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NATIONAL PROFILE OF THE INFORMATION SOCIETY IN PALESTINE, 2013



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Acronyms

ADNI	Arab Developer Network Initiative
ASREN	Arab States Research and Education Network
KOICA	Korea International Cooperation Agency
SEDEV	Soros Economic Development Fund
MEVCF	Middle East Venture Capital Fund
MTIT	Ministry of Telecommunication and Information Technology
OECD	Organisation for Economic Co-operation and Development
PALNREN	Palestinian National Research and Education Network
PAL TEL	Palestine Telecommunications Company
PICTI	Palestinian ICT Incubator
PIPA	Palestinian Investment Promotion Agency
PITA	Palestinian ICT Association of Companies
PITI	Palestinian ICT Capacity Building Initiative
PIX	Palestine Internet Exchange
PNINA	Palestinian National Internet Naming Authority
PSD	Partners for sustainable Development

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Introduction

The Palestinian Authority recognizes that building the information society (IS) as one fundamental aspect of the overall national sustainable development. The information society plays even a more important role in the case of a Palestine since the country faces heavy restrictions imposed by Israel. ICT can help bypass these restrictions and allow for economic growth and social development.

This report shows the extent of the efforts undertaken in Palestine, both in the public and private sectors, and also shows the impact of Israeli hegemony over the Palestinian economy, especially on aspects related to the Information Society.

For instance, the Palestinian government, led by the Ministry of Communications and Information Technology goes at a steady pace and with methodology towards building an active e-government. It is also seeking to obtain the necessary support to connect the Palestinian schools to the Internet, and raise the global connectivity in the country.

Perhaps the information society development is more visible in the private sector through the success of the Palestinian IT companies. A success that encouraged global companies, such as Cisco and Google, to invest in the Palestinian market.¹

Notably, the foreign investment comes to Palestine in a multiplicity of forms, and it is no longer limited to aid money through NGO's or development programs. International companies started to invest in Palestinian companies either directly or through venture capitals and seed funding.

This emerging activity has already begun to influence positively the Palestinian economy. According to the Ministry of Communications and Information Technology, the activity of the ICT companies is accounted for 17 per cent of the total activity in the service sector, and 30 per cent of it is oriented abroad, notably to Israel through outsourcing contracts, or to the Gulf states, Jordan and the United States.²

It should be noted that this report was limited to the study of the aspects of the Information Society developed by the Palestinian authority in the West Bank. Similar efforts are also developed in parallel in the Gaza Strip. It is unfortunate to see such duplication of efforts in a country already suffering from external pressure and severe shortage of resources. Uniting the efforts of all Palestinian parties will help a faster and more sustainable development of the information society in the country.

¹ More information about the role of Cisco in the Palestinian ICT sector is available in (White, et al., 2012).

² Resource: <http://www.pcbs.gov.ps/Portals/Rainbow/Documents/CONCUR09-11E.htm> (Accessed in Sep. 2013)

I. THE ROLE OF THE GOVERNMENT AND ALL STAKEHOLDERS

A. NATIONAL INFORMATION SOCIETY POLICIES AND E-STRATEGIES

The Ministry of Communications and Information Technology has developed, through a broad partnership with the private sector and the academics, the ICT Strategic Plan for the years 2011-2013. The plan was adopted in 2010; its objectives targeted also the postal sector in addition to the ICT sector.³

The Ministry of Communication and Information Technology prepares in 2013 a new ICT strategic plan for the years 2014-2016. It formed for this purpose a national team composed of experts from the private and academic sectors and of activists from civil society and consumer protection associations.⁴

B. PUBLIC/PRIVATE PARTNERSHIP (PPP) OR MULTI-SECTOR PARTNERSHIP (MSP)

This research showed clearly that the Palestinian government is keen to create a sustained dialogue with all stakeholders, concerning both the development of the country ICT strategies, and the implementation of action plans related to these strategies. As mentioned before, representatives from universities and private companies as well as from non-governmental associations contributed to the formulation of the ICT strategy for the years 2011-2013. A similar team is working on the coming strategy 2014-2016

