinian one with more challenging and higher added value projects. According to the Cisco report, the perception of the ICT sector has been changing positively over the period 2007-2011, not only among the State of Palestine's clients but generally speaking.

VALUE CHAIN OPERATIONS

Palestinian ICT companies are reported to engage in software development, ICT-related business consultancy, Internet services, hardware assembly and provision of office automation equipment, as well as hardware retail activities. They mostly serve the local market, with their main customer segments being government, business, civil society and private consumers. However, as mentioned above, 22 companies surveyed have initiated a total of 71 export relationships since 2010. ICT exports can be broken down into two main categories of services, respectively matching two distinctive business models:[10]

1. Outsourcing activities exported to multinationals (in markets located primarily in North America and Israel) – the engine of the industry;
2. Packaged products meeting special companies' needs (accounting, Enterprise Resource Planning (ERP), and hotel management to MENA or African markets), particularly in developing countries.

Palestinian ICT exporting companies are currently involved *inter alia* in the provision of back office support, data cleaning, consulting, geospatial information systems, training, turnkey solutions and mobile applications, as well as quality assurance and testing.

10. Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

MODES OF SUPPLY AND DISTRIBUTION CHANNELS

PalTrade11 found that 75% of services are delivered internationally in Mode 1 (cross-border supply[12] (electronically, or by other means (such as courier), to foreign customers/clients located xabroad)), 5% in Mode 2 (consumption abroad[13] (delivered in-country to foreign customers/clients located in the exporting country)), 15% in Mode 3 (commercial presence[14] (delivered abroad via a branch or subsidiary established abroad)) and 30% in Mode 4 (presence of natural persons[15] (delivered via professionals to foreign customers/clients located abroad)).[16]

11. PalTrade has conducted a quick survey, as part of the Diagnostic Study Report, with 20 selected PITA companies such as Exalt, 2i, ProGineer, Jaffa.Net, UltimatIT and Manarahnet, Cool Net and Mada Al Arab, NMotion, Dragon FX and Dimensions Studio, Bisan, Trusted Systems, Isra' and Data Set. Companies from Gaza representing these sectors included Nepras for Media, Unit One that also develops mobile applications similar to Exalt, Link Information Technology, Al Tariq Systems and Smart Soft.

12. Cross-border supply (Mode 1) is defined to cover services flows from the territory of one Member into the territory of another Member (e.g. banking or architectural services transmitted via telecommunications or mail).

13. Consumption abroad (Mode 2) refers to situations where a service consumer (e.g. tourist or patient) moves into another Member's territory to obtain a service.

14. Commercial presence (mode 3) implies that a service supplier of one Member establishes a territorial presence, including through ownership or lease of premises, in another Member's territory to provide a service (e.g. domestic subsidiaries of foreign insurance companies or hotel chains).

15. Presence of natural persons (Mode 4) consists of persons of one Member entering the territory of another Member to supply a service (e.g. accountants, doctors or teachers; teams of building professionals as employees of contractual service providers; foreign staff of companies operating in Mode 3). This does not include, however, access to the local labour (employment) market. The General Agreement on Trade in Services (GATS) Appendix on Movement of Natural Persons specifies that Members remain free to operate measures regarding citizenship, residence or access to the employment market on a permanent basis.

16. Participants could select more than one checkbox, so percentages may add up to more than 100%.

Box 3: The necessity of a commercial presence to consolidate positioning in markets

According to Mr. Musleh, the Business Development Manager at PITA, local representation is the best distribution channel, especially if it is complemented with technical resources that can interact and capture client needs. Interviewed by the team of the 2013 Diagnostic Study, he gave the example of Infinite Tiers, a company in Nablus that has a marketing arm through a physical presence in the United States, a channel which provides proactive sales leads and closes contracts for Palestinian development.

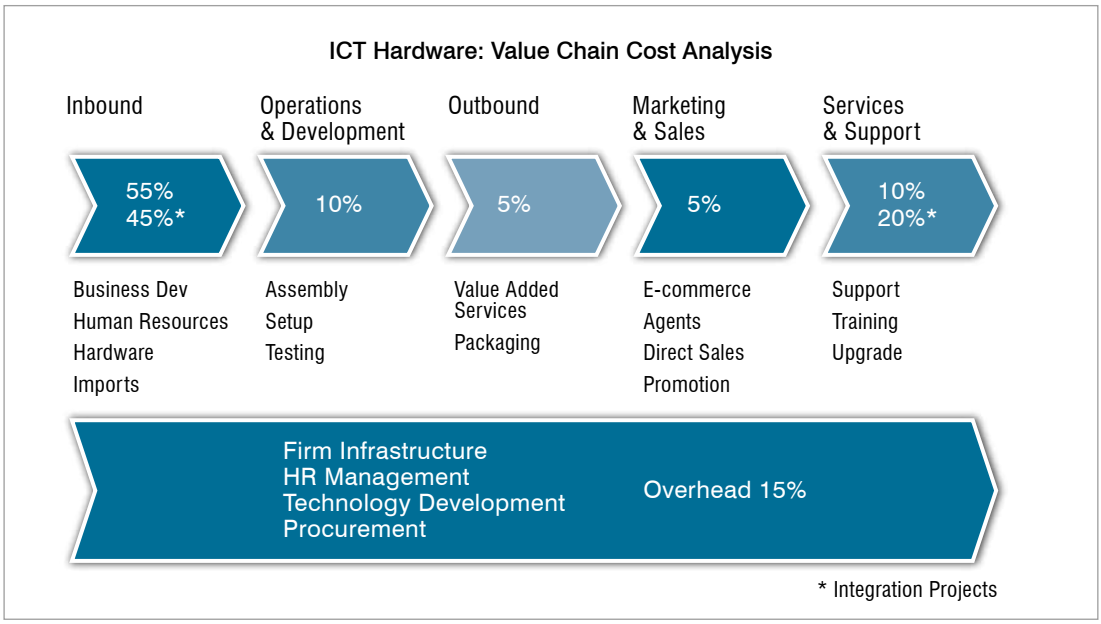
Mr. Musleh believes that it is important to have a representative office in the Silicon Valley in order to channel software outsourcing opportunities to Palestinian ICT companies that have successfully undertaken outsourcing business with Cisco, Microsoft, HP and other MNEs. He also advised having a representative office in the Gulf region, especially in Saudi Arabia, in order to be able to access business and sales leads. As each market is unique, a commercial presence will help to understand how to adapt to demand and how to do business.

Moreover, this commercial presence is likely to be more critical given that Palestinians face difficulty in travelling and may be unable to do so whenever the political situation with Israel deteriorates. According to White, 'many of the successful companies that sell externally have built contacts whilst their management was located in other countries or have sales people who can travel easily.' In the PalTrade survey, some companies mentioned having lost export business because of not having a local office to represent them and undertake local marketing efforts.

VALUE CHAIN COST ANALYSIS

The value chains of the hardware and software sectors must be analysed separately, particularly in terms of the cost analysis, because the State of Palestine produces software but only assembles hardware. Consequently, the hardware value chain cost analysis shows that imported inputs determine the cost structure to a large extent. The operations segment represents only 10% of total cost because it consists mostly of assembly.

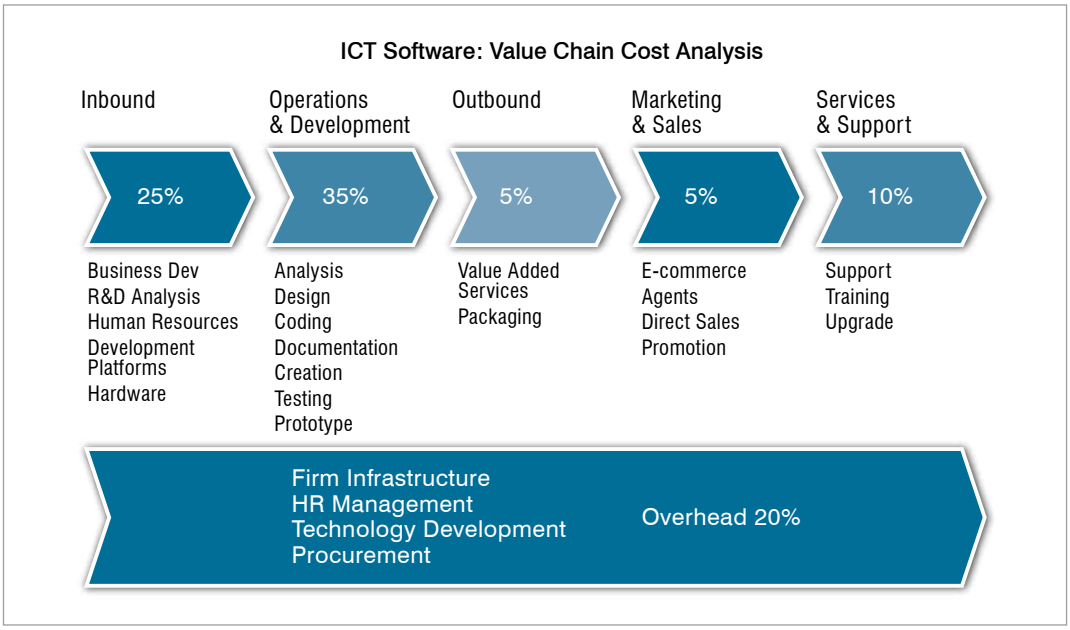
Figure 2: *ICT hardware value chain – cost analysis*



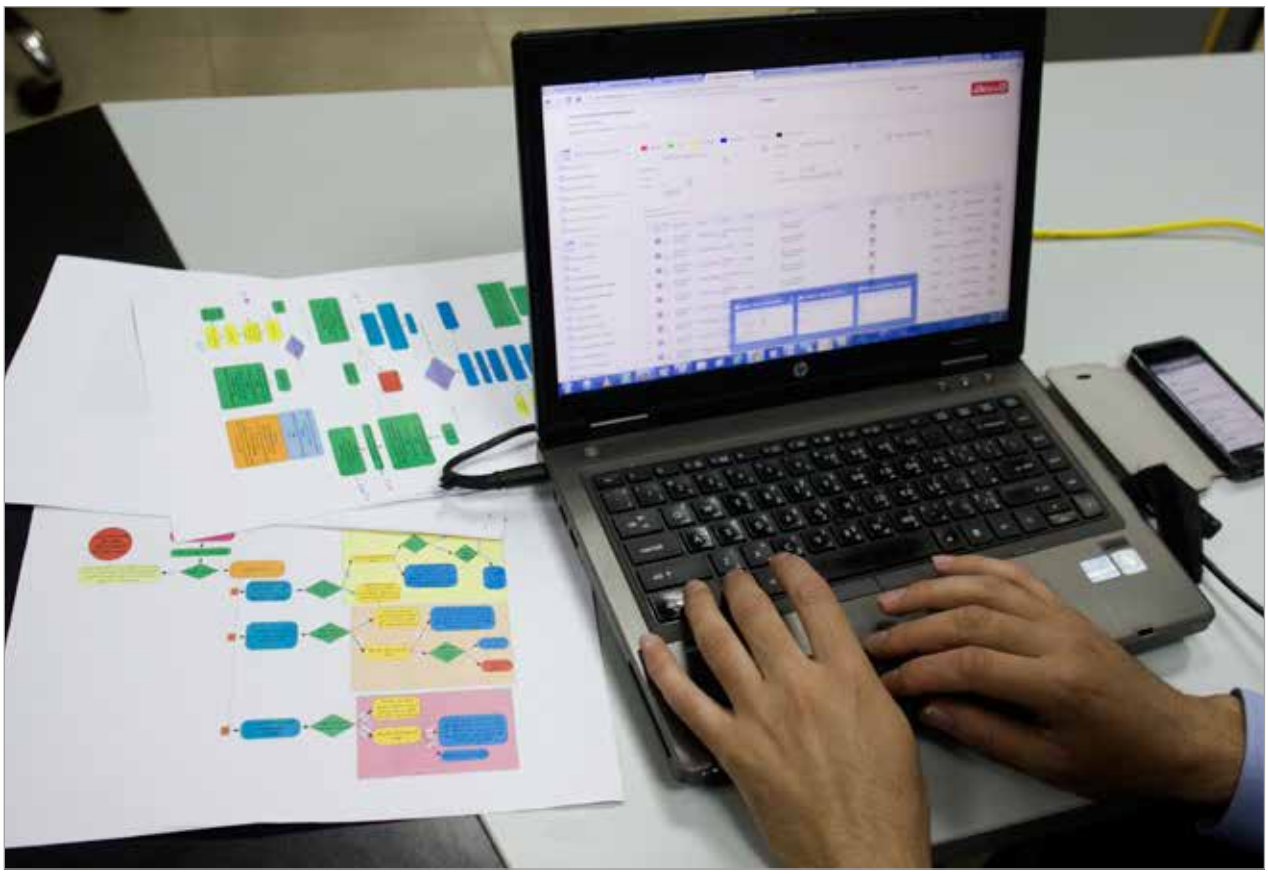
Source: USAID (2006). The Palestinian ICT Cluster: Assessment Report

In contrast, the software sector's operation and development segment represents 35% of total cost because it adds the essential part of the value to the product.

Figure 3: *ICT software value chain – cost analysis*



Source: USAID (2006). The Palestinian ICT Cluster: Assessment Report.



Source: © PalTrade

CURRENT VALUE CHAIN (IT Services excluding telecoms)

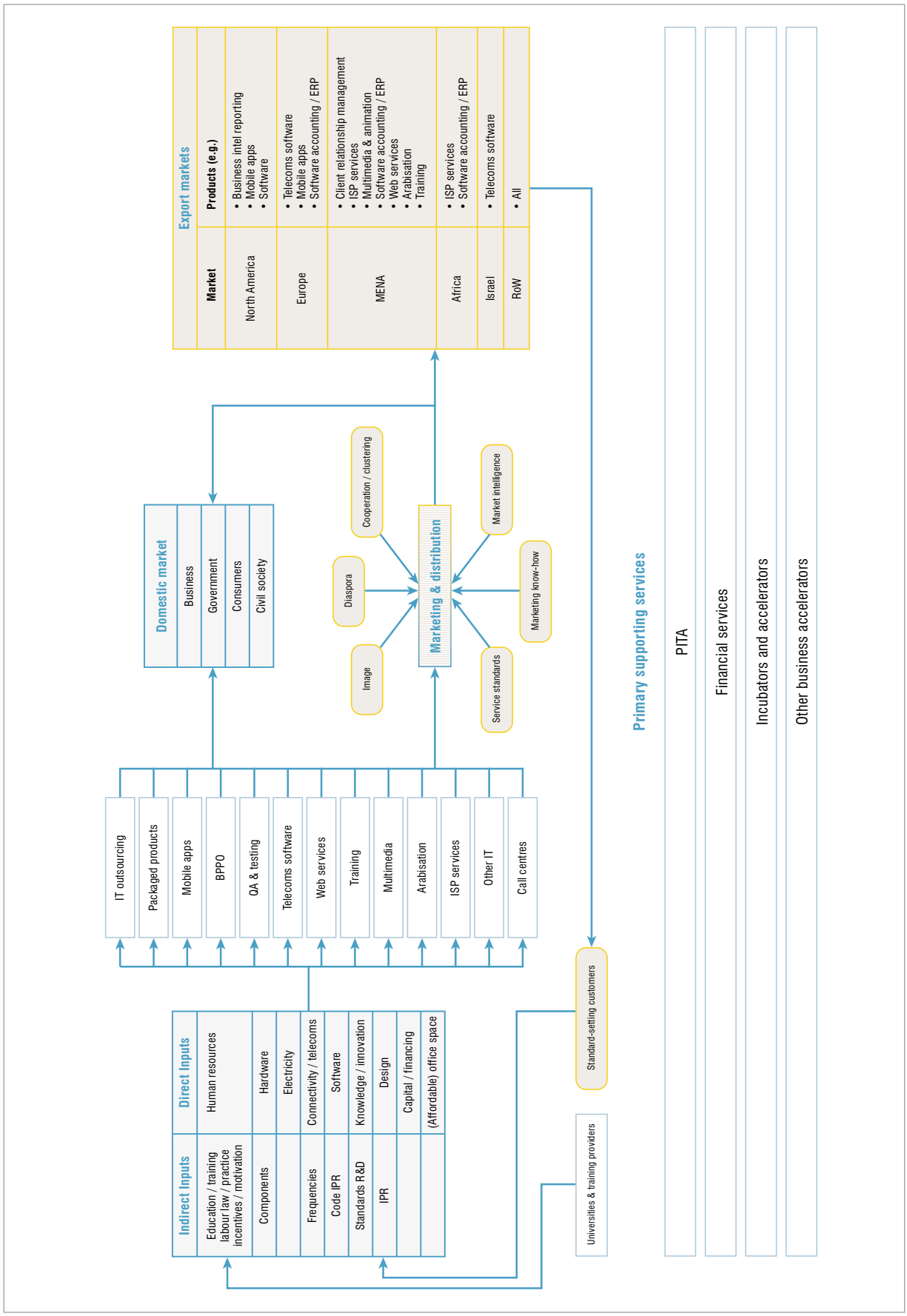
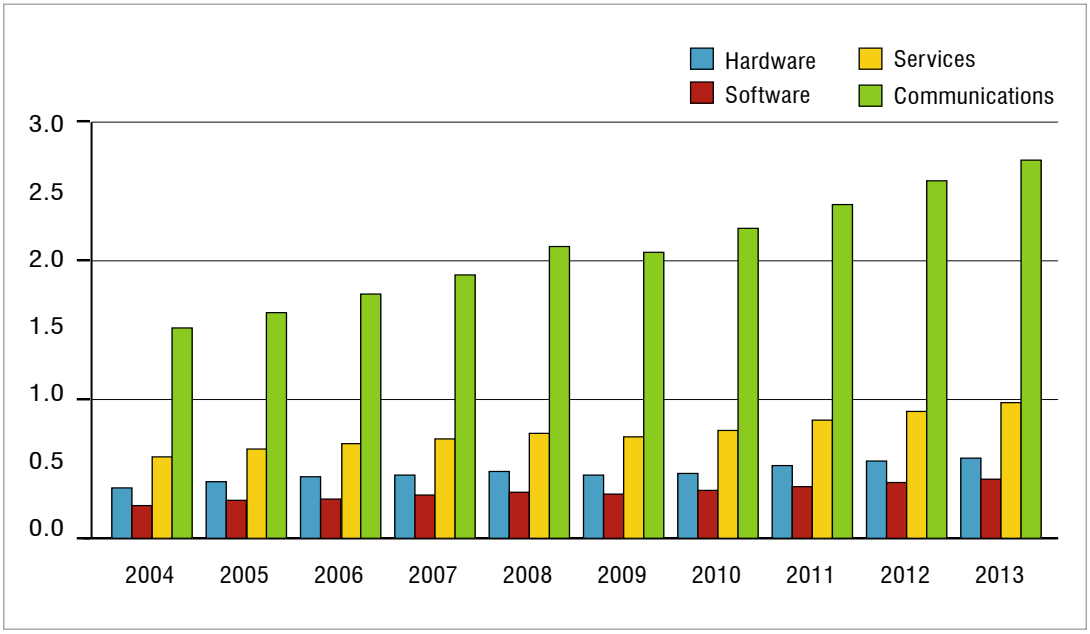
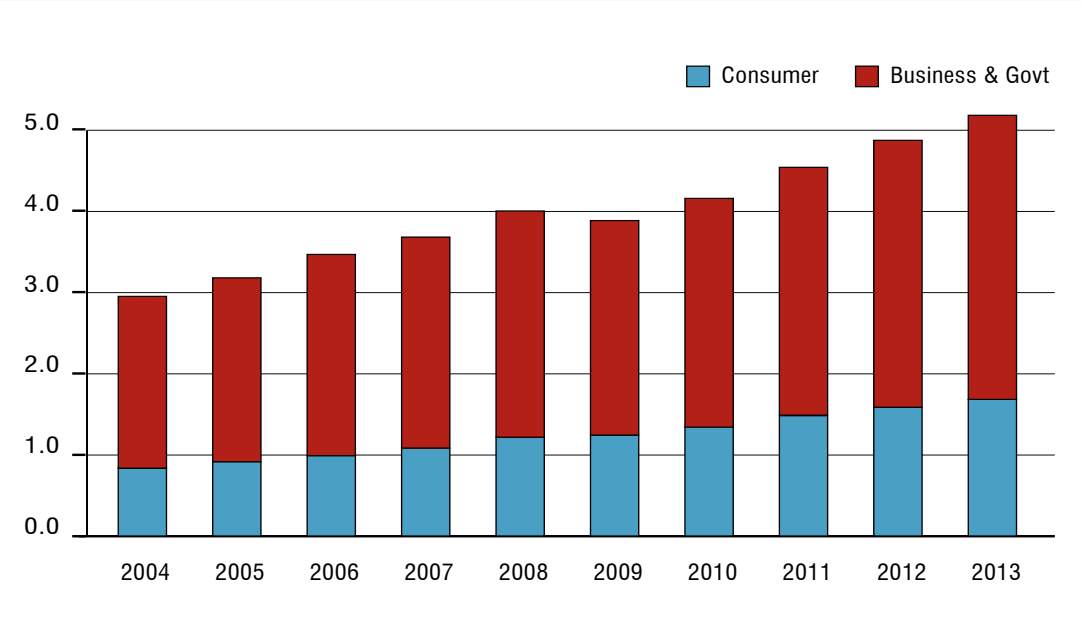