C. ROLE OF NON GOVERNMENTAL ORGANIZATION

Mercy Corps is one of the leading NGO's that play an active role in supporting the ICT sector in Palestine. In addition to the humanitarian assistance it offers since 1986, the organization supports many studies targeting the IT sector in Palestine. As an example, a recent study supported by Mercy Corps, and issued in April 2013, analyzed the sector in order to help Palestinian entrepreneurs make decisions concerning the most promising foreign markets and software products that the Palestinian companies should target to develop their activities.⁵

In 2011, Mercy Corps launched, in partnership, with Google.org and the Source of Hope Foundation, the Arab Developer Network Initiative (ADNI) to connect young Palestinians programmers with training and career opportunities in the global digital marketplace.⁶ In 2012, the organization inaugurated an incubator in the Gaza Strip under the name of Gaza Sky Geeks.⁷

The first local development foundation was founded in the year 2008. It is the Palestinian Telecommunication Group Foundation, an initiative of the Palestinian Telecommunication Group (Paltel). The foundation supports many activities to boost the ICT sector, for instance by providing equipments and free internet access to local associations with limited resources.⁸

³ The Palestinian ICT Strategy (Ministry of Telecommunication and Information technology, 2010)

⁴⁴ Source: the ministry of telecommunication and Information Technology

⁵ Technology Sector Development Report and Recommendations (SOLUTIONS FOR DEVELOPMENT CONSULTING CO., April 2013)

⁶ <http://www.mercycorps.org/tags/adni>

⁷ http://www.bizjournals.com/portland/morning_call/2013/06/how-mercy-corps-is-incubating.html

⁸ Activities of the foundation can be seen at: http://www.pgfoundation.ps/?page_id=286&lang=en

II. ICT INFRASTRUCTURE

A. MARKET STRUCTURE AND REGULATORY LANDSCAPE

The development of the Palestinian ICT market is limited because of the political and economic factors that surround it. The Ministry of Communication and Information Technology is responsible for regulating the market and issuing licenses for companies operating in it.

One company provides fixed telephone services in Palestine, it is Paltel, which is one of the Palestinian Telecommunication Group. Another company of this group: Jawwal offers mobile phone services. A second operator entered the mobile phone market under the name of "Wataniya" at the end of 2009. In addition, the Palestinian market suffers from piracy induced by several Israeli companies that are providing service within the Palestinian territories without legal authorization. A situation that causes losses to both the Palestinian companies and the authority, as it could not collect the fees and taxes due to this activity.⁹

The Palestinian Telecommunication Group provides also the ADSL Internet service through its subsidiary "Hadara". By the end of 2010, the group started to allow other Internet providers to offer their services via ADSL by adopting the Bit Stream Access technology. This has helped to open the Internet market and promote a positive competition climate. Global Com is another example of the Palestinian market openness. The company obtained the necessary licenses to provide broadband Internet and voice over IP (VoIP) services since 2008. It offers at present high speed Internet services through WiFi networks, and covers several cities in the West Bank.¹⁰

B. PENETRATION OF ICT SERVICES

According to the Arab Advisors Group, the number of fixed lines in Palestine attained by mid 2013, 402,000 lines, representing a penetration rate of 9.20 per cent. The number of mobile phone lines reached in the same period, 3,347,000 lines with a penetration rate of approximately 77 per cent, and a growth rate over the previous year that exceeds 10 per cent. These figures include the lines provided by Israeli companies that operate illegally on the Palestinian land, and which account for approximately 3 per cent of the market.¹¹

The International Telecommunication Union ITU estimates the number of Internet users in Palestine by 2.865 million users, which represents an access rate in the country of almost 68 per cent.¹² A report by the Arab Advisors Group indicates that ADSL lines are the primary access medium to the Internet. The number of ADSL subscriptions reached 203,682 at by mid 2013, with a growth rate of 17.1 per cent from the previous year.¹³

Mobile Internet using 3G technology is available in Palestine only through Israeli companies infringing on the Palestinian market, since Israel still refusing to grant the Palestinian operators the frequencies needed to operate 3G services.

C. ICT CONNECTIVITY

All segments of the Palestinian society don't have access to the Internet because of many political and economic obstacles that impede its spread. However, the Palestinian authority, companies, and NGOs are

⁹ (Madar for Research and Development, 2012)

¹⁰ Global Com services <http://www.globalcom.ps/solution%20and%20services/wirless-internet> (Page accessed in Oct. 2013)

¹¹ An overview of Palestine's cellular market by end of June 2013. AAG, August, 2013.

¹² Ibid.

¹³ An update of Palestine's fixed Internet market by end of June 2013, AAG, Sept. 2013.

making a lot of efforts to improve the situation. Some statistics show the evolution as the Central Bureau of Statistics and the Ministry of Communications and Information Technology announced in May 2013 that 55 per cent of young people (aged between 15 and 29 years) make use of the Internet, compared with 20 per cent in 2004. Internet cafes are the main access points of the population.¹⁴

A study published by the UNESCO with the Abu-Ghazaleh Foundation in April 2013 indicates that not more than 20 per cent of public schools are connected to the Internet.¹⁵ The Ministry of Education launched in August 2013, in cooperation with the Palestinian Telecommunication Group, the program "Abjad Net" that aims to connect to the Internet during the next five years, 1,000 schools in the West Bank and Gaza.¹⁶

Most of the Palestinian universities are connected to the Palestinian National Research and Education Network (www.palnren.net) which is a high speed fiber-optics network.¹⁷ This national network is connected to the Euro-Mediterranean network via the project EumedConnect. It is also part of the Arab States Research and Education Network (ASREN).¹⁸

D. INTERNET INFRASTRUCTURE

The Palestinian backbone is connected to the Internet via Jordan, Egypt, and the United Kingdom. There are microwave connections with Jordan and Israel. Palestine is still not connected to any submarine cables so far. The Palestinian Telecommunication Group announced in September 2012 a partnership with the Turkish company Pantel International AG to connect Palestine to a submarine cable.¹⁹

Palestinian mobile operators are still unable to provide 3G services because of the ban of Israel on the needed frequencies. The Internet service providers offer some alternative solutions through the deployment of WiFi networks.²⁰ Other alternatives which are based on the deployment of WiMAX networks are also facing the Israeli ban on the necessary equipments.²¹

The Internet Society-Palestine (ISOC-PS) has launched in 2013 with support of the Ministry of Communication and Information Technology, the Palestinian Internet Exchange, called PIX. So far, seven service providers are linked to it.²²

A study by the Arab Advisors Group estimates the international bandwidth in Palestine in 2013 to be 7,755 megabits per second, with a growth from last year equal to 16.3 per cent.²³

¹⁴ <http://www.pcbs.gov.ps/site/512/default.aspx?tabID=512&lang=ar&ItemID=791&mid=3265&wversion=Staging>

¹⁵ (Talal Abu Ghazaleh Organization - UNESCO, 2013)

¹⁶ The launching of "Abjad Net" <http://www.mohe.gov.ps/ShowArticle.aspx?ID=1123>

¹⁷ For more information: <http://www.palnren.net/ar>

¹⁸ <http://www.asrenorg.net/about/partners-and-members/national-networks.html>

¹⁹ Palestine Telecom Market Landscape, AAG, Feb. 2013.

²⁰ Global com is ready to launch mobile Internet, 28 Aug. 2012, <http://alqudsalraqmi.ps/atemplate.php?id=149> (accessed in Sept. 2013)

²¹ <http://pcit.ps/services/maxnet/>

²² http://isoc.ps/ISOC_BoD_on_PIX-17Jul2011.pdf

²³ Palestine Telecommunications Market Indicators and Projections, AAG, July 2013.