Figure 4: *Global ICT spending by technology in US$ trillions, 2004–2013*



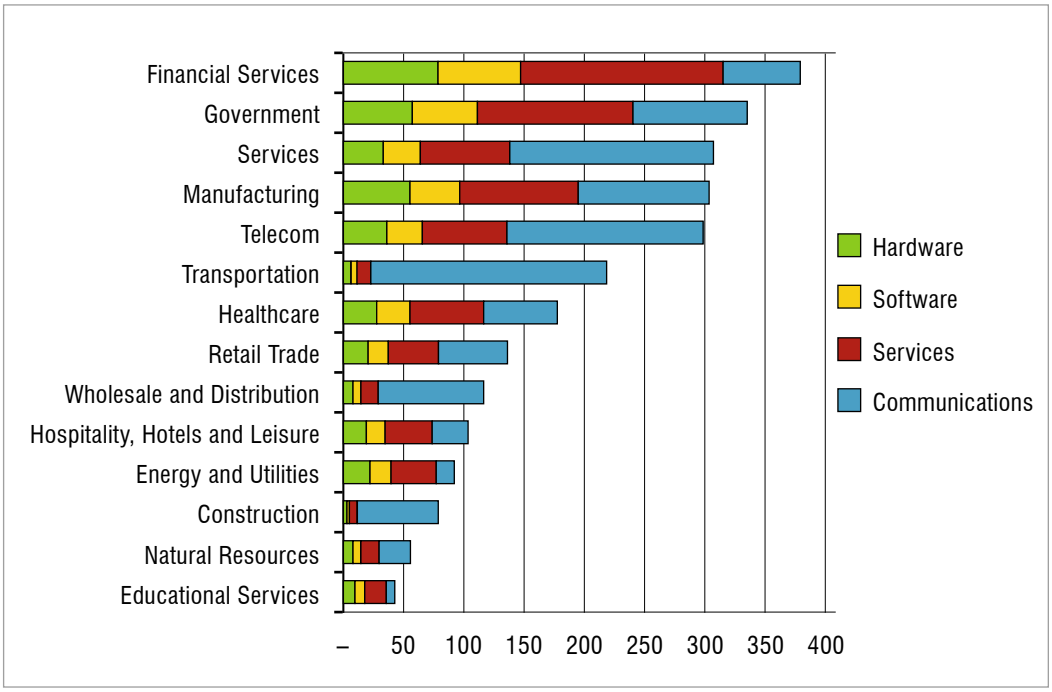
Source: World Information Technology and Services Alliance (WITSA) (June 2010). Digital Planet 2010.

Figure 5: *Spending on ICT by group in US$ trillions, 2004–2013*



Source: World Information Technology and Services Alliance (WITSA) (June 2010). *Digital Planet 2010.*

Figure 6: *Worldwide business spending on ICT by sector (US$ billions), 2009*



Source: World Information Technology and Services Alliance (WITSA) (June 2010). *Digital Planet 2010.*

WORLD AND REGIONAL MARKETS

GLOBAL MARKET TRENDS

The ICT industry worldwide is a vast, fast-growing sector. Communications represent more than half of the industry, but software and (other) ICT services account for well over US$1 trillion globally.

Governments and businesses account for around two-thirds of the industry's clientele, with consumers taking up the remaining third.

All sectors of the economy are ICT customers. However, some sectors, including financial and business services and government, stand out as major consumers of ICT services. From this follow potential or actual linkages between the ICT sector and other industries that are of relevance for strategic development at the business, sector and national societal levels. There are significant differences in the relative importance of communications, software and (other) ICT services between the various client sectors.

The ICT sector represented 5.4% of world GDP in 2008 and that share is expected to reach 8.7% by 2020. The growing importance of ICT is inter alia reflected in the increasing number of ICT companies that have among the biggest market capitalization in the world (Apple, Microsoft, Google, IBM, Samsung, Oracle, Intel, Amazon, etc.). The ICT sector has become the engine of the world economy.

The global consulting company A.T. Kearney has produced an index which ranks the top 50 countries worldwide as the best destinations for providing outsourcing activities, including ICT services and support, contact centres and bank-office support.[17] The 2011 report noted that the MENA region has become increasingly attractive because of its proximity to Europe and vast talent pool. Indeed, a few MENA countries are ranked in the top 50: the UAE (15th), Jordan (22nd), Tunisia (23rd) and Morocco (37th).[18] Provided the State of Palestine manages to properly brand its ICT sector, it should be able to capture a part of this outsourcing business.

17. A.T. Kearney Consulting (2011). Global Services Location Index. Available from www.atkearney.com/research-studies/global-services-location-index.

18. Egypt is ranked at 4, but the 2011 index was produced before the recent political unrest began.

Table 2: *ICT exports by main markets, main products and main type of buyers*

MAIN TARGET MARKETS	MAIN PRODUCTS EXPORTED	MAIN TYPE OF BU
1. N. America: • Canada and USA	1. Business Intelligence Reporting	• Market Research Company • Health Sector
	2. Mobile Applications	• ICT Companies
	3. Software	• Integrated Services Chip Manufacturers • Telecom equipment manufacturers • Telecommunication Operators
2. Europe • Germany and Netherlands	1. Software for Telecommunication	• Telecom equipment manufacturers • Software Companies
	2. Mobile Applications	• ICT Companies
	3. Software Accounting / ERP	• Non-profits • Contracting • Financial Services
3. MENA: • Jordan, Dubai, Algeria, Iraq	1. Hotel Management / Restaurants – Client Relationship Management	• Software Houses • Services Companies
	2. ISP Services	• Health Care Sector • Telecommunication Operators
	3. Multimedia and Animation	• Media Companies • Advertising Companies
	4. Software Accounting / ERP	• Trade • Industry / Utility Companies • Microfinance Organisations
	5. Web Services / Products	• Educational NGOs
4. Africa	1. ISP Services	• Telecom Operators
	2. Software Accounting / ERP	• Trade • Industry / Utility Companies • Microfinance Organisations
5. Israel	1. Software for Telecommunication	• Telecom equipment manufacturers

Source: Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

ESTIMATED CURRENT EXPORT PERFORMANCE

Owing to the lack of data, it is not possible to evaluate in any detail the sector's current export performance in terms of value, growth and market destinations. Based on a German Agency for International Development (GIZ)[19] report, the recent 2013 Diagnostic Study of four service sectors estimates ICT sector revenues at US$1 billion in 2012 but cannot do the same for ICT sector exports. GIZ estimates the value of ICT exports to have been around US$15 million in 2008.[20] Industry insiders[21] suggest that since then ICT export values have experienced a surge and may currently amount to approximately US$20 to US$50 million.

At present the lack of data does not allow for an accurate identification of market destinations, their size or their dynamism. However, some indications exist. The 20 respondent companies featured in the PalTrade survey conducted in 2012 as part of the Diagnostic Study claimed to export to Africa (Togo, Nigeria, Gabon, Cameroon); North America (Canada and the United States), Europe (Malta, Germany, the Netherlands, Cyprus, Norway, Italy, France

19. GIZ/Solutions for Development (March 2012). *Palestinian ICT Private Sector 3-Year Strategy and Development Plan.* Available from http://www.lacs.ps/documentsShow.aspx?ATT_ID=5644.

20. Exports were estimated to have grown from US$3 million to US$10 million between 2001 and 2005.

21. Interviews with two local ICT industry experts.

Source: © PalTrade

and the United Kingdom of Great Britain and Northern Ireland), Israel and the MENA region (Saudi Arabia, Jordan, Egypt, Iraq, Oman, Libya, Morocco, the UAE (Dubai), Lebanon and Algeria). Regional markets, the survey suggests, appear to play the most important role.

THE STATE OF PALESTINE'S MAIN COMPETITORS

The ICT industry is a global industry: competitors are potentially everywhere. The survey conducted under the auspices of the 2013 Diagnostic Study interviewed 20 Palestinian companies about their major competitors in the international market. They have identified: Jordan, Egypt, Israel, the UAE (Dubai), the Syrian Arab Republic and Lebanon in the Middle East; the United Kingdom, Ukraine, Poland, Romania and Serbia in Europe; India and Bangladesh in Asia; and finally the United States. In each region, they have identified for some of the major competitors their main competitive advantages vis-à-vis the State of Palestine (see box 4). According to the survey, increasing competition from companies in countries such as Sri Lanka and Bangladesh may pose a major threat to the ICT sector in the State of Palestine.

Box 4: Major ICT competitors and their strengths relative to the State of Palestine

Major competitors	Major competitive advantages
Jordan	Easy access, attractive investment environment, proximity of borders with Gulf countries and a large number of emerging companies with the same type of work.
Egypt	Availability of a huge number of skilled workers, access to foreign markets, low input costs, good education.
UAE (Dubai)	Attracts professionals from all over the world to work in Dubai.
Eastern Europe	Quality of service and geographic proximity to Europe.
India	Cheaper labour costs, less geographic problems, high quality service, low cost, good delivery time.

Source: Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

THE INSTITUTIONAL PERSPECTIVE

MAIN ACTORS

The main actors in the ICT sector TSN are PITA, PICTI, ICT centres for excellence located in Palestinian universities, Fast Forward, Leaders, Peeks, and MoTIT and MoNE.

PITA

PITA considers itself the driving force advancing the ICT sector's interests, as well as the leading information source about this sector in the State of Palestine. Based in Ramallah, PITA was founded in 1999 by a group of Palestinian entrepreneurs with the vision of creating a non-profit organization to advance the interests and positive societal impact of the State of Palestine's ICT sector. It now represents over 150 Palestinian ICT companies.

PITA has four main areas of intervention: (1) policy; (2) sector branding; (3) entrepreneurship and start-up development; and (4) human capital. PITA publishes a newsletter and a weekly email update, providing a substantial amount of information on the Palestinian ICT sector. Through its business development training programmes, PITA tries to fulfil a variety of ICT companies' needs in terms of capacity-building.

In the past observers questioned PITA's representativeness as membership was limited. As recently as in 2010 a study concluded that it had a limited membership in relation to the universe of ICT companies in the State of Palestine (at that time 60 members out of approximately 250 companies, or just under 25%) and that this impeded real knowledge and understanding of the sector, as well as limiting the sectoral and advocacy focus to members' interests.[22]

However, following a significant (and ongoing) surge, PITA by now counts 157 members, which would represent about 40% of current ICT companies in the State of Palestine. Even so, the 2013 Diagnostic Study sees the fact that PITA has so far done limited advocacy work as a weakness for the industry. (For instance, it could lobby for more government funding towards e-government projects.) That may be changing, however, with PITA using more and more resources to develop and organize its advocacy.

PICTI

The Palestine Information and Communications Technology Incubator (PICTI) is an independent Palestinian organization that was created through the initiative and support of the Palestinian information technology community. PICTI and its partner organization PITA have as their mission the revitalization and the sustainable growth of the ICT sector in the State of Palestine.

The strategic core components of PICTI include the incubator facility that offers professional business services to Palestinian entrepreneurs who have mature concepts for innovative ICT products assessed to have strong market potential. These core elements form the backbone of PICTI's operations and its support to the ICT sector. PICTI assists technology entrepreneurs by designing, developing, implementing and promoting initiatives that provide entrepreneurs with an integrated package of business development services that nurture and support the commercialization of ideas and enhance the development and growth of dynamic enterprises including micro, small, medium and high growth models.

Another of PICTI's core objectives is the establishment of a dynamic, market driven industry–university linkage programme that focuses on identifying the technical and managerial curricula necessary for university graduates to be internationally competitive in their respective fields. PICTI partnered with Intel and the University of California Berkeley to introduce in July 2008 the Theory to Practice Seminar as part of technology entrepreneurship education. Thirty professors attended the Seminar to localize and develop curriculum related to technology entrepreneurship at their own campuses. However, PICTI seems to be limited in its development by its lack of capital, technological expertise and human resources.

ICT CENTRES OF EXCELLENCE AT UNIVERSITIES

ICT Centres of Excellence are located inside university campuses to play an active role in bridging the gap between academia and the ICT industry. There is one each in Hebron, Nablus, Jenin and Gaza. These centres usually work in three main areas:

- Pre-incubation: they aim to build a strong and cohesive university-based entrepreneurial environment that encourages new business start-ups and spin-offs. The purpose of this track is to capture and support a pipeline of innovative ideas emerging from the State of Palestine's youth population;

22. Tucker, Tremaine (2012). *The ICT Sector in Palestine – Current State and Potentials*. MAS Publications, Palestine Economic Policy Research Institute, quoted in the 2013 Diagnostic Study.

- E-learning: they aim to tackle the many challenges associated with the use of ICT in higher education in order to help the formulation of the optimal level of ICT integration into the educational system, particularly in the math, science, and engineering tracks;
- Information technology training: they aim to design skills development training programmes in order to generate a continuous supply of competent Palestinian ICT human resources that will design, develop, engineer, implement, and manage computer-based information systems.[23]

FAST FORWARD

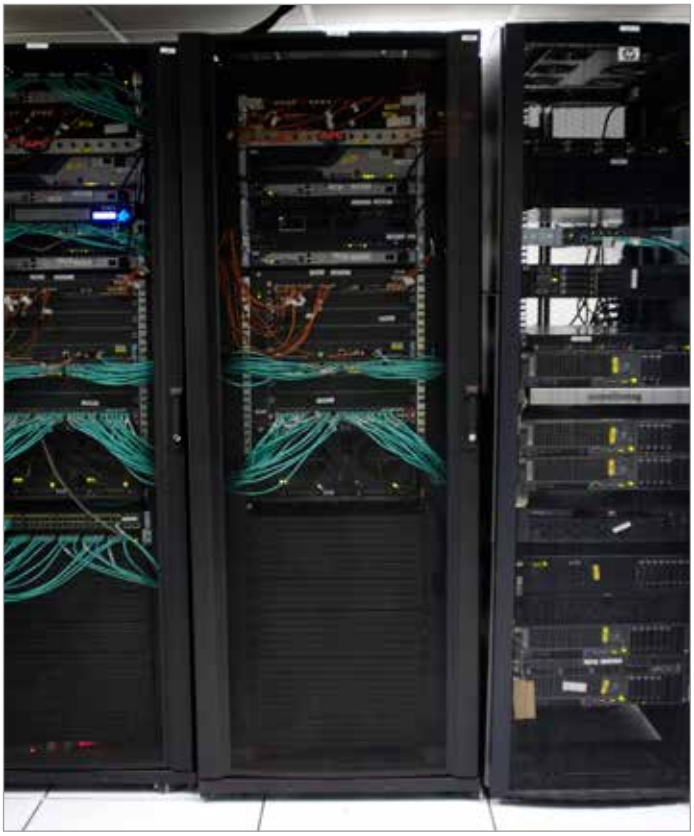
Fast Forward is a very new mentorship-driven start-up accelerator which strives to create an entrepreneurial community in the State of Palestine through the provision of a growth-enabling environment for technology start-up companies. It aims to accelerate the start-up innovation cycle and help talented entrepreneurs validate their businesses and reach Series-A funding or acquisition faster.[24] At the time of drafting the first wave is about to start.

LEADERS

Established in Ramallah in 2002, Leaders Organization is a prominent youth-led non-governmental organization implementing two major programmes: Social and Political Leaders, and Economic Empowerment. It aims to harness the energies and talents of Palestinian youth; encourage them to serve their society and express their views; provide resources to improve their skills; build their confidence in assuming leadership roles in their communities; actively foster their entrepreneurial ideas; and create business and employment opportunities.[25] The organization also provides training. At least one company (Steadypoint) has graduated from the programme and is now a PITA member.

PEEKS

Peeks is a community-based grassroots organization that contributes to the development of a sustainable knowledge-based economy in the State of Palestine and focuses on empowering technology entrepreneurship by engaging students, professionals, industry experts and expatriates through events and activities that are widely accessible and highly collaborative and that facilitate a creative collision of ideas and experiences; encourage collaboration, openness and trust; expand exposure to emerging world challenges; and foster a culture of innovation and entrepreneurship.[26]



Source: © PalTrade

TSN ASSESSMENT

Trade support institutions (TSIs) are institutions that have an interest in, and bearing on, the sector's export development. Broadly, the TSIs providing important services to the Palestinian ICT sector can be categorized in the following areas:

- Policy support network
- Trade services network
- Business services network
- Civil society network.

Tables 3 to 6 identify the main TSIs whose service delivery affects the ICT sector in the State of Palestine. An assessment of the TSIs along four key dimensions – coordination, human capital, financial sustainability, and advocacy – is provided. The ranking (high, medium or low) for each TSI was selected in the context of the service delivery of the TSI relative to the ICT sector. In other words, the assessment was conducted based on ICT sector stakeholders' evaluation of how well TSIs serve them.

23. See for instance: Birzeit University (2013). Business Start-up Center. Available from http://sites.birzeit.edu/nzitce/.

24. See for more details: Fast Forward (2013). Website available at www.fastforward.ps/.

25. See for more details: Leaders Organization Palestine (2011) Website available at www.leaders.ps/.

26. For more details see: Peeks (n.d.). Website available at http://www.peeks.ps.

POLICY SUPPORT NETWORK

These institutions represent ministries and competent authorities responsible for influencing or implementing policies and regulations in the State of Palestine.

Table 3: *Palestinian ICT sector policy support network*

Name	Function/role	Coordination*	Human capital**	Financial sustainability***	Advocacy ****
Ministry of Telecommunications and Information Technology (MoTIT)	Provides policy direction and regulation for the telecommunications and ICT sector. Functions as telecoms regulator (including licensing, pro-competitive regulation etc.). MoTIT also spearheads the government's e-government policy, and supports the Ministry of Finance in the procurement of ICT equipment and software.	M	M	H	M
Ministry of National Economy (MoNE)	Responsible for key business services and related policies, including business registration. Responsible for trade policy, including trade in services policy, and related international negotiations. Responsible for industrial property rights legislation and administration.	M	M	H	L
Ministry of Finance (MoF)	Responsible for import duties (e.g. on ICT hardware inputs) and for government procurement. MoF also spearheads legislation related to financial services and financing mechanisms.	L	M	H	L
Ministry of Labour (MoL)	MoL manages the formulation and administration of labour laws and legislation and manages and monitors the labour market.	L	M	M	L
Ministry of Culture (MoC)	MoC is responsible for copyrights and related rights (IPR) (legislation, administration).	L	L	M	L

***** Coordination with other TSIs: measures the strength of this institution's linkages with other institutions as well as the beneficiaries of their services (in particular, the private sector) in terms of collaboration and information sharing.
** Human capital assessment: assesses the general level of capability of this institution's staff in terms of their training and responsiveness to sector stakeholders.
*** Financial resources assessment: assesses the financial resources/capacity available to the institution to provide service delivery in an efficient manner.
**** Advocacy: assesses the efficacy of this institution's advocacy mechanisms, and how well/frequently this institution disseminates important information to the sector.

TRADE SERVICES NETWORK

These institutions or agencies provide a wide range of trade-related services to both government and enterprises. They support specific aspects of trade and are concerned with the delivery of trade and export solutions to both public and private sectors.

Table 4: *Palestinian ICT sector trade services network*

Name	Function/role	Coordination	Human capital	Financial sustainability	Advocacy
PITA	PITA is the main industry representation body, representing 150+ companies. PITA's strategy is built on four main pillars: • Education and human talent; • Advocacy and policy; • Enterprise development; • Branding the sector in relevant markets. Key pillars: • The Palestine Global ICT Network – a diaspora and friends of the State of Palestine network that is serving all pillars and stakeholders; • Palestine Technology Week – a major event that connects the sector with the outside world.	H	L	M	M
PICTI	PICTI provides incubation and advisory services to start-up businesses and entrepreneurs.	M	L	M	L
Fast Forward	Fast Forward is a very new mentorship-driven start-up accelerator which strives to create an entrepreneurial community in the State of Palestine through the provision of a growth-enabling environment for technology start-up companies.	L	L	M	M
PalTrade	PalTrade is the country's foremost private sector body dealing with trade and trade policy and providing trade-related services. Together with MoNE PalTrade is spearheading the development of trade in services policymaking capacity and is home to the private sector Trade in Services Unit.	M	L	M	H
Palestine Standards Institution (PSI)	PSI is considered the sole body responsible for issuing Palestinian standards. It collaborates with public and private sector institutions in the elaboration of standards. PSI has not yet engaged in standard-setting in the ICT sector, but is planning to do so in the future.	L	L	H	M

BUSINESS SERVICES NETWORK

These are associations, or major representatives, of commercial services providers used by exporters to effect international trade transactions.

Table 5: *Palestinian ICT sector business services network*

Name	Function/role	Coordination	Human capital	Financial sustainability	Advocacy
National Institute for Information Technology	The National Institute for Information Technology, originally established under the auspices of the Palestinian Economic Council for Development and Reconstruction, provides training services on ICT.	L	L	M	L
(Future) MoTIT Training Centre	Upon its impending move to a new location MoTIT will house a state-of-the art training centre.	L	M	M	L
Private training providers	Multiple ICT training providers supply ICT-related training to companies.	L	M	M	L

CIVIL SOCIETY NETWORK

These institutions are not explicitly engaged in trade-related activities. They are often opinion leaders representing interests that have a bearing on the country's export potential and socioeconomic development.

Table 6: *Palestinian ICT sector civil society network*

Name	Function/role	Coordination	Human capital	Financial sustainability	Advocacy
Leaders	Leaders provides mentoring, training and various other services.	M	L	M	L
Peeks	Peeks is a bottom-up, primarily web-based grassroots group. Peeks is entirely community-driven and so far (deliberately) lacks formal institutional structures, but plays a major communicative role in the local ICT community.	M	L	L	M
University Centres of Excellence (Hebron, Nablus, Gaza, Jenin)	The university centres of excellence provide sector-specific assistance to student talent on entrepreneurship and ICT.	M	L	M	L

PERCEPTION OF PALESTINIAN TSIS IN THE ICT SECTOR – INFLUENCE VS. CAPACITY

The above analysis resulted in a multidimensional assessment of the capacities of TSIs to respond to the needs of ICT sector enterprises. This analysis can be further developed by also considering another dimension, that of the level of influence that the TSI possesses over sector stakeholders. The following tentative classification aims to reflect the perception of sector stakeholders regarding the level of influence and capacity to respond of each institution.

Table 7: *Perception of Palestinian TSIs – influence vs. capacity*

		Capacity to respond to sector needs		
		Low	Medium	High
Level of influence in the sector	High		• PITA • MoTIT	
	Medium	• PICTI • Peeks		
	Low	• Fast Forward • PSI • MoNE • MoF • MoL • MoC • Leaders	• PalTrade • National Institute for Information Technology • Private Training Providers • (Future) MoTIT Training Centre	

Table 7 reflects a general perception that the sector's TSI network lacks sufficient capacity to respond to the sector's needs. No institution is perceived to have high capacity. Both PITA and MoTIT are perceived to have a high level of influence and are working hard to contribute, but with limited means. The perceived low level of influence of most TSIs in this sector arguably reflects a lack of focus on the sector and its potential. MoNE and the other ministries could make significantly greater contributions by taking note of the importance of the sector and its needs.

Much of the gains in influence (and the consequent results) can arguably be achieved without significant additional resources, through awareness and refocusing. However, adding capacity is likely to multiply the effects.

LEGAL AND REGULATORY FRAMEWORK

TELECOMMUNICATIONS LAW AND POLICY

The current, largely modern legal regime for telecommunications stems from 1996.[27] Together with the more recent instructions on the protection of competition in the sector it establishes a fair system of regulated competition.

A 2009 Presidential Decree[28] (the current form of regular legislation) further established the Palestinian Telecommunications Regulatory Authority (PTRA). However, it is yet to be operationalized. At present MoTIT is the telecom regulator, enforcing regulatory and competition-related rules and principles.[29]

The 2010 PNA Statement of National Telecommunications Policy, issued by MoTIT, underlines the country's commitment to an open, competitive telecom market. Specific ambitions of relevance to the entire ICT sector (and other economic players) include the introduction of wholesale broadband access services and the regulation of cost-oriented retail prices of dominant operators.

A major challenge, as indicated, is the Israeli refusal to allow the issuing of 3G (and 4G) licenses to Palestinian mobile operators, while Israeli mobile operators illegally provide mobile services (including 3G) in the West Bank through transmission equipment in the settlements. MoTIT is spearheading a long-standing international campaign at the highest political level to end both the restrictions and the unlicensed provision of Israeli services.30 An important basis is Article 36 of Appendix III of the Interim Agreement which outlines coordination arrangements between Palestinians and Israelis in the telecommunications arena.

E-SERVICES LEGISLATION AND POLICY

There is currently virtually no legislation regulating the provision of e-services and electronic commerce more broadly. MoTIT has developed a draft e-services law

27. Law no. 3 of 1996 on communications and telecommunications; Ministerial decision no. 1 of 1996 on communications and telecommunications.

28. Decree no. 15 of 2009.

29. Palestinian National Authority, Ministry of Telecommunications and Information Technology (April 2010). *Statement of National Telecommunications Policy.* Available from www.mtit.pna.ps/ar/cp/plugins/spaw/uploads/files/Sector%20Policy%20and%20Roadmap%20Palestine-internal%20draft[1].pdf.

30. For a summary see Palestinian National Authority, Ministry of Telecommunications and Information Technology (September 2012). Imposed Israeli Restrictions on the Palestinian ICT Sector. Available from www.pmtit.ps/ar/index.php?p=restrictions.

which, however, is still awaiting further legislative action. The draft aims to cover all major relevant issues comprehensively, including matters such as electronic signatures. Advocacy, in particular from the private sector, may be needed to advance the legislative process.

DATA PROTECTION AND ICT BUSINESS-RELATED STANDARDS

There is currently no data protection law in the State of Palestine. Moreover, because of potential intrusions of Israel, and in order to preserve the security of data and servers, offshore storage is sometimes useful, triggering the need for appropriate flanking by legal and treaty provisions.

There are no official standards for the ICT industry. However, PSI has begun looking into the matter and has signalled a willingness to engage with stakeholders.

FOREIGN DIRECT INVESTMENT (FDI)

The legal framework governing FDI consists of the Law on Encouragement of Investment (no. 1 of 1998) and its amendment (Presidential Decree no. 2 of 2011). The Law specifies the priority subsectors that benefit from the incentives and exemptions stipulated in the law. These subsectors are: industry; tourism; agriculture; ICT; health; education; mortgage finance companies and investment of companies that are in the business of providing development-related financing and guarantees; real estate development projects; environment recycling and development projects; and any other sector approved by the Council of Ministers based on recommendations by the Palestinian Investment Promotion Agency (PIPA) Board of Directors.

The incentive policy set by the law includes the following.

The fixed assets of an enterprise receive various exemptions on customs duties for a defined period. This law also applies to spare parts (meeting certain criteria), fixed assets for developing or enlarging an already existing enterprise, and price increases due to changes in costs associated with price hikes in the exporting country, or increases in shipping or transportation costs.

Exemptions on income taxes are also granted to investments greater than US$250,000 for new projects and US$100,000 for development projects. This applies for a certain number of years related to the size of investment, commencing from the beginning of the first fiscal year following the year of commencement of production or from the start of its actual activities, and an additional term will be received during a project's trial period.

Additional exemptions and incentives may be granted to enterprises engaged in export activities.

A non-Palestinian investor may invest any amount of capital, in any sector or subsector, without derogating from prevailing laws. The provisions of this law apply to all investors equally and without discrimination on the basis of reciprocal treatment.

FDI IN ICT

ICT companies (except businesses that trade in various kinds of electronic devices and ready-made software) are entitled to receive the following exemptions:

- Companies and projects that employ five local professional employees in the field of information technology shall receive an exemption from income tax for a period of three years beginning from the date of engagement of these employees;
- Companies and projects that employ ten local professional employees in the field of information technology shall receive an exemption from income tax for a period of seven years beginning from the date of engagement of these employees;
- Companies and projects that employ twenty local professional employees in the field of information technology shall receive an exemption from income tax for a period of nine years beginning from the date of engagement of these employees;
- Companies and projects that employ thirty local professional employees in the field of information technology shall receive an exemption from income tax for a period of eleven years beginning from the date of engagement of these employees.

Employees and companies (for purposes of the above thresholds) must meet the following conditions:

- Be qualified to work in the field of information technology and hold an academic degree in this field from universities and specialized colleges that are certified by the Ministry of Education and Higher Education (MoEHE);
- Be engaged on a full-time basis and have a payroll tax file;
- The company or project enjoying the benefits of this law must maintain the minimum number of employees for which the exemption was granted for the entire term of the exemption and the Agency has the right to verify such compliance.

TAXES

PIPA thus offers tax exemptions to ICT firms based on number of employees rather than the size of the capital investment. This measure also aims to stimulate job creation in the sector. Yet according to the 2013 Diagnostic Study, further tax breaks for start-ups in the early years of operation are needed.

The tax rate on corporate profits is currently 20%. The maximum rate of personal income tax is 20%. Human resources development and training costs are now treated as capital investment for the ICT industry.

The creation of a software technology park offering tax exemptions (as well as providing comprehensive support services for enterprises (utilities, administrative support, marketing courses, etc.) should be envisioned following success stories in China, India and Viet Nam.

FOREIGN COMPANIES

A Foreign Ordinary Company is a company that is registered outside of the State of Palestine. Foreign companies, their subsidiaries, representatives and branch offices that wish to conduct business in the State of Palestine must fulfil the same registration requirements as a locally established company. The procedure for registration is simple. Foreign investors (natural persons) can work in the State of Palestine provided they obtain work permits from the appropriate ministry.

Foreign participation in Palestinian companies, however, must not exceed 49%, according to Defence Order no. 56. However, an exception can be granted to surpass that percentage by an authorization from the Companies' Comptroller, which is not a complicated process. Nevertheless, the authorized signatory can only be a Palestinian.

INTELLECTUAL PROPERTY RIGHTS (IPR)

Laws regarding intellectual property rights are somewhat outdated in the State of Palestine. This has a limiting effect on the country's attractiveness for foreign direct investors, especially in the ICT sector.

Patent protection exists in theory, but not in practice, based on laws from 1947 and 1953.[31] The same applies to the protection of copyrights and related rights, which – again in theory – relies on British mandatory legislation, since neither Jordan nor Egypt nor Israel made any changes to the original mandatory copyright regime.

The main component of the mandatory regime is the British Copyright Act, 1911, which has been applied in the State of Palestine since 1924.[32] Current copyright law in the State of Palestine is therefore the same complete corpus of laws which has been in force for almost 80 years.

Both areas of IPR – copyright and industrial property – have received significant attention from the responsible ministries (MoNE for industrial property, MoC for copyright and related rights) and multiple donors and organizations, including the World Intellectual Property Organization. Comprehensive new drafts for both exist and have been introduced into the legislative process. However, in the absence of the normal legislator (the Legislative Council, currently suspended) both have been held up. Both aim (in principle) for compatibility with the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). However, pending any advance on the State of Palestine's path towards World Trade Organization (WTO) membership (and hence formal adoption of TRIPS obligations), the details are still under discussion.

A key weakness of the current IPR regime is the near-total lack of enforcement. Courts and judges generally lack the substantive knowledge and experience to deal with IP cases even on the basis of the current outdated legal regime. The administrative and supervisory authorities lack the manpower and experience, as well as arguably de facto the political mandate to ensure any level of protection, which is hence left to contracts and market forces.

TRADE POLICY AND TRADE AGREEMENTS

Trade in services policymaking in the State of Palestine is in its infancy. Apart from a few minor references in the Interim Agreement/Paris Protocol, services are not yet part of any trade agreement to which the State of Palestine is a party.

However, with the EU-funded Trade in Services at PalTrade and MoNE the government and major stakeholders have begun to engage on the matter. The 2013 Diagnostic Study, as indicated, is part of the effort. Trade in Services Units have been established at MoNE and PalTrade and a major training cycle on trade in services negotiations is under way, with around 20 persons from public and private sector stakeholders being trained with high intensity on trade in services agreements, their negotiation and – more broadly – trade in services mechanics and policymaking. The establishment of sectoral

31. The Patents and Design Law No. 22 of 1953 is applicable in the West Bank while Patent Law No. 64 of 1947 is applicable in the Gaza Strip.

32. By virtue of the Copyright Act, 1911 Order, 1924. The Copyright Act was modified slightly by the High Commissioner in Copyright Ordinance, 1924.

working groups (including on trade in ICT services), the development of sectoral and cross-sectoral negotiation briefs and the drafting of a services strategy are further elements of the efforts under way.

Trade in services policymaking, including sector-related matters on ICT services trade, will eventually be integrated into the country's future overall trade policy. It can and should generate significant benefits for Palestinian services industries that are trading across borders. This includes in particular the ICT sector. In all relevant negotiations on trade in services agreements, which include GAFTA, the EuroMed context and (in the future) the WTO/General Agreement on Trade in Services (GATS), specific commitments on market access and regulatory disciplines can and should be obtained from trading partners to ensure maximum predictability and protection for Palestinian ICT services exporters. Possible commitments to be negotiated may include, for example, disciplines on admitting Palestinian ICT engineers to travel to partner countries to provide services, or the right to establish ICT training and service centres in foreign markets, such as the Gulf, under non-discriminatory conditions.

The above stands in the direct context of the State of Palestine's efforts to approach and later join the WTO. An application for observer status is pending. Most importantly, the establishment and regular operation of the National Task Force and the Technical Advisory Team, assisted by the WTO Unit at MoNE, are major achievements on the way towards a comprehensive trade policy, of which WTO membership will be a pillar. Both MoTIT and PITA are engaged with these bodies and participate in training and other activities on trade in services in particular and WTO in general.

SECTOR DEVELOPMENT INITIATIVES

The ICT sector has received limited financial assistance and regulatory and fiscal policy support from the government since 2006. Among the sector's weaknesses is the lack of capacity of MoTIT to influence the evolution of the sector, as well as the low level of commitment to ICT initiatives by most ministries. The 2013 Diagnostic Study sees as a threat the 'low prioritization of the creation of a knowledge-based economy by governmental bodies'.

However, there have been an increasing number of international initiatives to promote Palestinian ICT services over the past few years. The most significant came from the development agencies of the United States and the United Kingdom, respectively USAID and the Department for International Development (DFID), as well as from Cisco, an American private company. According to the 2013 Diagnostic Study, the presence of multinational companies and the steady inflow of international aid have been two factors driving growth in the ICT sector. Together, they have advanced the expansion of the sector and triggered improvements in the proficiency of companies and the quality of products.

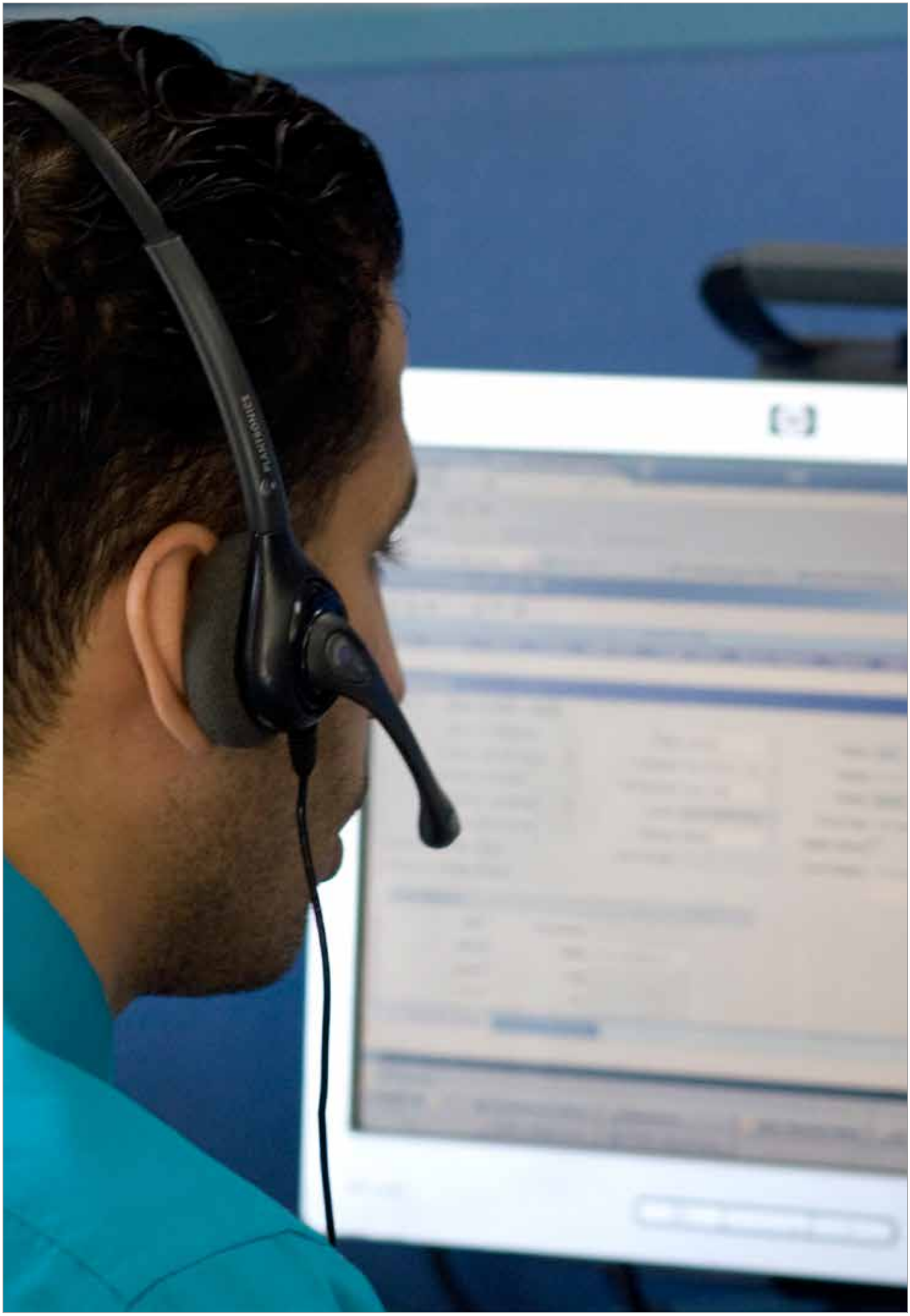
In December 2010, the United States State Department held a special event in Washington D.C. with the support and presence of Secretary of State Hillary Clinton, who announced the launch of the 'Palestinian Information Communications Technology Capacity-Building Initiative'.[33] This initiative has been designed to enhance the economic capacity of the Palestinian ICT sector by facilitating partnerships between Palestinian companies and American MNEs, especially those operating in the West Bank, Gaza, Israel, Jordan and the rest of the Middle East. The programme aims to help Palestinians foster innovation and gain advanced skills in marketing and project management, as well as to improve the long-term investment climate.

As for Cisco, it has invested US$15 million in the Palestinian ICT sector since 2008, notably to encourage Cisco R&D teams to outsource to Palestinian companies. Moreover, Cisco has committed to investing US$11 million in two private equity funds and one venture capital fund in order give better access to finance to Palestinian ICT entrepreneurs. Interviewed by the Diagnostic Study team, Mr. Ibrahim Abu Kteish, the General Director of Najjad Zeenni Centre of Excellence at Birzeit University, mentioned that some donors such as USAID sometimes subsidized Palestinian ICT companies and by doing so artificially gave them a comparative advantage: 'Our donors such as USAID sometimes give the ICT companies a competitive and comparative advantage internationally by subsidizing some of the private sector cost and expenses.'

GIZ, the German development agency, has been active in the sector for some time. It has supported the development of PITA's current three year strategy and is the main development partner of Expotech, the yearly Technology Week organized by PITA and PICTI.[34]

33. See United States of America, Department of State (2010). Palestinian Information Communications Technology Capacity Building Initiative Fact Sheet, 17 December. Available from www.state.gov/r/pa/prs/ps/2010/12/153103.htm.

34. See Palestinian Information Technology Association of Companies (PITA) (2013). Expotech: Technology Week 2013 website. Available at www.expotech.ps.