III. ACCESSIBILITY TO INFORMATION AND KNOWLEDGE

A. PUBLIC DOMAIN INFORMATION

Practically, all the Palestinian ministries and many public institutions have an electronic presence through web sites and social networks. They offer through these media, information and news of interest to the Palestinian citizens.

Moreover, many Palestinian organizations aim to document the history and the events that led to the current situation in Palestine, in order to revive and preserve the Palestinian memory. The Center for Palestinian Residency and Refugee Rights “Badil” is an example. Its web site is very rich and it documents the Foundation's activities.²⁴

Most Palestinian universities have electronic libraries, some of which allow free access to resources to students as well as to the public.²⁵ Wafa news agency also offers through its National Information center, an electronic library that includes reports and books, in many domains, such as history, politics and culture.²⁶

²⁴ <http://www.badil.org/ar/about-badil>

²⁵ http://library.ppu.edu/ar/freeresources/P_resources.aspx

²⁶ The e-Library of Wafa Agency, <http://www.wafainfo.ps/library.aspx>

IV. ICT CAPACITY BUILDING

A. ICT IN EDUCATION AND TRAINING

The Palestinian Ministry of Education implements, with the cooperation of the Belgian Government, a large-scale project that aims to promote e-learning in Palestinian schools. The main objective is to raise the quality of education, and to create an interactive atmosphere between students and teachers and the community inside and outside the school. The project spans the period 2010-2015, and its costs are estimated to 4 million Euro.²⁷

B. TRAINING PROGRAMMES FOR CAPACITY BUILDING IN THE USE OF ICT

Many entities organize IT training courses in Palestine, ranging from beginner courses to cutting-edge tools and applications. Beside the private training institutes, the Training Department of the Government Computer Center offers, since years ago, many ICDL courses as well as more specialized technical courses. The training is mainly offered to government employees.²⁸ The department collaborates for this purpose with Cisco Academy, and it is currently working on the establishment of a new IT training center funded by KOICA (Korea International Cooperation Agency South) . The center is expected to open by the end of 2013.²⁹

Universities also play an important role in training. Universities such as Al-Quds Open University is an accredited training and exam center for many academies of international companies such as Microsoft, Oracle and others.³⁰ The University of Palestine in Gaza organizes, in cooperation with Mercy Corps, free advanced IT courses for university students and fresh graduates.

Cisco has adopted in May 2011 a capacity building program, called “tamkeen.net” that targeted the Palestinian companies operating in the IT field. The main objective of the training is to open up emerging Palestinian companies to the global market.³¹

²⁷ For more information about the project, see <http://www.elearn.edu.ps/?q=node/15>

²⁸ For statistics, see <http://www.pmtit.ps/ar/index.php?p=main&id=1183>

²⁹ Source: . The Ministry of Communication and Information Technology

³⁰ ICTC activities at AlDuds University: <http://www.qou.edu/arabic/index.jsp?pageId=140>

³¹ For more details about the training, see <http://www.forbes.com/sites/richardbehar/2013/07/24/positively-positeam-a-glimpse-inside-cisco-israels-training-of-palestinian-entrepreneurs/>

V. BUILDING CONFIDENCE AND SECURITY IN THE USE OF ICTS

The Ministry of Communication and Information Technology issued the first draft of the Electronic Transactions Act back in 2010, and it is still awaiting discussion in the Cabinet of Ministers.³²

Meanwhile, The Palestinian government formed the Information Security Team as part of its eGovernment project. The team is responsible for dealing with all matters related to the protection of data stored in government databases as well as data transmitted across the network between the various ministries, and this is mainly done within the interoperability framework "Zinnar". The team is intended to be the founder of the different entities that usually ensure the security of information in eGovernment.³³ The Ministry of Communication and Information Technology is also working on forming a Palestinian Computer Emergency Response Team, composed of representatives of the ministries and governmental bodies involved in the application of information security policy.