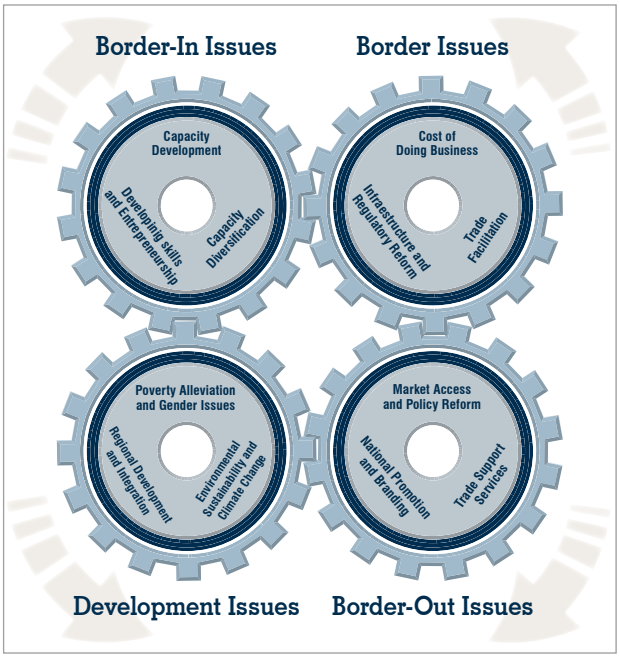


Source: © PalTrade

EXPORT COMPETITIVENESS ISSUES

This section presents a summary analysis of the major constraints to export developments faced by the Palestinian ICT sector, as well as issues that would likely inhibit the positive socioeconomic spillovers desired from the sector's growth. The analytical framework for the analysis is a 'four gears' framework consisting of the following elements.

- Supply-side issues impact production capacity and include challenges in areas such as availability of appropriate skills and competencies; diversification capacity; technology; and low value addition in the sector's products.
- The quality of the business environment are constraints that influence transaction costs, such as regulatory environment; administrative procedures and documentation; infrastructure bottlenecks; certification costs; Internet access and cost of support services.
- Market entry issues are essentially external to the country (but may also be manifested internally), such as market access, market development, market diversification and export promotion.
- Social and economic concerns include poverty reduction, gender equity, youth development, environmental sustainability and regional integration.



SUPPLY-SIDE ISSUES (THE 'BORDER-IN GEAR')

Box 5: The main supply-side issues affecting the Palestinian ICT sector

- The State of Palestine's education system is able to supply enough skilled workers for the ICT sector annually but they are not adequately trained.
- Critical-thinking, creativity and problem-solving are underemphasized at all levels of the education system.
- Labour force mobility is limited and hampered.
- The brain drain might be a major threat for the ICT sector in the State of Palestine in the short run but can be turned into an opportunity in the long run (like the diaspora).
- Access to innovative finance instruments like venture capital is limited.
- Palestinian companies must keep updating on new technologies to preserve their position.
- Companies lack marketing skills and these need to be developed as a top priority.
- Marketing and sales skills of Palestinian entrepreneurs need to be improved.
- Low attractiveness to FDI.
- There is a lack of cooperation between the private sector and universities in the area of R&D and innovation.
- The State of Palestine as an information society lags behind its neighbours.

THE STATE OF PALESTINE'S EDUCATION SYSTEM IS ABLE TO SUPPLY ENOUGH SKILLED WORKERS FOR THE ICT SECTOR ANNUALLY BUT THEY ARE NOT ADEQUATELY TRAINED

The issues appear to be the following:

- Their knowledge is too theoretical: they lack any practical experience as there are no adequate internship programmes within the private sector;
- Their approach is too general: they have not developed strong skills in one or several particular areas of expertise (e.g. digital content application development);
- The private sector complains that technologies available at universities are outdated or at least not state of the art. Insiders estimate that only about a third of graduates in specialties related to ICT succeed in finding employment.[35]

35. Tucker, Tremaine (2012). *The ICT Sector in Palestine – Current State and Potentials*. MAS Publications, Palestine Economic Policy Research Institute, quoting Dr Saidam and PITA CEO Abeer Hazboun.

Consequently, academic training is not meeting the needs of the industry. PITA is currently working on developing a Task Force for the Human Talent Development Initiative with the academic sector, sponsored by Google and other donors, to pilot a project that will produce better market-ready human resources through two main activities:

3. Intensive training with four main tracks, one on soft skills and the remaining three technical, to be based on a study to be conducted with members;
4. Influencing the curriculum at the universities with regard to these four main tracks.

CRITICAL-THINKING, CREATIVITY AND PROBLEM-SOLVING ARE UNDEREMPHASIZED AT ALL LEVELS OF THE EDUCATION SYSTEM

The Palestinian population enjoys a high rate of literacy and is proficient in Arabic. These are two strengths that the ICT sector can build upon. However, other skills need significant improvement. The 2013 Diagnostic Study recommends that the education system be reformed 'in a qualitative sense, so as to improve critical thinking, creativity and problem-solving at all levels of learning.'

LABOUR FORCE MOBILITY IS LIMITED AND HAMPERED

The turnover rate is low in a context of high unemployment rates. There are often non-compete clauses in Palestinian contracts and, in fact, they are increasingly common in the ICT sector. Such clauses inhibit labour mobility between companies that enable them to transfer knowledge and this limits their ability to start their own entrepreneurial ventures. Because the freedom of contracting is guaranteed under Palestinian law, if the parties agree, non-compete clauses can be inserted into contracts. Palestinian labour law and/or industry standards should prohibit or discourage non-compete clauses (for example, in the Silicon Valley (California) such clauses are unenforceable in courts).

THE BRAIN DRAIN MIGHT BE A MAJOR THREAT FOR THE ICT SECTOR IN THE STATE OF PALESTINE IN THE SHORT RUN BUT CAN BE TURNED INTO AN OPPORTUNITY IN THE LONG RUN (LIKE THE DIASPORA)

The State of Palestine is losing skilled workers who leave the country to work abroad. It considers this brain drain as a major threat to the development of the industry. It must be considered a threat if it prevents local companies from finding human resources to develop their business. However, if the brain drain is reversed in the long run, these engineers could bring back their expertise to the State of Palestine and set up new companies.

An extensive body of literature shows that Asian emerging economies such as South Korea, Chinese Taipei, China, and Viet Nam have succeeded in catching up in ICT sectors thanks to their diaspora (Paulmier (2001); Smart and Hsu (2004); Pham (2010)). Their experience shows that a limited number of expatriates is enough to make a difference. White (2010) shows that overseas Palestinians already play a critical role in the ICT sector as he mentions that a great number of senior managers in Palestinian companies have gained work experience abroad, mostly in the United States.

A 'reverse brain drain' should thus be at the core of the ICT development strategy in the State of Palestine. A great deal of investigation must be conducted in order to track overseas Palestinians working in this industry around the world and further develop a database on the diaspora. Experience from other countries like Chinese Taipei shows that the role of the diaspora was often critical in the industry's infancy. PITA's initiative 'GloPal – the State of Palestine's Global ICT Network' is an important starting point.

ACCESS TO INNOVATIVE FINANCE INSTRUMENTS SUCH AS VENTURE CAPITAL IS LIMITED

ICT companies do no benefit from easy access to capital because Palestinian banks do not grant loans/credit for the execution of ICT projects. They refuse to finance ICT operations when companies have no collateral, and software companies do not have sufficient capital assets to qualify as collateral. The 2013 Diagnostic Study considers the 'limited availability of risk and venture investment and working capital' a substantial constraint on the development of the sector.

In a 2010-2011 Cisco survey it was announced that, in addition to the funds from USAID and the Department for International Development, Cisco has committed to invest US$ 11 million in two private equity funds and one venture capital fund. In 2011, Sadara Ventures, the first venture capital fund targeting the Palestinian ICT sector, was launched with international backing. The fund's initial investors included: Cisco; Google (via the Google Foundation); the Soros Economic Development Fund (and affiliated individuals); The European Investment Bank; the Skoll Foundation; Steve and Jean Case; and a number of other leading individuals from the American financial community. These funds should improve access to finance for Palestinian ICT entrepreneurs.[36] This indicates that major foreign ICT companies believe in the potential of ICT sector in the State of Palestine.[37]

PALESTINIAN COMPANIES MUST KEEP UPDATING ON NEW TECHNOLOGIES TO PRESERVE THEIR POSITION

The ICT sector is an industry where technologies are constantly changing, and relatively faster than elsewhere. It is for this reason that the 2013 Diagnostic Study warns that: 'An important element of remaining viable as a location for outsourcing is to ensure that the engineers keep up to date with new technologies.' White's survey tends to show that Palestinian companies are aware of the future evolution and the need to adapt their technology to it (see box 6).

36. Palestine Economic Policy Research Institute & Portland Trust (2012). The ICT Sector in the Palestinian Territory. Palestinian Economic Bulletin, August.

37. Normally, venture capitalists tend to request that policymakers clarify existing legal rules governing foreign ownership and explicitly eliminate percentage limits on foreign ownership. Pending regulations governing domestic sources of capital such as pension funds should allow for investment in venture capital funds.

Box 6: Future trends in outsourcing according to Palestinian ICT companies

- Software development, web application development and network services will remain important over the next few years.
- Managed services, mobile applications and Voice Over Internet Protocol (VOIP) are expected to become more important over the next few years.
- Software support, database development and hardware technical support are expected to become less important.

Source: Based on White, Nicholas (2010). Market Mapping of the Palestinian ICT Sector and the Opportunities for Partnerships in the Region, 2nd Edition. Mercy Corps.

COMPANIES LACK MARKETING SKILLS AND THESE NEED TO BE DEVELOPED AS A TOP PRIORITY

Palestinian entrepreneurs do not have good skills in marketing and sales and do not understand global markets' needs. They lack the ability to analyse market trends in order to develop services for identified target prospects. The Palestinian companies interviewed estimated that international competitors have better marketing and public relations skills as well as an increased ability to launch and perform creatively on individual projects (due, according to them, to strong financial capacities); and deliver higher quality services that are more innovative – the overall result of benefitting from larger capacities and staff.

The fact that ICT providers are not only unacquainted with the workings of international markets, but also that they are incapable of identifying adequate trading partners, accounts for the sector's relatively low level of development. The ICT focus group concluded that competitive advantages are not yet identified and target markets have not been identified, as there is no clear consensus on them. Based on a PalTrade survey, companies' main interest is in marketing missions and market entry strategies as the most needed interventions. Palestinian ICT companies also need to have access to management and marketing classes. Marketing courses should be delivered to ICT students at universities.

MARKETING AND SALES SKILLS OF PALESTINIAN ENTREPRENEURS NEED TO BE IMPROVED

In the State of Palestine ICT companies are built on technical skills; few have commercial skills. Consequently, the 'marketing is simplistic and naïve'.[38] This is confirmed by the Palestinian ICT Private Sector 3-Year Strategy and Development Plan of 2012, which underlined that in all sectors, including ICT, companies suffer from a lack of business skills such as marketing and business development, as well as quality requirements for services.[39]

A PalTrade Diagnostic Survey of ICT companies revealed numerous constraints related to the lack of knowledge of international markets: insufficient commercial trade contacts (70% agree or strongly agree); lack of market information (80%); lack of export knowledge (65%); and difficulty in identifying suitable local partners in foreign markets (75%). ICT companies in the State of Palestine thus need to have better access to management and marketing training, and marketing skills should be systematically conveyed to ICT students at universities.

38. Cisco (2012). Cisco Pioneers Market Development Approach in Palestine (prepared by Mission Measurement for Cisco). Available from http://missionmeasurement.com/uploads/documents/Cisco_Pioneers_Market_Development_Approach_in_Palestine_-_White_Paper_by_Mission_Measurement.pdf.

39. The analysis in the Palestinian ICT Private Sector 3-Year Strategy and Development Plan in 2012 shows that all sectors in the strategic group do not have end-to-end regional/global market penetration programmes, which should include (1) capacity-building for companies for business skills such as marketing and business development; (2) quality requirements for products and services; (3) robust export promotion policies that address local sector 'market reach' and 'small scale' gaps; and (4) trade analysis.

Table 8: *Identified measures to address barriers and constraints to ICT exports*

COMPANIES' AREAS OF INTEREST TO ADDRESS BARRIERS AND CONSTRAINTS	NUMBER OF RESPONDENTS	SHARE
Guidance on better commercial use of the Internet	5	28%
Equal treatment of services exporters relative to goods exporters in export assistance	5	28%
Other	5	28%
Financing strategies	6	33%
Management & skills training	6	33%
Technical assistance in designing quality assurance systems for the service firm	7	29%
Improvement of media profile with interviews, newspaper articles, success stories	7	39%
Training in the development of services export plans	8	44%
Streamlining of regulatory procedures	8	44%
Equal treatment of services exporters in export assistance irrespective of their size	8	44%
Instruction in industry market analysis	9	50%
Introduction to trade contacts and potential commercial partners	9	50%
Training in marketing skills	10	56%
Increased transparency in fomestic regulation	10	56%
Publication of laws, regulations and administrative guidelines affecting sector	10	56%
Participation in services marketing missions	13	72%
Assistance with development of market entry strategies	16	89%

Source: Barreto, E. et al (2013). Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.

LOW ATTRACTIVENESS TO FDI

FDI inflows are likely to be the best indicator of the State of Palestine's comparative advantages. In the case of the software industry, proximity to demand is irrelevant to attract FDIs, as the physical distance does not imply any extra cost. Therefore, incentives only exist on the supply-side, such as access to skilled workers. The State of Palestine has so far not been very successful in attracting FDI into the ICT sector. Factors apart from limited direct incentives appear to include a weak national brand image, i.e. a lack of international awareness of the State of Palestine's capacities and potential in this sector. Legal constraints also exist that hinder the inflow of FDI. Foreigners can only own 49% of the capital of a company unless an exceptional authorization is obtained, and tools such as preferred equity appear to be underdeveloped.

THERE IS A LACK OF COOPERATION BETWEEN THE PRIVATE SECTOR AND UNIVERSITIES IN THE AREA OF R&D AND INNOVATION

Among the 20 PITA member companies that participated in the PalTrade survey, 85% declared owning their own R&D activities. The Cisco 2010 Survey asserts that industry-university interactions in R&D activity have not significantly changed since 2003; industry-university joint R&D projects are still marginal. Coordination between companies and universities is largely non-existent. There is a need to build platforms linking universities and the private sector.

THE STATE OF PALESTINE AS AN INFORMATION SOCIETY LAGS BEHIND ITS NEIGHBOURS

The information society is based on the dissemination of computers (PC households), telecoms (broadband, wireless services, network infrastructure), Internet (e-commerce spending), as well as the development of a virtual social life (social networks, civil liberties etc.). In the State of Palestine, 54% of inhabitants (over 10 years old)

use a computer. Of these 40% use the Internet; 51% of households have their own computer but only 30% with Internet access; 95% of households have a mobile line. The 2013 Diagnostic Study sees this as a major weakness for the country.

In 2009, the UN Economic and Social Commission for Western Asia (ESCWA) evaluated the extent to which the environment in ESCWA member countries enables the former to build an information society[40]. The State of Palestine was bundled together with Iraq, Sudan and Yemen in the category of countries having the lowest maturity level (out of four levels) in establishing and maintaining an enabling environment.

According to UN ESCWA, ESCWA members at this maturity level have outdated legal and regulatory frameworks that are inadequate for the ICT sector and consumer needs, as well as poor enforcement of existing laws. They are still experiencing very high software piracy rates and lack initiatives for ICT standardization. In addition, investment funds and entrepreneurship support are not present on the ground.

However, according to two local ICT experts interviewed, the State of Palestine is by now (and possibly was already at the time of the ESCWA study) relatively more developed than Sudan and Yemen. In addition, at least in some respects, the State of Palestine appears to belong to the level of maturity 2. Investment funds and entrepreneurship support can be found nowadays. There are several incubation programmes and entrepreneurship support organizations (Fast Forward Accelerator, PICTI, PEEKS, etc.) even though entrepreneurship skills are not sufficiently developed.

40. Unfortunately, Palestine is not yet included in the ITU information society index.

Table 9: *Ranking of ESCWA member cou ntries by maturity level in establishing an enabling environment (2009)*

COUNTRY OR TERRITORY	MATURITY LEVEL 1			MATURITY LEVEL 2			MATURITY LEVEL 3			MATURITY LEVEL 4		
	2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
Bahrein							✓	✓	✓			
Egypt							✓	✓	✓			
Iraq	✓	✓	✓									
Jordan							✓	✓	✓			
Kuweit				✓	✓	✓						
Lebanon				✓	✓	✓						
Oman				✓	✓				✓			
Palestine	✓	✓	✓									
Qatar				✓				✓				✓
Saudi Arabia				✓				✓	✓			
The Sudan		✓				✓						
Syrian Arab Republic	✓				✓	✓						
United Arab Emirates							✓				✓	✓
Yemen	✓	✓	✓									

Source: United Nations Economic and Social Commission for Western Asia (ESCWA) (2010). *Regional Profile 2009.* Available from http://isper.escwa.un.org/Default.aspx?TabId=65&item=24.

Box 7: Overview of the main business environment issues affecting the Palestinian ICT sector

- The State of Palestine presents a particular difficult environment for doing business.
- There are several ICT infrastructure handicaps and Israeli obstacles to its development.
- Lack of/difficult access to affordable office space.
- Political instability.
- Intellectual property rights are not protected.
- The State of Palestine suffers from an absence of certification and quality systems.
- Horizontal/vertical cooperation and coordination (e.g. clustering) among ICT companies and between ICT providers and other businesses is lacking.

Table 10: *Ease of doing business rankings*

	Egypt	Jordan	Palestine	Singapore
Ease of doing business	110	96	131	1
Starting a business	21	95	177	4
Resolving insolvency	137	104	183	2

Source: GIZ/Solutions for Development (March 2012). *Palestinian ICT Private Sector 3-Year Strategy and Development Plan.* Available from www.lacs.ps/documentsshow.aspx?att_id=5644.

QUALITY OF THE BUSINESS ENVIRONMENT (THE 'BORDER GEAR')

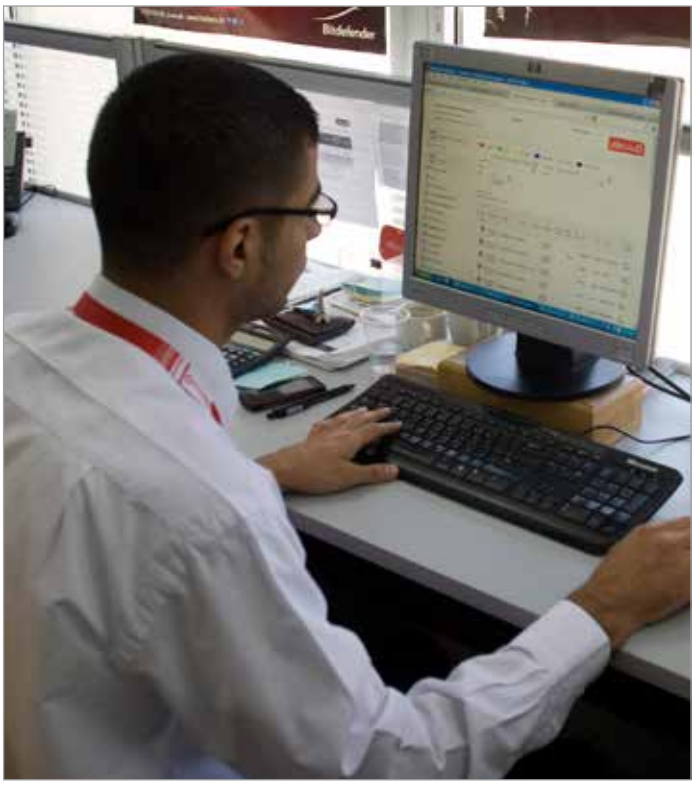
THE STATE OF PALESTINE PRESENTS A PARTICULARLY DIFFICULT ENVIRONMENT FOR DOING BUSINESS

The State of Palestine ranks low on the indices of ease of doing business. The process of registering a company is neither simple nor economical for technology start-up entrepreneurs. Licensing requirements (registering with the Companies' Controller) seem to be arduous: 10,000 dinars of capital need to be secured in order to register and 25% of this amount must be located in a bank. The first registration is particularly costly (between US$1,000 and US$5,000). Finally, 10% of all profits must be set aside as part of a mandatory reserve. All of these requirements slow the establishment of new companies.

THERE ARE SEVERAL ICT INFRASTRUCTURE HANDICAPS AND ISRAELI OBSTACLES TO ITS DEVELOPMENT

High infrastructure costs are a major weakness of the sector in the State of Palestine. Internet and telecommunications are of a lower quality and higher cost than in Israel and in Jordan and energy costs are also higher than in Jordan. The costs of connectivity and electricity are also problematic. The quality of connectivity is an issue as well as the fact that there is no control of the gateway. Finally, connectivity is uneven across the country. Major cities are well connected compared with rural areas. In addition, four major obstacles to the development of ICT infrastructure in the State of Palestine are due to Israeli policies:

1. Restricting access to the State of Palestine's electromagnetic sphere;
2. Control of the flow of ICT imports into the State of Palestine;
3. Facilitation of the operation of illegal Israeli telecommunications providers in Palestinian territories; and
4. Prohibition of the development of telecommunications infrastructure between the West Bank and Gaza.



Source: © PalTrade

The 2013 Diagnostic study identifies several threats to the ICT infrastructure in the State of Palestine: the lack of support for required infrastructure developments, Israeli control of telecommunications infrastructure (3G/4G access, international gateways), as well as continued unlicensed operation of Israeli mobile operators in the West Bank.

LACK OF/DIFFICULT ACCESS TO AFFORDABLE OFFICE SPACE

Office & operating space in Ramallah in particular is often unaffordable for start-ups and small ICT businesses. In practice this operates as a significant obstacle to doing business, especially in the early stages of companies' development. There appears to be a strong case for the provision of subsidized physical infrastructure, possibly in the form of value-added 'tech parks'.

POLITICAL INSTABILITY

Security issues, the fluid political climate and the challenges faced in getting international travel documents constrain the development of ICT exports. Some companies' losses in export business were due to political instability.

The Palestinian ICT industry has consequently shown a relative resilience against the periodic crises in relations between Israel and the State of Palestine. ICT companies in Gaza, for example, usually continued to serve clients in various countries throughout Israeli bombing campaigns, keeping up service and delivery standards. In fact, while some economic sectors have suffered over the past years inter alia because of Israeli impediments on physical exports, most segments of the ICT sector have continued to thrive.

INTELLECTUAL PROPERTY RIGHTS ARE NOT PROTECTED.

Laws regarding IPR are somewhat outdated in the State of Palestine and this limits its attractiveness to FDI. The major weakness, however, comes from the lack of enforcement of IPR regarding information technology and the low capacity of the judicial system to settle disputes on this matter. The ICT focus group even states that IPR to protect software are 'non-existent' in the State of Palestine. Moreover, because of potential intrusions of Israel, and in order to preserve the security of data and servers, offshore storage might be required.

THE STATE OF PALESTINE SUFFERS FROM AN ABSENCE OF CERTIFICATION AND QUALITY SYSTEMS

There are currently no regulatory or autonomous industry certification and quality systems in place for the Palestinian ICT industry to tap into. This severely affects its credibility, in particular with prospective customers. Palestinian companies therefore resort, where possible, to certification by international brand companies such as Microsoft.

HORIZONTAL/VERTICAL COOPERATION AMONG ICT COMPANIES AND BETWEEN ICT PROVIDERS AND OTHER BUSINESSES IS LACKING

The absence of leadership and coordination in the private sector is problematic. Palestinian companies are relatively small and the level of cooperation between them is extremely limited. CEOs prefer to 'stay small' rather than to cluster with other companies, merge with others or acquire others in order to increase capacity and go after bigger markets.[41]

There appears to be very little strategic cooperation between ICT companies and other businesses. Co-marketing or clustering, for example with financial or professional services, seems to be the exception.

41. Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

Box 8: Overview of the main market entry issues affecting the ICT sector

- Palestinian ICT companies find it increasingly difficult to compete with companies from less advanced countries such as Sri Lanka and Bangladesh.
- There is a lack of both awareness and credibility among international buyers.
- Commercial presences abroad (required to consolidate Palestinian positions in the markets) are lacking.
- The potential of the diaspora to find and secure opportunities (especially for outsourcing) is underused.
- There is no trade (in services) policy, nor trade (in services) agreements securing market access, non-discrimination and regulatory standards.
- Palestinian commercial diplomacy support is lacking.
- There is a lack of adequate sector branding to support Palestinian ICT companies.

MARKET ENTRY (THE 'BORDER-OUT GEAR')

PALESTINIAN ICT COMPANIES FIND IT INCREASINGLY DIFFICULT TO COMPETE WITH COMPANIES FROM LESS ADVANCED COUNTRIES SUCH AS SRI LANKA AND BANGLADESH

The ICT industry is a global one: competitors are potentially everywhere. While Palestinian companies have shown that they are often internationally competitive in principle, they find it difficult to compete on price with companies in countries such as Sri Lanka and Bangladesh. This underlines their need to work continuously on improving unit labour costs, including through improvements in technical, business and project management skills.

THERE IS A LACK OF BOTH AWARENESS AND CREDIBILITY AMONG INTERNATIONAL BUYERS

International buyers of outsourcing capabilities are relatively unaware that the State of Palestine holds outsourcing capabilities. The State of Palestine suffers from prejudices in this industry: international buyers are likely to be reluctant to sign contracts with Palestinian companies because they perceive the State of Palestine as a permanent zone of conflict and consequently totally unreliable to do business in. Therefore, there is a critical need for more sector branding to support the marketing effort of the companies.

The ICT focus group also recommends 'designing a branding strategy in one direction', 'identifying areas in which the country can be competitive' and 'organizing targeted trade missions'. PalTrade and PITA need to make more efforts to improve the awareness of international buyers and branding in order to change their perception about the State of Palestine's capability. This would require launching targeted branding campaigns to change perceptions.

COMMERCIAL PRESENCES ABROAD (REQUIRED TO CONSOLIDATE PALESTINIAN POSITIONS IN THE MARKETS) ARE LACKING

Palestinian ICT companies are barely physically present in their target markets, with few exceptions. While much value in the industry is generated through cross-border supply (mode 1), local representation is often a key marketing and complementary supply channel. It is important to have a representative office in the Silicon Valley in order to channel software outsourcing opportunities to the Palestinian ICT companies that have successfully undertaken outsourcing business with Cisco, Microsoft, HP and other MNEs. A representation office in the Gulf region, especially in Saudi Arabia, would also be an asset in order to be able to access business and sales leads.

As each market is unique, a commercial presence will generally help to understand how to adapt to demand and how to do business. Such commercial presences are likely to be more critical in the situation of the State of Palestine as sudden variations in the Israeli-Palestinian situation can affect the industry staff's ability to travel. In the 2013 PalTrade survey some companies mentioned having lost export business because of not having a local office to represent them and undertake local marketing efforts.

THE POTENTIAL OF THE DIASPORA FOR FINDING AND SECURING OPPORTUNITIES (ESP. FOR OUTSOURCING) IS UNDERUSED

The Palestinian diaspora offers significant potential to identify and realize opportunities for new outsourcing activities, not only in neighbouring countries and Gulf countries but also in Europe and North and South America. As is the case for other business-related services personal contacts and, most importantly, trust are key ingredients of successful cross-border business relationships, especially for information – and business process-sensitive ICT services. PITA is making significant efforts to establish and underpin contacts with the diaspora. PITA is engaged with the diaspora to develop new business channels as well as to undertake market penetration studies. Further efforts must be made to integrate the diaspora, including through government-led commercial diplomacy.

THERE IS NO TRADE (IN SERVICES) POLICY, NOR TRADE (IN SERVICES) AGREEMENTS SECURING MARKET ACCESS, NON-DISCRIMINATION AND REGULATORY STANDARDS

There is a clear need for a supportive trade in services policy in the ICT sector, as in other services sectors. Interviewed companies confirm that the government should, in cooperation with business support organizations (PITA, PalTrade), conclude trade in services agreements (WTO/GATS, GAFTA/Pan-Arab Services Trade Agreement, EuroMed and others) to address barriers relative to market access and discrimination (such as the difficulty in obtaining visas and travel documents) as well as to develop markets at regional and international levels.

Importantly, the State of Palestine's future trade in services policymaking should encompass a holistic view of the services sector, ensuring that market access and related disciplines are obtained not only for ICT services but also, strategically, for other services with which ICT services are or can be clustered, such as financial services, accounting and advertising. Within the area of ICT services comprehensive commitments across subsectors of 'computer-related services', as well as telecommunications services, should be sought to ensure flexibility in product development and marketing.

This should tie in with a broader trade policy to support all needs of the industry. This would include matters such as IPR (TRIPS and TRIPS-type agreements) and trade in goods disciplines (for hardware and other goods accompanied by or triggering ICT services trade).

Source: © PalTrade

PALESTINIAN COMMERCIAL DIPLOMACY SUPPORT IS LACKING

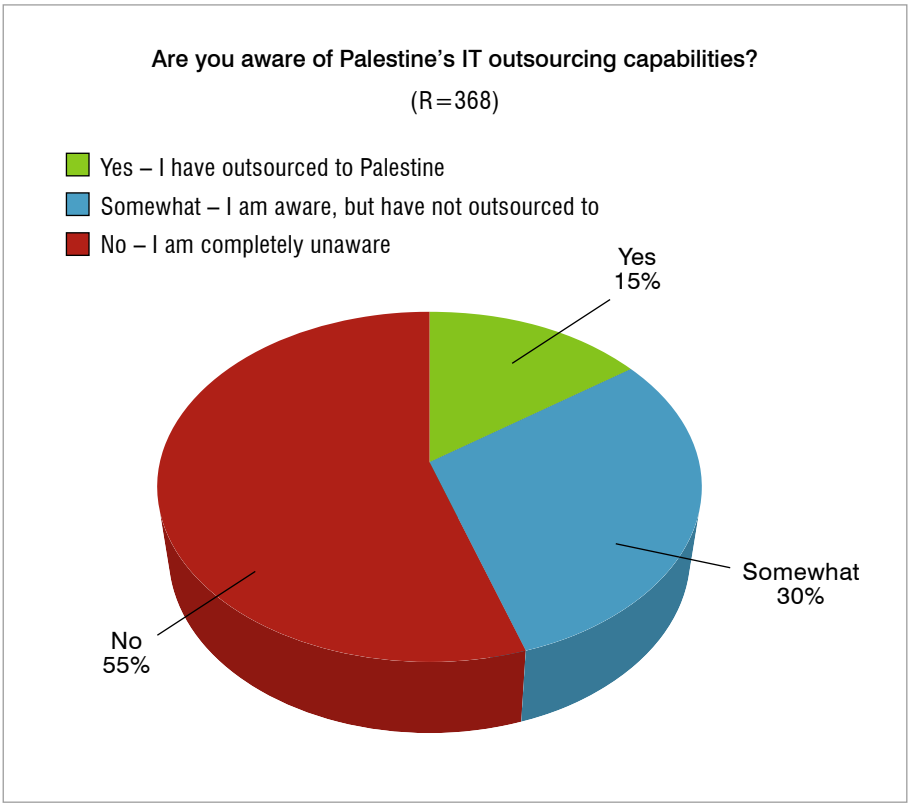
The international marketing of ICT services, like that of other professional services, relies heavily on trust. There is currently virtually no support from Palestinian embassies for ICT exporters. This should be remedied.

THERE IS A LACK OF ADEQUATE SECTOR BRANDING TO SUPPORT PALESTINIAN ICT COMPANIES

Cisco conducted a survey among international buyers of outsourcing capabilities. It found that 55% are unaware that the State of Palestine holds outsourcing capabilities. However, this appears to be a glass half full rather than half empty. The 2013 Diagnostic Study finds it 'remarkable (…) that 45% of the 368 respondents in the international buyer survey have responded positively to being aware of the State of Palestine's ICT outsourcing capabilities.'

The Cisco report also shows that the State of Palestine suffers from prejudices in this industry: less than 10% of respondents who were completely unaware of Palestinian outsourcing capabilities were open to contract with them. International buyers are likely to be reluctant to sign contracts with Palestinian companies because they perceive the State of Palestine as a permanent zone of conflict and consequently totally unreliable to do business in.

Figure 7: *Awareness of Palestinian outsourcing capabilities among international buyers*



Source: Cisco (2012). Cisco Pioneers Market Development Approach in Palestine.

Box 9: Overview of development issues in the ICT sector

- Unsatisfactory absorption of ICT graduates (but there is room for win–win improvement).
- Women are underrepresented, despite an industry (potential) gender bias towards women.
- Environmental impact could be improved.

DEVELOPMENT GEAR

UNSATISFACTORY ABSORPTION OF ICT GRADUATES (BUT THERE IS ROOM FOR WIN-WIN IMPROVEMENT)

Each year about 2,000 new ICT graduates enter the labour market. The above numbers indicate that the domestic ICT and related sectors are not/will not be able to absorb them – unless they have experience – without a boom and/or structural improvements. This appears to be a lose–lose situation for the industry and the graduates, which in turn offers the possibility in principle of a win–win development, given the vast opportunities provided by the sector generally. The 2013 Diagnostic Study highlights the need to provide these graduates with additional training and placement assistance to make them more productive and usable for the industry, and hence more employable: 'It is essential to develop programmes that would target new graduates to be attractive for private sector employment.'

Source: © PalTrade

WOMEN ARE UNDERREPRESENTED, DESPITE AN INDUSTRY (POTENTIAL) GENDER BIAS TOWARDS WOMEN

The ICT sector could contribute to providing more women with employment, as a gender bias towards women is usually present in this sector in developing countries. For instance, 65% of employees in this sector in the Philippines are women.[42] It could thus play a critical role in the context of the State of Palestine as women suffer higher unemployment rates than men (28% against 19% in 2011). However, although the best ICT graduates in terms of final grades are female, they still face a higher unemployment rate than men.[43]

According to the 2013 Diagnostic Study, ICT companies perceive recruiting women as more costly in the long run because they anticipate that, once they are married, they will need maternity leave; they will be more frequently absent; and overall will have a lower labour productivity once they have children. Indeed, that is already partly reflected in female salaries, which are, in general, lower than those of men at the same level of qualifications.[44]

Improving female ICT graduates' absorption into the sector may require positive measures such as favourable legislation for businesses to hire more women, tax breaks, insurance cost coverage and subsidies (for maternity leave etc.), working from home schemes, etc. as well as direct incentives for women to keep working after marriage.

ENVIRONMENTAL IMPACT COULD BE IMPROVED.

The ICT sector generally does not generate problems of sustainability in the long run as it does little direct damage to the environment. However, some efforts can be made to reduce its environmental impact by using alternative power sources such as photovoltaic panels and other alternative technologies to capture solar energy, as the State of Palestine enjoys sunshine more than 80% of the year.

Conversely, the industry can make significant positive contributions to the environment. For example, using software to monitor and regulate the use of energy in buildings, smart-houses and secured houses can reduce power consumption; paper can be saved through paperless office policies; etc.

42. *Ibid*.

43. Tucker, Tremaine (2012). *The ICT Sector in Palestine – Current State and Potentials*. MAS Publications, Palestine Economic Policy Research Institute.

44. The 2013 Diagnostic Study finds that 'the gender pay gap also exists locally but is not yet empirically evidenced'.

WHERE WE WANT TO GO

ICT stakeholders agree that their vision for the sector can be phrased as follows:

> *'Palestine is an innovative hi-tech hub leading the transformation to an export led knowledge-based economy.'*

THE FUTURE VALUE CHAIN

The future value chain should incorporate both possible structural improvements and additional products/markets. The representation of the future value chain aims to capture the main developments that appear desirable and possible, as reflected in this strategy document, to ensure the expansion of ICT exports from the State of Palestine.

SYNERGIES AND LINKAGES

Importantly, the ICT sector permeates society like few others, is linked to virtually every industry and body in a mutually reinforcing relationship, and can thus in the Palestinian context generate numerous synergies with public institutions as well as with other domestic sectors such as tourism, finance, health, agriculture, education or construction. Figure 6 above reflects not only the significant volume of spending on ICT but also the spread of the industry's clients across the entire economic spectrum. This spread reflects not only customers and hence markets, but simultaneously also opportunities for synergies and linkages as other industries can act as cooperation partners for the development of joint products (e.g. banking software, tourism applications), for marketing clusters and for joint branding initiatives, to name just a few.

Specific potential linkages have been identified in the course of the strategy design process, for example with public institutions in the context of e-government initiatives; with tourism on various shortfalls in the industry that could be addressed through ICT solutions; with the finance and insurance industry on matters ranging from automation and reporting to brokerage software; with the accounting sector on joint ERP product development; with the legal services industry on issues such as document management and speech-to-text conversion; with other professional/business-related services such as auditing, engineering, consulting and advertising/public relations on market information; and with polling institutes on ICT support to their work. Specific examples of synergies and related potential joint actions discussed by stakeholders in the context of the development of this strategy are reflected in box 10.

Source: © rpb1001. Nablus web designer

Box 10: Sectors and public institutions – synergies and potential joint activities

Sector or public institution	Synergies/potential joint activities
Local government e.g. municipalities	E-municipality solutions based on cloud architecture, potentially to be implemented with GIZ and the Municipality Fund through a cluster of ICT companies.
Ministries	E-citizen solutions and e-services as well as financial/taxation/customs solutions.
Tourism sector	Portals, hotel room and events reservation systems, payment gateway, online handicraft shop, tour reservations.
Financial sector	Insurance and banking systems generally (e.g. e-banking, payment systems and mobile banking solutions) and to cater for specific interests (e.g. Islamic banking).
Health sector	Hospital, clinics and labs software solution in cloud architecture.
Agriculture and farming sector	Automation, price information, remote control, e-marketing.
Industry and trade	ERP solutions and accounting software, human resources, international bar code for the State of Palestine.
Education	E-learning solutions, content generation, educational games.
Construction/engineering	Project management.

The large variety of responses from stakeholders, once prompted to reflect on synergies, powerfully underlines the significant and broad-ranging potential for such synergies. Exploring these will be a continuous task and potentially highly lucrative investment not only for the ICT industry but also and equally for its potential partners in other sectors.

Numerous other examples and concrete opportunities for synergies and linkages are often easily identified, provided one makes the effort. Some are found when considering other sectoral strategies within the NES effort. For instance, the Leather and Footwear Export Strategy identifies as a weakness of that industry the absence of sufficient skills and technologies to engage in computer-aided design – an obvious opportunity for strategic cooperation and possibly joint development for the ICT and the footwear and leather industries.

All of the above opportunities are worth exploring, both systematically and as occasions arise. However, arguably as promising in the Palestinian context are synergies/linkages with government (e-government), tourism, financial services, and industry and trade.

MARKET IDENTIFICATION

Identifying markets for an industry as diversified as ICT is a challenging task. In an industry that is in many ways genuinely global, largely borderless and fast-evolving, broad sectoral assessments are difficult and of limited value. Markets in this industry are almost by definition company – and product-specific.

PITA has recently commissioned two studies on regional and international markets. Only the first[45] is currently available. Further market research is needed and must be carefully targeted. ICT strategy stakeholders have nonetheless engaged in a necessarily tentative reflection on existing and new markets and products. The results are reflected below.

45. Solutions for Development Consulting Co. (April 2013). *Palestinian ICT Sector 2.0: Technology Sector Development Report and Recommendations Relevant to Regional and Global Market Opportunities.* Prepared for PITA and Mercy Corps.

NEW PRODUCT OPPORTUNITIES

There is a growing list of products being developed by companies such as human resources management software, help desk support, ERP, financial and accounting, etc. The 2013 Diagnostic Study has identified as major opportunities for product diversification the development of e-commerce and e-government, the expansion of multilingual digital content and mobile software technology. There are further Business Process Outsourcing (BPO) opportunities for the State of Palestine such as bookkeeping, data entry,46 insurance claims, ICT support and call centres. Graphic design software including 3D technologies also looks promising. Specific opportunities and potentials, however, will in many cases be company – and situation-specific, and are hence difficult to specify in detail at the sector level.

The focus group, however, has identified a number of products that could/should be further developed and related actions that could/should be taken. These and many more are reflected in the PoA.

- **Product:** information technology outsourcing for ISP, network design and implementation.
  - Possible actions: targeted market surveys; (support on) bids and tenders; (support for) the participation of ICT companies in exhibitions; (facilitation of) business to business (B2B) meetings; (facilitation of) trade missions.

- **Product:** Business Process Outsourcing (BPO).
  - Possible actions: targeted market surveys; (support on) bids and tenders; (support for) the participation of ICT companies in exhibitions; (facilitation of) B2B meetings; (facilitation of) trade missions.

- **Product:** call centre services (inbound and outbound).
  - Possible actions: targeted market surveys; support on bids and tenders; support for the participation of ICT companies in exhibitions; facilitation of B2B meetings; facilitation of trade missions.

- **Product:** mobile applications and Voice Over Internet Protocol for enterprises
  - Possible actions: targeted market surveys; support on bids and tenders; establishment/operation of representation offices in target markets or other collective representation for marketing and sales; mobile app store(s).

- **Product:** high-end R&D.
  - Possible actions: (support to) contracting with multinational and Israeli high-tech companies.

- **Product:** ICT consulting, in particular on (a) security, (b) end-to-end automation and (c) e-government.
  - Possible actions: (support to) outsourcing for regional service providers and the establishment/operation of direct implementation relationships with multinationals.

- **Product:** (other) functional expertise (consulting) on issues such as supply chain management optimization, customer relationship management, ERP.
  - Possible actions: (support on) training, facilitation of B2B, linkages with foreign cooperation partners.

A key cross-cutting challenge for the distribution of new/old products to new/old markets are e-commerce channels. Their targeted development is a company-level and collective need.

NEW MARKET OPPORTUNITIES

As part of the 2013 Diagnostic Study exercise the PalTrade team asked 20 ICT companies about new market opportunities. Apart from the markets quoted above, they mentioned that they would like to export to Yemen, Kuwait and other Gulf countries. PalTrade also held a workshop in December 2012, gathering PalTrade Team Leaders and some international consultants to discuss market opportunities for the ICT sector.

In the process underpinning the 2013 Diagnostic Study stakeholders engaged in a reflection of potential markets based on a double concentric circles approach of short-term, medium-term and long-term markets on the basis of neighbours, nearby and farther away target countries, and identified market requirements that would support Palestinian exports such as common business language, political alignment and specific opportunities. The results are reflected in table 11.

Two major competitive advantages seem to determine these opportunities: the geographical location and the common business language. The neutrality of the Palestinian Arabic accent is an advantage in call centres. Not least in view of these factors, the experts identified Jordan, Israel, Libya and Sudan as targets in the short term. In the medium term, Gulf countries and Iraq look the most promising, equally thanks to the common business language and/or culture. In the long term, Palestinian companies should be able to target Egypt and Algeria. Europe seems to be a realistic market only in the medium term, and North America and South America are seen as target markets only in the long term. These markets and the factors making them attractive (or Palestinian ICT companies attractive to them) are visualized in table 11.

46. For instance, the company Unitone has currently a contract with a Dutch client for data entry BPO. In that context, Unitone hired more than 200 people in Gaza. (see: http://unitone.ps)

Table 11: *Target markets for the Palestinian ICT sector based on country needs and requirement criteria*

STRATEGY TIME FRAME	SHORT TERM TARGET MARKET				MEDIUM TERM TARGET MARKET			LONG TERM TARGET MARKET			
GEOGRAPHIC LOCATION	NEIGHBOUR		NEARBY		NEARBY			NEIGHBOUR	NEARBY	FUTURE	FUTURE
COUNTRY	Jordan	Israel	Libya	Sudan	Gulf countries	Europe	Iraq	Egypt	Algeria	N. America	S. America
THE VOUNTRIES REQUIREMENT CRITERIA	» Geographical location » Common business environment » Clustering opportunities » Mutual recognitioin » Pro-active diaspora	» Geographical location » Familiar business environment » Clustering opportunities » Quality-price ratio » Local linkages with arab-israeli	» Common business language » Innovation and specialisation » Delivery package » Political alignment » Technology application	» Common business language » Innovation and specialisation » Delivery package » Political alignment » Technology application	» Common business culture » Clustering opportunities » Specialisation » Pro-active diaspora » Quality-price ratio	» Political alignment » Clustering opportunities » Specialisation » Familiar business environment » Conductive trade environment	» Common business language » Innovation and specialisation » Delivery package » Political alignment » Quality-price ratio	» Common business language » Political alignment » Clustering opportunities » Familiar business environment » Service trade agreements	» Political alignment » Innovation and specialisation » Quality-price ratio » Common business language » Delivery package	» Political alignment » Clustering opportunities » Quality-price ratio » Familiar business environment » Market access	» Pro-active diaspora » Political alignment » Quality-price ratio » Specialisation » Clustering opportunities

Source: Barreto, E. et al (2013). *Diagnostic Study – Palestine: Export Readiness & Potential of Services Sectors.*

FOUR APPROACHES FOR MARKET DEVELOPMENT

Four main approaches for market development can be distinguished: existing products to old markets, existing products to new markets, new products to old markets and new products to new markets. The following paragraphs outline a few ideas developed by stakeholders in the context of the development of this strategy.

EXISTING PRODUCTS TO OLD MARKETS

- Continue to export enterprise resource planning and accounting packages to Yemen, Oman and African countries. Convert the products to 'Software as Service' as a distribution channel option considering the cloud computing trend.
- Continue to export health information systems to the UAE with more focus on scaling sales operations.
- Continue with the market access efforts to get software outsourcing contracts from Israel by transitioning from United States-based MNEs such as Cisco, Microsoft and HP that have a physical presence in Israel to targeting Israeli companies. (The value proposition here is the reduced cost and enhanced convenience regarding both geographic location and common business language. Channels in this case should be B2B meetings and events organized through PalTrade and counterpart organizations in Israel with the assistance of PITA and United States-based ICT MNEs.)
- Continue with market access efforts in European countries such as the Netherlands to attract BPO, in particular to Gaza where human resources costs are particularly competitive.

EXISTING PRODUCTS TO NEW MARKETS

- Initiate exports for inbound/outbound call centres in Ramallah and business process outsourcing in Gaza for North America. (The call centre provider *Reach*, for example, has very recently signed a contract to service an American client, estimated to be worth around US$ 1million, indicating that significant opportunities exist in this area.)
- Initiate exports of information technology outsourcing in data and Internet network design and implementation to African countries.
- Initiate exports of healthcare, ERP and accounting software to African (in particular North African) countries such as Sudan and Libya. A promising avenue is to go via hubs such as Malta, which has an established relationship with the Libyan business community. For example, a company such as 2i in the State of Palestine, which as a branch of the Maltese 2i (which also has branch office in the United States) is in an ideal position to Arabize and launch new products in the Libyan market. The fact that PITA in 2010 initiated cooperation with Malta provides further support to this option.

NEW PRODUCTS TO OLD MARKETS

- Oracle, Microsoft, SAP and other MNEs are expanding their business in the Arab MENA emerging market. An alignment with the ecosystems of these companies is an opportunity for Palestinian companies to become implementing partners for new products for the region instead of just locally, leveraging existing business relationships in, and knowledge of, these markets.

Source: © Tomorrow's Youth Organization.

- The market for mobile outsourced applications (projects that governments, corporations and organizations outsource for their internal business processes) is growing. This provides an opportunity for Palestinian companies to use existing connections to target markets, not least in the region where the common business language acts as a powerful additional factor.

NEW PRODUCTS TO NEW MARKETS

The consultations suggested that both PITA and its member firms are not exposed enough to new market opportunities and ideas. However, the options below, which resulted from the consultations, appear to represent new opportunities for the Palestinian ICT sector.

- Entertainment gaming for children and adults such as action games, educational games etc. for Arab speaking populations. The language factor would act as an obvious conduit/value proposition here.
- Islamic banking and insurance products to Europe and South East Asia.

STRUCTURAL IMPROVEMENTS TO THE VALUE CHAIN

The analytical findings above suggest that a range of structural improvements to the value chain can be made. These partly add new elements, and partly significantly transform and augment existing elements of the value chain. Many appear to combine limited cost and effort with great potential for impact.

TRADE POLICY

As discussed above, a well-considered trade in services policy will provide better and more reliable market access and predictable regulatory conditions in target markets. This applies to both ICT services and other services with which ICT services can be sold in parallel or as clusters. Further trade policy elements that can support the sector include trade in goods disciplines/policies (as ICT services may accompany, or be triggered by, exported and imported goods) and IPR disciplines/ policies (TRIPS etc.).

Importantly, a supportive trade policy will consider both exports and imports (as these may, in turn, facilitate or trigger exports)[47] of services and goods. MoNE is (early) in the process of developing a trade in services policy (at first through the Trade in Services project) and envisages building a more comprehensive trade policy in the near future. The work of the National Task Force and the Technical Advisory Team should be focused and leveraged accordingly.

SYSTEMATIC FOCUS ON EXPLOITATION OF SYNERGIES AND LINKAGES

As discussed above, there are virtually limitless possibilities to establish and exploit actual or potential synergies and linkages between ICT and other industries and societal activities, from tourism software to e-government solutions. A systematic focus on these possibilities and their

47. For example, the importation of sophisticated hardware may (1) enable sophisticated service capabilities to be built and then exported and/or (2) trigger the need for ancillary services (maintenance, support, software) which may be provided both locally and regionally/internationally.

Source: © Tomorrow's Youth Organization.

realization, at the enterprise, association and government levels, holds significant potential. Mechanisms could include the establishment and use of clusters between ICT and other companies (see below) or the establishment of an export council for ICT which also operates as a matchmaking platform, or other coordination/matchmaking platforms/fora.

CLUSTERING WITHIN AND BEYOND THE ICT INDUSTRY

As indicated, strategic clustering within the ICT industry and between ICT companies and other service providers (accounting, financial services, entertainment, advertising etc.) should be pursued to develop old and new markets, unlocking potential for economies of scale and new products.

COMMERCIAL DIPLOMACY

A strategic approach to Palestinian commercial diplomacy, with a focus inter alia on the ICT sector's need for trust-based client relationships, could underpin marketing efforts. This may be particularly relevant in new markets where reference projects are absent or rare (e.g. South America).

DIASPORA WORK

Similarly, strategic communication and collaboration with, and involvement as clients, investors or brokers of, the Palestinian diaspora in target markets can enable and significantly stabilize the said trust-based relationships need for successful marketing of ICT services, including and beyond outsourcing.

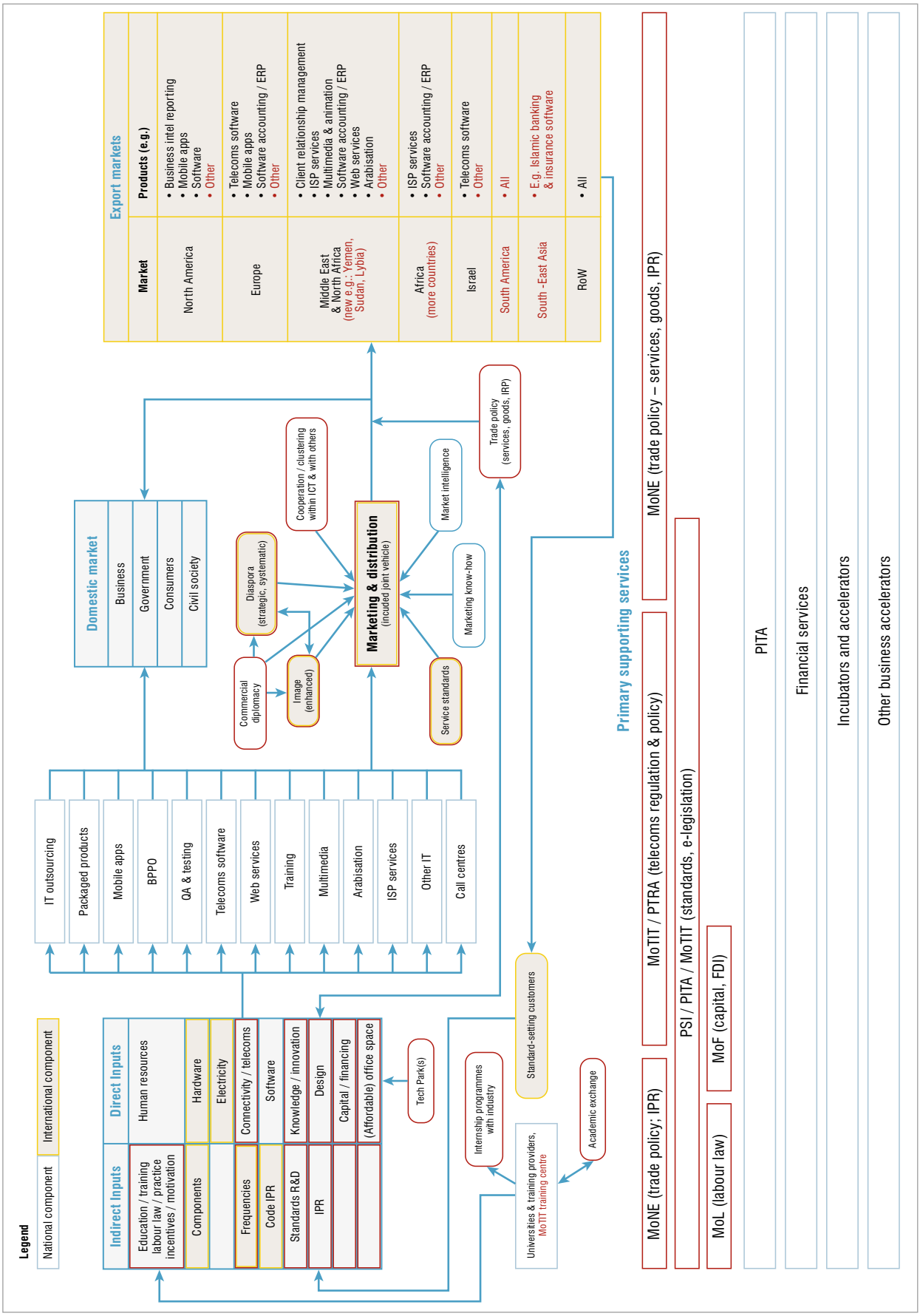
STANDARDS AND E-SERVICES LEGISLATION

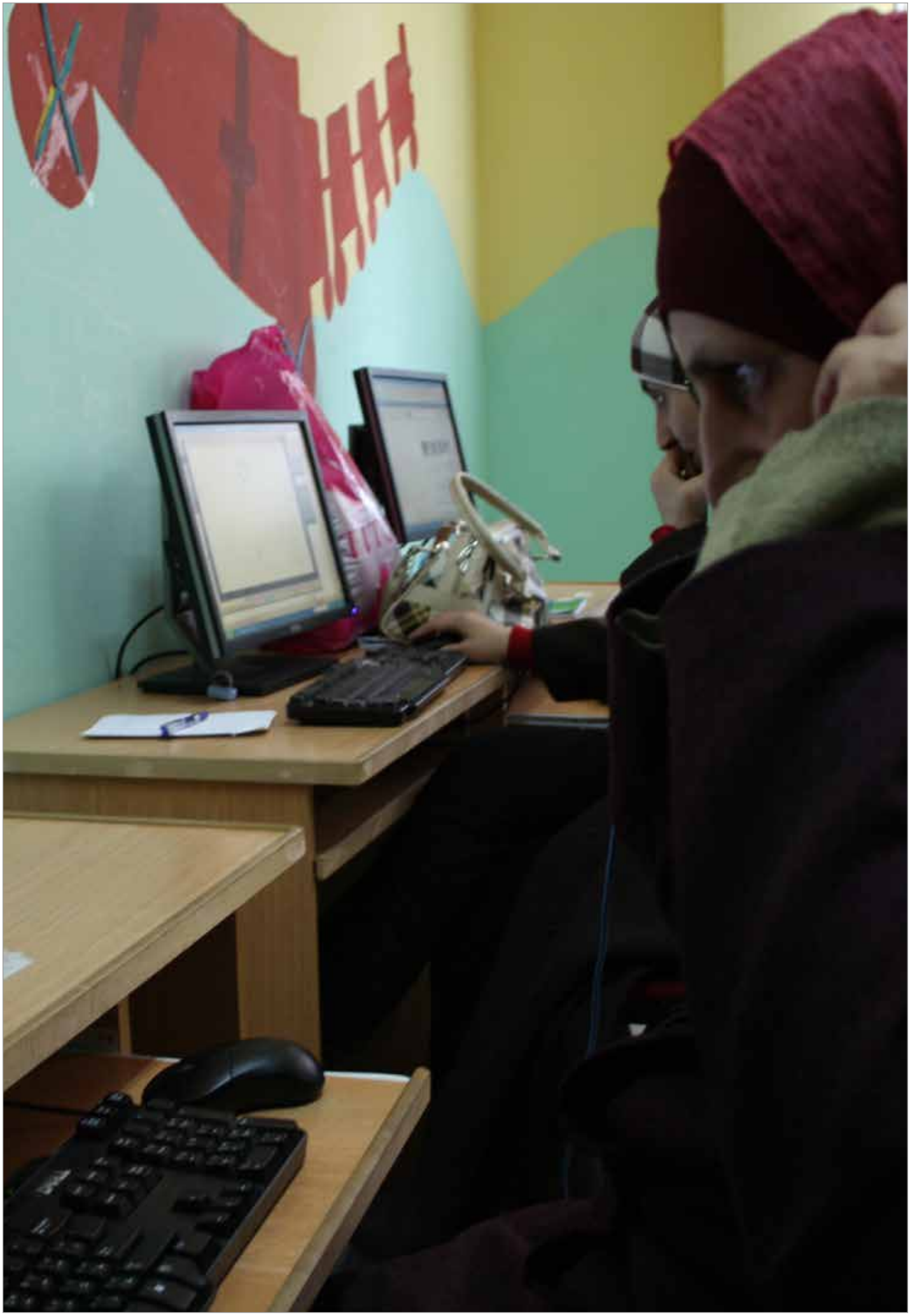
The current efforts by MoTIT to develop comprehensive legislation on e-services and e-commerce will provide important backing to present and future export activity. The same applies to the development of ICT-related services standards (industry and/or PSI).

COOPERATION BETWEEN EDUCATIONAL INSTITUTIONS AND ICT INDUSTRY

A key structural improvement would be a systematic, sustained and ideally large-scale cooperative engagement between industry and educational institutions. This includes curriculum development (focus on industry needs) and internship/auditorium-to-practice programmes. Existing initiatives should be expanded and complemented as appropriate.

FUTURE VALUE CHAIN : IT services excluding telecoms





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HOW TO GET THERE

STRATEGIC PLAN OF ACTION

Five strategic objectives reflect elements required to fulfil the sector vision.

1. **Enhance the business environment for the ICT sector to support and enable the industry**. This objective will be realized through initiatives implemented under the following operational objectives:
   - Support the sector effectively through enabling policies and legislation (especially ICT and labour-related);
   - Improve the efficiency of administrative procedures to open/operate an ICT business;
   - Improve and use tax, investment and capital markets laws and practices to raise investment and enable exit strategies for investors;
   - Develop special infrastructure for FDI in ICT;
   - Increase the level of trust and build-up of capital, i.e. to attract FDI, through improved IPR protection (TRIPS aligned IPR laws).

2. **Enhance the ICT business supply-side to better enable the industry to export.** This objective will be realized through initiatives implemented under the following operational objectives:
   - Improve the quality and suitability of human resources for the ICT industry;
   - Increase infrastructure efficiencies that can support ICT exports;
   - Develop the ability to attract FDI to ICT;
   - Develop linkages with other economic sectors to increase the efficiency and effectiveness of these sectors and develop local markets for ICT products.

3. **Enhance ICT business development and market entry to better enable the industry to export.** This objective will be realized through initiatives implemented under the following operational objectives:
   - Improve the brand for the Palestinian ICT sector in order to change perceptions, develop awareness and make buyers trust the quality value proposition;
   - Increase Palestinian exposure/access to trade and market information and market access programmes;
   - Develop a clustering approach in marketing and product development;
   - Empower and assist companies to increase their operations and exports;
   - Increase the capacity of ICT companies through enterprise level technical assistance to increase their human resource competencies and product offering quality.

4. **Build the entrepreneurial capacities of the sector.** This objective will be realized through initiatives implemented under the following operational objectives:
   - Promote innovation and entrepreneurship in the ICT sector;
   - Develop innovative financial products meeting market needs.

   - **Build the capacity to successfully conduct trade-in-services negotiations on ICT with Israel, the EU, GAFTA and other countries.** This objective will be realized through initiatives implemented under the following operational objectives:
   - Build capacity for trade-in-services negotiations focused on ICT;
   - Develop substantive negotiating positions on ICT.

IMPORTANCE OF COORDINATED IMPLEMENTATION

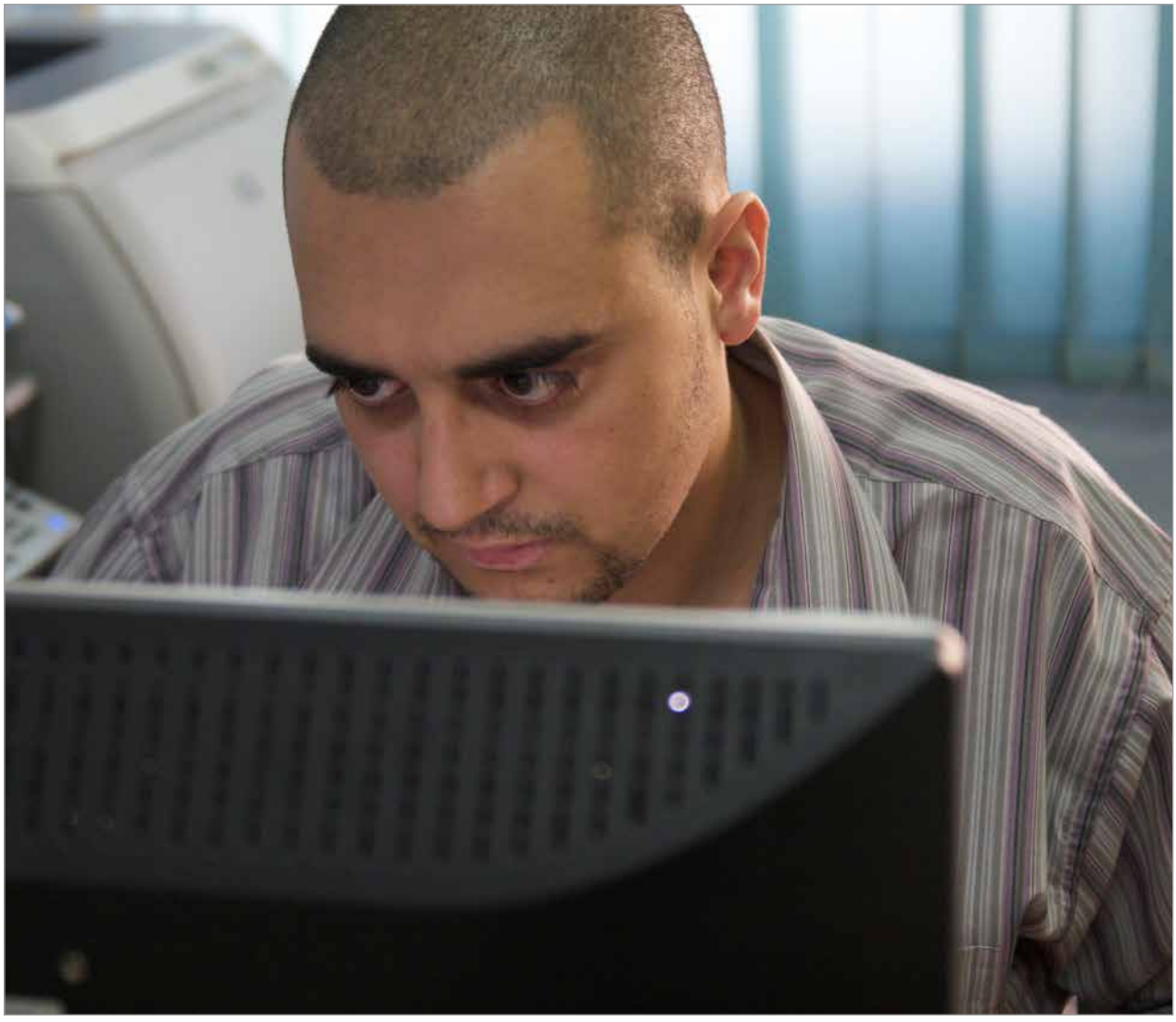
The broad range of activities, together with the complex nature of integrated intervention, requires careful implementation that efficiently directs resources and monitors results at both the micro and macro levels. To this end, the Palestinian Export Council (PEC) will be established in order to facilitate the public–private partnership in elaborating, coordinating, and implementing the NES.

In particular, PEC will be tasked with coordinating the implementation of activities in order to optimize the allocation of both resources and efforts across the wide spectrum of stakeholders. Within this framework, the implementation of the ICT strategy also falls within the purview of PEC.

Such efforts will involve directing donor, private, and public sector organizations towards the various NES priorities in order to avoid duplication and guarantee maximum impact. Responsibilities will also include monitoring the results of activities and outputs, while at the same time recommending policies that could serve to enhance the realization of the strategic objectives. With a 360 degree view of progress, the Council will be best-placed to manage funding and provide regular reports to donors and stakeholders. Moreover, PEC will play a key role in recommending revisions and updates to the strategy so that it continues to evolve in alignment with the State of Palestine's changing needs.

IMPLEMENTATION PARTNERS – LEADING AND SUPPORTING INSTITUTIONS

A number of institutions will play a key role in the implementation of the PoA for the ICT sector. These are institutions that have the overall responsibility for successful execution of the strategy, as well as support institutions that are active partners but not leading institutions. Each institution mandated to support the export development of the ICT sector is clearly identified in the strategic plan of action.



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THE STATE OF **PALESTINE**
NATIONAL EXPORT STRATEGY

PLAN OF ACTION

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Strategic objective 1: Enhance the business environment for the ICT sector to support and enable the industry.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures2	Means of verification3	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
1.1 Support the sector effectively through enabling policies and legislation (especially ICT and labour-related).	1.1.1 Gap analysis. Conduct a gap analysis of digital legislation (i.e. digital signatures, data protection, online payments etc.), taking into account existing draft legislation prepared by MoTIT, to identify areas where pro-industry improvements can be made. Multiple issues have been identified in the MoTIT Policy Statement and in the PITA 3-year plan.	3	PITA, MoTIT	Conduct a gap analysis (study) of current and planned digital legislation	Study completed	PITA	MoTIT, Ministry of Justice (MoJ), MoNE	PITA (USAID project), MoTIT revision/drafting process	25 000
	1.1.2 Policy and legislative recommendations and related awareness raising. Based on identified gaps in digital legislation (1) elaborate specific policy recommendations including legislative text to align digital legislation with the long-term requirements of the ICT sector (and the overall digital economy) and (2) develop related policy paper(s) to form the basis of an advocacy and awareness-raising campaign (target: policy-makers, industry, consumers). To be aligned with PITA's ongoing/planned advocacy/awareness-raising activities.	3	PITA, MoTIT, companies, ICT professionals	Elaborate specific policy recommendations; develop related policy paper	Set of recommendations (paper); policy paper(s)	PITA	MoTIT, MoJ, MoNE, PalTrade	PITA, MoTIT	50 000
	1.1.3 Enact labour laws conducive to ICT. Conduct a gap analysis and advocacy campaign for labour laws conducive to ICT (balancing company and employee interests), in particular regarding gender and special needs, to increase the pool of talent in ICT, in particular by the inclusion of women and special needs individuals, and thereby to drive input cost down.	2	Women, PITA, companies	Gap analysis; advocacy campaign	Gap analysis (study) completed; advocacy campaign elements performed (e.g. number of events held, papers disseminated, etc.)	PITA	PalTrade, Ministry of Women's Affairs, MoTIT		10 000 Gap analysis; 12 000 advocacy
	1.1.4 Non-compete clauses. Advocate the avoidance, elimination or limitation of non-compete clauses in employment contracts of ICT professionals in the Palestinian ICT employment market. ICT professionals need to be better able to change jobs with/at different companies in the local market. This will also be a safeguard not to stifle knowledge acquired from being of benefit to hiring companies and create opportunities for others to get in the job market. Explore the possibility of legislative/regulatory intervention limiting non-compete clauses (e.g. to a maximum duration of x months post-termination), and implement if feasible.	2	ICT professionals, ICT companies	Advocacy/awareness-raising campaign; analysis (study) of possible legislative/regulatory intervention; regulatory/legislative action	Campaign elements performed (e.g. number of meetings on the issue; number of communications); study completed; new/revised draft law/regulation	MoL	MoTIT, ICT professional associations and entrepreneurs		12 000 Advocacy; 12 000 (possible legislative intervention)

Strategic objective 1: Enhance the business environment for the ICT sector to support and enable the industry.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures2	Means of verification3	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
1.1 Support the sector effectively through enabling policies and legislation (especially ICT and labour-related).	1.1.5 Staff stock options and other remuneration issues. Allow for/advocate the use of staff stock options as a loyalty incentive programme in lieu of a (only) salary based reward system for employees' level of effort.	2	Venture capital, start-ups, entrepreneurs, companies, ICT professionals	Advocacy/awareness-raising campaign	Campaign elements performed as appropriate (materials developed; number of meetings held; etc.)	MoNE	Ministry of Finance (MoF), capital markets, PIPA, PalTrade	Venture capital companies	12 000 Advocacy
1.2 Improve the efficiency of administrative procedures to open/operate an ICT business.	1.2.1 Bureaucracy. Reduce burdensome bureaucracy systematically, e.g. reduce the registration legal fees/costs incurred to register and close a company in order to make it more efficient to formalize ICT start-up businesses in the State of Palestine. Automation and optimization of security clearance procedures to be considered.	2	Entrepreneurs, start-ups, ICT companies	Public–private sector roundtable/consultation on the issues; reform action (government)	Roundtable/consultation held; procedures revised; possibly automation implemented	MoNE	Private Sector Coordination Council, PalTrade, PITA	Venture capital companies	12 000 Advocacy
1.3 Improve and use tax, investment and capital markets laws and practices to raise investment and enable exit strategies for investors.	1.3.1 PIPA law – tax break for ICT companies. Raise awareness on the availability and benefits of the PIPA law clauses for ICT companies (income tax breaks if they hire a minimum of five employees). Advocate for the consequent use of the clause and full cooperation by the authorities. Analyse weaknesses in the law and advocate for their elimination (e.g. requirement for employees to hold degrees in ICT).	2	Entrepreneurs, start-ups, ICT companies	Advocacy/awareness-raising campaign; analysis (study) of weaknesses	Campaign elements implemented as appropriate (e.g. events, electronic information tool for PITA, PIPA websites, etc.)	PIPA	PITA, PalTrade, MoTIT	Venture capital companies	12 000 Advocacy
	1.3.2 Additional tax breaks for ICT start-ups. Advocate for and provide tax breaks/tax holidays for ICT start-ups to improve cash flow, a key issue/risk for start-ups, particularly in the ICT sector.	2	Entrepreneurs, start-ups, ICT companies	Advocacy campaign; implementation of tax breaks	Campaign elements performed; tax breaks implemented; tax breaks used by qualifying start-ups	MoNE	MoF, Palestine Capital Markets Authority, incubators/accelerators	Venture capital companies	20 000 Advocacy/analysis
	1.3.3 Capital gains tax on Initial Public Offerings. Examine the possibility of, and if possible move towards, removing capital gains tax on Initial Public Offerings in the area of ICT.	2	Entrepreneurs, start-ups, ICT companies	Analysis (paper, consultations); regulatory action	Analysis paper; consultations held; regulatory action performed; number of Initial Public Offerings	MoNE	MoF, Palestine Capital Markets Authority, incubators/accelerators	Venture capital companies	20 000 Advocacy
	1.3.4 Preferred equity. Advocate for and improve (on the policy/legislative level) the possibilities for preferred equity share (type of shareholding stock) in order to protect the rights of investors. Further customized forms of stock should be explored to meet investor needs. This will make it easier for entrepreneurs to access angel, seed and venture capital funding while allowing such investors the right to safeguard their investment even if they are minority stakeholders.	2	Venture capital, start-ups, entrepreneurs, companies, ICT professionals	Analysis of possible action; advocacy campaign; regulatory action (if needed)	Analysis performed (paper); legislative/regulatory changes; use (uptake) of forms of preferred equity	MoNE	Venture capital companies		12 000 Advocacy

Strategic objective 1: Enhance the business environment for the ICT sector to support and enable the industry.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures2	Means of verification3	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
1.3 Improve and use tax, investment and capital markets laws and practices to raise investment and enable exit strategies for investors.	1.3.5 Foreign ownership. Advocate for and improve (at the policy/legislative level) the possibilities for foreign ownership generally or specifically in the area of ICT in order to increase diaspora and other foreign investors' participation in company establishment and growth.	2	Venture capital, start-ups, entrepreneurs, ICT companies, ICT professionals	Advocacy/awareness-raising campaign; legislative changes	Campaign elements performed; draft reform legislation prepared; reform legislation implemented; number of new foreign investors	MoNE	PITA, MoTIT		12 000 Advocacy
1.4 Develop special infrastructure for FDI in ICT.	1.4.1 Special zones/'tech parks'. Develop special combined physical and legislative/regulatory infrastructure such as 'tech parks' (special zones) that would grant companies tax-free treatment on their imports (including hardware), exports and income and preferential access to, and price treatment by, utilities and other services (e.g. telecoms, electricity), including through subsidies. This should include an analysis of previous attempts to create such structures.	3	As above + investors	Needs assessment; special zones legislation/regulation; 'tech park(s)'	Reform legislation/regulation drafted; 'tech park(s)' established; number of companies established in 'tech parks'	MoNE	MoTIT, PITA, capital market, PalTrade		30 000 Analysis and drafting; 300 000 to 500 000 pilot
1.5 Increase the level of trust and build-up of capital, i.e. to attract FDI, through improved IPR protection (TRIPS-aligned IPR laws).	1.5.1 IPR laws. Promote the development, adoption and awareness of, WTO TRIPS-aligned laws in view of the need of the ICT industry to improve the level of trust of foreign investors in investing in the State of Palestine, including MNEs. Includes review and assessment (including impact assessment) of existing draft legislation on industrial property and copyright & related rights, and of prior analyses conducted under multiple projects. Promotional activities should build on recent MoNE/MoC campaigns.	2	Entrepreneurs, start-ups, PITA companies, MNEs, ICT professionals	Review of all IPR legislation and practice (current and draft) and prior analyses; recommendations for reform (draft text); awareness-raising campaign	Report/study (review); recommended legislative texts; new/revised laws implemented; campaign elements performed	MoNE (industrial property), MoC (copyright & related)	MoJ, PalTrade, PITA	Ongoing development of draft legislation on copyright (at MoC) and industrial property (at MoNE); related awareness-raising campaigns (some donor-financed, e.g. USAID/ICI Project)	100 000
	1.5.2 IPR courts. Upgrade the ability of Palestinian courts to adjudicate IPR cases. The court system is currently not capable of judging cases on IPR disputes in the ICT and software industry. Capacity-building for judges specifically on ICT-related IPR issues will increase the level of trust of investors in the legal environment.	2	Entrepreneurs, start-ups, PITA companies, MNEs, ICT professionals	Curriculum development for trainee judges; training for judges	Curriculum upgrades; number of judges/trainee judges trained; number of IPR cases adjudicated	MoJ	MoNE, MoTIT	Multiple training/capacity-building programmes for judiciary – potential synergies to be assessed	50 000 Capacity-building

Strategic objective 2: Enhance the ICT business supply-side to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
2.1 Improve the quality and suitability of human resources for the ICT industry.	2.1.1 Tertiary education – curricula. Engage industry in curriculum development based on a market needs programme so that students can be more productive after their graduation and be fully in tune with technology trends and market needs. This should be based on an analysis of best-of-class tertiary education institutions and their methodology for understanding industry needs.	3	Students, professors, start-ups, ICT companies	Curriculum development (based on best-of-class analysis); related coordination/consultation mechanisms	Curriculum developed and implemented; survey of companies having hired new graduates	MoEHE	MoTIT, PITA, PalTrade, MoL, universities	PITA programmes	450 000
	2.1.2 Tertiary education – internship programme(s). Develop and exploit industry linkages to develop quality internship programmes to enable students to gain practical training in what would be expected from them upon graduation, to complement the theories they acquire in class and to enable companies to find suitable staff. Internship programmes could and should include an international dimension (e.g. placement in European companies) if possible.	3	Students, professors, start-ups, ICT companies	Development of internship programme; support measures for programme (including subsidies, stipends etc.)	Programme developed; support measures implemented (e.g. number of stipends provided); survey of interns and hosts; survey of companies hiring graduates; number of interns finding qualified jobs	MoEHE	MoTIT, PITA, PalTrade, MoL, universities; Private Sector Coordination Council	PITA programmes	200 000 annually
	2.1.3 Academic exchange. Devise and implement a programme for academic exchange at the PhD/professor level to attract high-quality foreign academics as teachers at Palestinian universities in order to expose students to recent technology research and trends. Create academic opportunities, especially for diaspora academics who may partly re-settle in the State of Palestine.	1	Students, professors, start-ups, ICT companies	Development of exchange programme; implementation of exchange programme	Programme developed and implemented; number of academics exchanged; number of classes held by/students benefitting from high calibre foreign academics	MoEHE	Universities, PITA, MoTIT, PalTrade		250 000 (Initially, plus yearly support depending on size)
	2.1.4 Student placement. Develop/support student placement programmes at institutions graduating ICT professionals. The State of Palestine is currently graduating 1,600 – 2,000 per year, of whom only up to 500 will find a specialized ICT job in the State of Palestine under the current capacity. Improved student placement at universities with ICT programmes is needed to increase the prospects of graduates and the matching of industry needs with skills.	2	Students, professors, start-ups, ICT companies	Development of placement programme; support measures including financing assistance	Placement programme developed and implemented; number of students successfully placed; surveys of hiring companies and recent graduates	MoEHE	Universities, PITA, MoTIT, Palestinian Central Bureau of Statistics (PCBS)		20 000 (awareness-raising and initial programme); annual support based on size
	2.1.5 Female and special needs human resources. Since there is minimal participation of females and people with special needs in the industry, the promotion of gender and special needs participation will also increase the availability of qualified resources for export resource scalability and reduce the cost of human resource inputs.	2	Women and disabled segment of ICT professionals, ICT companies	Awareness-raising/advocacy campaign	Campaign elements performed; number/share of female/special needs employees; survey of companies and female/special needs employees (results; satisfaction)	MoL	MoNE, Ministry of Women's Affairs, PCBS, MoTIT, PITA		20 000 Awareness-raising

Strategic objective 2: Enhance the ICT business supply-side to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
2.1 Improve the quality and suitability of human resources for the ICT industry.	2.1. 6 In-job training. Conduct/support the conduct of specialized in-job training to update/upgrade qualifications/certifications of ICT employees in order to improve the quality of products and methodologies, especially those used in developing software. This is particularly relevant at the junior level at the beginning of employment.	2	ICT professionals, companies	Development/promotion of in-job training programmes/opportunities; support measures including subsidization	Number of trainings conducted; number of employees/companies having benefited	PITA	MoL, Ministry of Planning and Development; PCBS, MoTIT, training companies. MoEHE, universities		350 000
	2.1.7 Incentives for ICT professionals. Provide incentives, including tax incentives, to ICT professionals to continue their professional self-development plans. This will also create a market for ICT training houses.	2	ICT professionals, companies	Design and implementation of incentives	Number of professionals taking up incentives; survey of professionals/companies	MoF	PITA, PIPA, MoTIT, PCBS		12 000 Advocacy plus incentives
2.2 Increase infrastructure efficiencies that can support ICT exports.	2.2.1 Broadband access and costs. Reduce/subsidize the broadband access tariff for ICT companies and professionals to reduce the input cost to the value chain of the industry. This includes improvement to physical infrastructure (landlines, wireless) and negotiations on Palestinian access to 3G/4G capacity, the encouragement (e.g. through local government) of fibre-to-home/business networks, as well as energy saving programmes and work on developing alternative sources for electrical energy as the cost of electricity and fuel is continuously on the rise.	3	Companies	Reduction of broadband access tariffs and physical infrastructure specifically for the benefit of ICT companies/professionals; negotiations with Israel; continuation/upgrade of related MoTIT-led campaign	Reduction of rates; improvements in access; 3G/4G access established	MoTIT	PALTEL, Wataniya, wireless ISPs PTRA if active PITA, universities	ISOC Palestine (Internet Society, Palestine Chapter)	20 000 (campaign); subsidies/price support as appropriate
	2.2.2 Payment gateway. Establish a payment gateway, which is a crucial piece of infrastructure to enable government e-services and e-commerce applications.	3	Everyone	Establishment of Palestinian payment gateway	Gateway established; number of companies using it	Palestine Monetary Authority	PITA, MoF, Banking Association	Palestine Monetary Authority	TBD (work is underway additional financing need to be determined)
2.3 Develop the ability to attract FDI to ICT.	2.3.1 Partnerships with MNEs. Foster/facilitate business relationships for Palestinian companies to become MNE Certified Implementing Partners for companies such as SAP, Oracle, Cisco, etc. Palestinian companies to train and qualify to become implementing partners of renowned ICT software, including customizing it.	3	ICT companies, PITA	B2B promotion activities; targeted support for training, hiring, other, including through subsidization	Number of Memoranda of Understanding signed	PITA	MoNE, MoTIT PalTrade		500 000 annually
	2.3.2 Salary survey/unit labour costs. Conduct a salary survey for the industry regarding the different ICT professional positions, in both absolute and relative terms (unit labour costs), to remain in control of the national cost differentiation factor, if any.	1	Venture capital, start-ups, entrepreneurs, companies, ICT professionals	Conduct a salary survey in ICT industry; analysis of unit labour costs	Survey conducted; results discussed (workshop or other), possibly published	PCBS	PITA, PalTrade, MoNE	Venture capital companies	12 000

Strategic objective 2: Enhance the ICT business supply-side to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
2.4 Develop linkages with other economic sectors to increase the efficiency and effectiveness of these sectors and develop local markets for ICT products.	2.4.1 Local ICT diffusion/linkages. Develop and implement local ICT diffusion programmes (e.g. Demo Days) targeting local market segments for linkages, especially government, including local municipalities (esp. education and health) and business sectors such as financial services, tourism, accounting and audit, and others.	3	ICT companies, PITA, other business sectors, government	Study on priority linkages to be developed; demo/communication events; targeted support to joint product/service development (including subsidies, incentives)	Number of 'linkages' projects implemented by businesses/government (survey)	PITA	MoTIT, PalTrade, chambers of commerce MoNE, PCBS	PITA	500 000 annually

Strategic objective 3: Enhance ICT business development and market entry to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
3.1 Improve the brand for the Palestinian ICT sector in order to change perceptions, develop awareness and make buyers trust the quality value proposition.	3.1.1 Promotional and marketing material (plus branding). Develop collective promotional and marketing material for both local and international markets (including web and mobile applications) to communicate the value proposition statement for each subsector in the ICT industry that is identified as having export potential. Ideally this should be done in combination with developing a brand identity, or brand identities for subsectors (such as 'Palestine Gaming', 'APPlied Palestine' or the like). PITA's prior/ongoing work on branding (3-year plan) will form the basis of any further work.	2	PITA, PalTrade, companies	Development of promotional and marketing material; participation in international exhibitions	Promotional materials developed; number of participations/participants in international events; survey of companies to evaluate impact of brand identity on sales	PITA	MoTIT, PIPA, PalTrade, MoNE, PCBS	PITA strategy	100 000 (to be assessed against ongoing work at PITA for complementarity)
	3.1.2 Marketing and sales capacity-building. Develop marketing and sales capacity-building programmes so ICT companies can better promote their products and services, in particular to international markets. PITA is working on the matter under its Enterprise Development pillar (3-year strategy).	3	PITA, PalTrade, companies	Capacity-building programme; implementing capacity-building activities	Capacity-building programme developed; number of companies benefiting from improved marketing/sales capacity (survey)	PITA	PalTrade, MoTIT	PITA (Enterprise Development Pillar) PalTrade/MoNE Trade in Services Project (Export Marketing Workshops 2013)	100 000 (TBC)
	3.1.3 ICT Demo Centre. Develop an ICT Demo Centre to serve as a key stop for foreign business (and donor) delegations. The centre should demonstrate private and public sector achievements and capabilities, in particular with regard to innovation and creativity. This should be complemented by a parallel demo presence on the Internet and in social media fora.	2	Entrepreneurs, start-ups, companies, government employees, government agencies	Establishment of ICT Demo Centre	Number of visitors at Demo Centre; number of contracts signed as a result of visits to the Centre (survey)	PITA	MoTIT PalTrade MoNE, PCBS		300 000
3.2 Increase Palestinian exposure/access to trade and market information and market access programmes.	3.2.1 Market survey(s). Conduct, and regularly update, market surveys of identified target markets (local and global) to enable Palestinian ICT companies to better understand, assess, approach and service these markets. This should be done by supporting PITA's existing/planned work in this area as suitable, and complementing it as needed.	3	PITA, PalTrade, companies	Market surveys	Number of market surveys completed/updated	PalTrade	MoTIT, PCBS, PITA	PITA studies 2013	50 000 (pilot surveys)
	3.2.2 Diaspora and embassy/consular mission involvement. Actively seek diaspora and embassy network participation in communicating business opportunities to ICT companies. Enable a platform of cooperation between diaspora and ICT companies in the State of Palestine, including the organization and execution of trade missions to identified target market countries. This should build on PITA's 'Palestinian Global ICT Network' initiative.	3	PITA, PalTrade, companies	Database of diaspora ICT network and development of platform (both building on PITA's 'Palestinian Global ICT Network' initiative); ICT-specific commercial diplomacy approach/programme at embassies	Database developed and maintained; level of participation of diplomatic offices in sharing trade information; number of business opportunities generated through overseas Palestinians (company survey)	Ministry of Foreign Affairs	PITA, PalTrade, MoTIT, MoNE, PCBS	PITA's 'Palestinian Global ICT Network' initiative	150 000 (ability to build on PITA initiative needs to be assessed)

Strategic objective 3: Enhance ICT business development and market entry to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
3.3 Develop a clustering approach in marketing and product development.	3.3.1 Clustering (within ICT industry). Analyse and monitor relevant value chains in the ICT industry and promote strategic clustering approaches in areas/situations where companies can complement (not compete against) each other in offering and providing solutions to clients. This should include, where appropriate, clustering with foreign providers to close gaps, offer competitive pricing, etc.	2	PITA, PalTrade, companies	Analysis/monitoring of value chains with a view to identifying clustering opportunities; promotion of clustering (awareness, advocacy)	Campaign activities performed ; number of clusters formed; number of successful bids by clusters (surveys)	PITA	PalTrade MoNE, MoTIT, PCBS		50 000
	3.3.2 Cluster pilot(s). Design, launch and support 1–3 pilot cluster(s) between Palestinian ICT companies (West Bank – West Bank or ideally West Bank – Gaza (which may show interesting cost effectiveness opportunities)). Publicize results as a success story.	2	PITA, PalTrade, companies	Pilot cluster(s); publication of results	Pilot cluster(s) designed and launched; number of participating companies; experiences of participating companies such as increased sales etc. (surveys); results publicized	PITA	PalTrade, chambers of commerce, MoTIT, MoNE, PCBS		50 000
	3.3.3 Clustering (between ICT and other industries/sectors). Analyse potential for clustering between ICT and other companies (e.g. banks, accountants, tourism agencies) and promote strategic clustering approaches.	1	PITA, PalTrade, ICT companies, other companies	Analysis/monitoring of value chains with a view to identifying clustering opportunities; promotion of clustering (awareness, advocacy)	Campaign activities performed; number of clusters formed; number of successful bids by clusters (surveys)	PITA	PalTrade MoNE, MoTIT, other professional/business associations, chambers of commerce		50 000
	3.3.4 Cluster pilots (of ICT with other companies). Design, launch and support 3–5 pilot clusters between Palestinian ICT companies and other companies. Publicize the results as a success story.	1	PITA, PalTrade, ICT companies, other companies	Pilot cluster(s); publication of results	Pilot cluster(s) designed and launched; number of participating companies; experiences of participating companies such as increased sales etc. (surveys); results publicized	PITA	PalTrade MoNE, MoTIT, other professional/business associations, chambers of commerce		50 000
	3.3.5 Joint marketing company/vehicle. Test the feasibility of establishing a marketing company, as a joint venture between Palestinian ICT companies, to represent the companies and conduct business development on their behalf. Have this company open branch offices and representation in Israel, EU, North America, Libya and the Gulf region (based in Dubai with accessibility to Saudi Arabia).	1	PITA, PalTrade, ICT companies (plus potentially other companies/clusters)	Feasibility study; establishment of marketing company; opening of branch offices	Study conducted; marketing company established; branches opened; number of new/renewed contracts (surveys)	PalTrade	PITA, MoNE, MoTIT, PCBS		20 000 (feasibility study)

Strategic objective 3: Enhance ICT business development and market entry to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
3.3 Develop a clustering approach in marketing and product development.	3.3.6 Establish a National Export Council (NEC) for ICT. Establish and launch a National Export Council for the ICT private sector, to include champions from the public sector as well. The Council will monitor and evaluate progress of market access development locally and internationally. The NEC for ICT should serve as an open platform for systematic and regular monitoring and discussion of opportunities for synergies/clustering with other industries, and should seek active dialogue with such industries/sectors.	2	ICT companies, PITA, PalTrade, other industries	Establishment and launch of ICT NEC	NEC established and launched; new/improved business opportunities (survey)	PalTrade	PITA, MoNE, MoTIT, PCBS		20 000 Seed funding for the Council
3.4 Empower and assist companies to increase their operations and exports.	3.4.1 Diversification of market access channels. Assist ICT companies in diversifying market access channels (e.g. identify foreign buyers of Palestinian ICT services; support marketing and sales of ICT products and services developed by Palestinian ICT companies (including in clusters with other industries); support the creation of commercial accounts and the Apple and Google Mobile Application stores; etc.).	3	ICT companies, PITA, PalTrade	Assistance to ICT companies (various measures)	Assistance measures performed; increased sales (survey)	PalTrade	PITA, MoNE, MoTIT, PCBS		100 000
	3.4.2 Scaling. Assist companies to scale current exports of ICT products and access new markets by organizing/supporting the organization of targeted events in (including individual business visits to) these countries.	3	ICT companies, PITA, PalTrade	Assistance to ICT companies (various measures)	Assistance measures performed; increased sales (survey)	PalTrade	PITA, MoNE, MoTIT, PCBS	PITA (Enterprise Development Pillar)	250 000
	3.4.3 New products to old markets – alignment with 'ecosystems'. Support strategic alignment with major foreign/multinational ecosystems. Oracle, Microsoft and SAP and other MNEs are expanding their business in the Arab MENA emerging market. An alignment with the ecosystems of these companies is an opportunity for local Palestinian companies to become implementing partners, ideally for the region and not just locally.	2	ICT companies, PITA, PalTrade	Assistance to ICT companies (various measures)	Assistance measures performed; Increased alignments; increased sales (surveys)	PalTrade	PITA, MoTIT, MoNE, PCBS	PITA (Enterprise Development Pillar)	300 000 Annual R&D grant
	3.4.4 New products to old markets – mobile application outsourcing Support outsourcing in mobile applications. The global and regional markets in mobile outsourced applications are growing exponentially. These are the projects that governments, corporations and organizations outsource for their internal business process.	2	ICT companies, PITA, PalTrade	Assistance to ICT companies (various measures)	Assistance measures performed; number of new products; increased contracts/sales (surveys)	PalTrade	PITA, MoTIT MoNE	PITA (Enterprise Development Pillar)	300 000 Annual R&D grant

Strategic objective 3: Enhance ICT business development and market entry to better enable the industry to export.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
3.4 Empower and assist companies to increase their operations and exports.	3.4.5 New products to new markets. » Support the development and marketing of new products for new markets. It is apparent that enterprises and PITA are not exposed enough to new market opportunities. Options include, for example: » Games for Arabic speaking children and adults such as action games, educational games, etc.; » Islamic banking and insurance products for Europe and South East Asia; » BPO such as data entry, ICT call centres, accounting, insurance and other ICT value chain support options.	2	ICT companies, PITA, PalTrade	Assistance to ICT companies (various measures)	Assistance measures performed; number of new products/new markets; increased sales (surveys)	PalTrade	PITA, MoNE, MoTIT	PITA	300 000 Annual R&D grant
3.5 Increase the capacity of ICT companies through enterprise level technical assistance to increase their human resource competencies and product offering quality.	3.5.1 Capacity for trade missions. Conduct capacity-building programmes on how to successfully plan and execute trade missions, as companies have limited export knowledge. Specifically, develop capacity-building programmes for company employees on business development and market access, trade missions and internationalization generally.	3	ICT companies, PITA, PalTrade	Capacity-building activities on how to successfully plan and execute trade missions	Number of capacity-building workshops, participants, etc.; number of trade missions; Increased sales as a result (survey)	PalTrade	PITA, MoNE, MoTIT	PITA (Enterprise Development Pillar); PalTrade/MoNE Trade in Services Project (2013 Export Marketing Workshops; roadshows)	70 000
	3.5.2 Standards & certifications. Develop and implement standardization of, and certification for, methodologies, processes and products in order to increase the level of trust in the Palestinian ICT product offering.	3	ICT companies, PITA	Development of standards; promotion of their implementation; certification	Number of standards developed; uptake of standards by companies (number of certifications; survey)	PSI	PITA, PalTrade, MoNE, MoTIT		500 000 annually

Strategic objective 4: Build the entrepreneurial capacities of the sector.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
4.1 Promote innovation and entrepreneurship in the ICT sector.	4.1.1 Entrepreneurship training/teaching. Build entrepreneurial capacity in the ICT sector by developing an ICT-focused entrepreneurship curriculum (example: Intel Entrepreneurship Programme) and by incorporating the entrepreneurial curriculum (or elements) into university curricula.	1	Entrepreneurs, incubators/accelerators including university incubators	Training programmes on entrepreneurship; curriculum (elements) on entrepreneurship for universities (possibly: lectures by foreign 'stars' on entrepreneurship)	Training programmes developed and made available; number of participants; curriculum (elements) developed and implemented in universities; number of companies citing impact (survey)	MoEHE	Incubators, accelerators, online for a, MoTIT, diaspora		70 000 (plus annually recurring 30 000)
	4.1.2 Procurement from start-ups. Have the Government commit to buying a certain percentage from local ICT start-ups to provide financing and cash flow through market-oriented incentives.	3	Start-ups, companies	Procurement from local start-ups	Share of local start-ups in government ICT expenditures	MoF	MoTIT, MoNE, PITA		3 000 000 Annual budget (but value for money so effectively 0 – 500 000)
	4.1.3 Supporting Incubators and accelerators. Develop a national support system/coalition to support incubators and accelerators. The system/coalition should, for example, spearhead a quality management programme for incubator/accelerator staff, develop linkages with mentors and angels networks, and launch/support a network of incubators for cross-fertilization. Diaspora potential in this context to be explored and used.	2	Incubators, entrepreneurs, start-ups	Forming of national support system/coalition; development of quality management programme; development of network of incubators/accelerators; monitoring and evaluation	Support system/coalition formed; quality management programme developed, disseminated and implemented; eventually/overall: number of companies/technologies/software developed through incubators and accelerators	MoNE	Incubators, accelerators, MoTIT, Private Sector Coordination Council, Business Angel Network	Various existing donor support to incubators and accelerators	50 000 Annual programme for monitoring & evaluation
	4.1.4 Regional/international linkages (incubators/accelerators). Develop links with regional and international accelerator programmes to develop entrepreneurial skills and bring them to international levels, and so start-ups can be exposed to international markets	2	Incubators, entrepreneurs, start-ups	Signature of regional/international partnerships	Number of regional/international linkages (incubators/accelerators) established; number of start-ups citing international links as important factors in their development (survey)	MoNE	PalTrade, Private Sector Coordination Council, Business Angel Network incubators, accelerators, MoTIT		25 000 annually
4.2 Develop innovative financial products meeting market needs.	4.2.1 Financial products for ICT businesses. Promote the development and use/availability of bank financial products for ICT exporters, avoiding the need for collateral other than contracts.	2	ICT companies	Development and promotion/implementation of financial products	Number of ICT companies able to obtain credit without traditional collateral	PITA	Banking Association, banks, Private Sector Coordination Council		12 000 Advocacy
	4.2.2 Other financing mechanisms. Systematically promote the institutionalization and availability of R&D funds, business angels, seed funding and venture capital by providing government commitments for funding/co-funding (e.g. matching grants).	2	ICT companies	Promotion/coordination/institutionalization; government commitments/matching grants	Measurable improvement in financing mechanisms (types, availability) (survey)	PITA	Government, Business Angel Network R&D Fund MoNE, MoF, diaspora, PCBS		500 000 Annual grants

Strategic objective 5: Build capacity to successfully conduct trade in services negotiations on ICT with Israel, the EU, GAFTA and other countries.									
Operational objective	Activities	Priority 1=low 2=med 3=high	Beneficiaries	Target measures	Means of verification	Leading implementing partners	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US$)
5.1 Build capacity for trade-in-services negotiations focused on ICT.	5.1.1 Trade in services (TIS) capacity-building. Train government officials and private sector representatives and champions on how to prepare for and conduct trade in services negotiations. This should also include training on WTO accession/membership and its consequences. This will build on the comprehensive training/capacity-building cycle conducted under the EU-funded PalTrade/MoNE TIS Project.	3	MoNE, PalTrade, PITA	Training; related materials/tools	Number. of trainings; number & satisfaction of participants (evaluation)	MoNE	PalTrade, MoTIT, PITA	TIS Project (PalTrade/MoNE)	20 000 (further capacity-building in addition to TIS project)
	5.1.2 Sectoral working group on services policy and negotiations. Establish, operate and support a sectoral working group for the ICT sector on TIS policy and negotiations.	3	MoNE, PalTrade, PITA, ICT companies, MoTIT	Appointment of the members of the sectoral working group; definition of its mandate and means; regular meetings	Meetings held, participation; meeting outputs (e.g. positions, reviews), negotiators	MoNE	PalTrade, MoTIT, PITA	TIS Project (PalTrade/MoNE)	N/A
5.2 Develop substantive negotiating positions on ICT.	5.2.1 Negotiating briefs, strategies and materials. Prepare negotiating briefs, strategies and materials (issues include, e.g., visas for Saudi Arabia and Libya, permits for Israel, etc.) based on countries identified in the NES and negotiating fora offering opportunities (e.g. GAFTA, EuroMed, WTO).	3	MoNE, PalTrade, PITA, ICT companies, MoTIT	Negotiating briefs; strategies; materials	Negotiating briefs; strategies; materials	MoNE	PalTrade, PITA, MoTIT	TIS Project (PalTrade/MoNE)	30 000 (sector-specific White Papers and other follow-up to TIS project)
	5.2.2 Position papers. Develop private sector position papers for TIS negotiations.	3	MoNE, PalTrade, PITA, ICT companies, MoTIT	Position papers	Position papers drafted; issues reflected in TIS negotiations	PalTrade	PITA, MoTIT, MoNE	TIS Project (PalTrade/ MoNE)	30 000 Position papers

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APPENDIX 1: LIST OF STAKEHOLDERS

Name	Organization	E-mail
Murad Tahboub	ASAL Tech.	info@asaltech.com
Hussein Yassien	Nasher	hyassien@enasher.com
Mohammed Alameh	Amaar Group	malameh@amaar.ps
Anas Abu Sara	PalTrade	aabusara@paltrade.org
Muhannad Hijjawi	PalTrade	mhijjawi@paltrade.org
Ramadan Badaha	Ministry of National Economy	ramadanb@met.gov.ps
Ahmed El Farra	Palinvest	aelfarra@palinvest.ps
Bashar Skaik	PalTrade	bskaik@paltrade.org
Nahed Jaber	Palestinian Standards Institution	njaber@psi.pna.ps
Florid Zurba	Ministry of Telecommunication and Technologies	florid@mtit.pna.ps
Isra'a Milhem	Ministry of National Economy	isra'am@met.gov.ps
Rayan Darwish	Ministry of National Economy	rayand@met.gov.ps
Muhanna Manasrah	Babilsoft	muhana@babilsoft.com
Maher Al-Tabbaa	GCCI	mtabbaa@hotmail.com
Laith Kasis	Team Coordinator	laithkassis@gmail.com
Anan Ghazi	MTIT	allanghazi@gmail.com
Yaser M. Waheidi	Ministry of Telecommunication and Technologies	Ywaheidi@mtit.pna.ps
Hassan Qasem	Dimensions	hassan@dimensions.ps
Abeer Hazboun	PITA	abeer@pita.ps
Rami Wehidi	Consultant	rami.wihaidi@athar.ps
Muhammed Musleh	PITA	mmusleh@pita.ps
Ala Aladdin	Intertech	ala@intertech.ps
Tareq Maayah	EXALT	tareq@exalt.ps
Sireen Sabi	Reach	sireen.sabi@reach.ps
Yousef Jabr	Reach	yousef.jabr@reach.ps
Saeed Zidan	Ultimit	saeed.zeidan@ultimitats.com
Rasha Salahiden	2isoftware	rasha@2ime.com
Jawad Abdelkarem	Ministry of Telecommunication and Technologies	jawadismail1972@yahoo.com
Dalia Qumseh	Ministry of National Economy	daliaq@met.gov.ps
Total	**29**	

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PALESTINE TRADE CENTER