³² Information about the draft law is available at: <http://www.mtit.pna.ps/e-laws/>

³³ For more details about the team, see: <http://zinnar.pna.ps/E-Government/securityFramework/>

VI. ENABLING ENVIRONMENT

A. LEGAL AND REGULATORY ENVIRONMENT

In addition to the Electronic Transactions Act which is currently under study at the Cabinet of Ministers, Many draft laws are proposed to regulate the economic activity in the information society, including: the draft law on the Protection of the Industrial Property and a new penal code that includes a special chapter on computer and Internet crimes.

The Palestinian authority has issued a set of economic laws and legislations to encourage and support foreign and domestic investments in Palestine. It named an entity to implement these legislations called the Palestinian Investment Promotion Agency (PIPA). These laws have been formulated to protect potential investors from risks, and to consolidate their return on Investment.³⁴

B. DOMAIN NAME MANAGEMENT

The Palestinian National Internet Naming Authority (PNINA) is the official registrar for the Internet domain names in Palestine. It manages the main domain name and the subdomains such as .org.ps and .com.ps. PNINA has begun registration for the Arabic domain name (فلسطين) at the beginning of 2011.³⁵The authority delegates the registration of domain names to a large number of accredited registrars inside and outside the country.³⁶

C. STANDARDIZATION IN ICT

In order to prepare for a successful eGovernment, the relevant ministries of the Palestinian authority launched in 2011 the "interoperability framework Zinnar" which is a part of the frameworks and standards governing the operations of electronic data exchange between governmental institutions. Zinnar is supposed to provide the appropriate infrastructure to build upon it properly and effectively the Palestinian eGovernment.³⁷

D. ICT INVESTMENTS AND GOVERNMENT-SUPPORTED FACILITATION MEASURES

There are extensive local and international efforts to boost the ICT sector in Palestine. For instance, the European Investment Bank launched in December 2009, the first Venture Capital Fund in the Palestinian territories oriented towards IT export companies.³⁸

In the same context, Cisco sponsored since 2008, an initiative including a training program for capacity-building, incubation and risk capital investments, the company has invested until mid-2012 up to \$15 million, including \$11 million in a venture capital fund called "Sadara".³⁹ Soros Economic Development Fund is also investing \$5 million in the Middle East Venture Capital Fund (MEVCF).⁴⁰

³⁴ <http://www.pipa.gov.ps/index.asp>

³⁵ <http://www.pnina.ps/ar/2011/01/falasteen-domain-name-registration-has-been-launched/>³⁵

³⁶ <http://www.pnina.ps/ar/registrars/registrars-list/>

³⁷ <http://zinnar.pna.ps/>

³⁸ European Investment Bank supports Middle East Venture Capital Fun, 22 December 2009. http://europa.eu/rapid/press-release_BEI-09-269_en.htm .

³⁹ Cisco Pioneers Market Development Approach in Palestine, June 2012. (White, Saul, & Davenport, 2012)

⁴⁰ <http://sedfny.org/portfolio/active-portfolio/mevcf.html>

In mid-June 2013, the U.S. Agency for International Development USAID has signed through its project "Compete", an agreement with "Aldawlah for Investment" and "Mena Apps", to create a seed investment and Angel investors fund, under the name of "Arabreneur". An initiative that aims to support young entrepreneurs to pass the gap that separates the incubation stage from the stage of receiving venture capitals.⁴¹

In the same perspective, a group of young entrepreneurs launched in spring 2013 an initiative called [PALinnO](#)⁴² that aims to build a bridge for startups from Palestine to Silicon Valley. The program offers office space, foreign mentoring, seed investment and follow-up funding for innovative Palestinians in order to help them succeed globally.⁴³

Also, the government supports, through Palestinian Investment Promotion Agency, follow-up programs that aim to help the private sector gain funding of local projects through international programs or credit facilities. It currently offers facilitated loans from the Italian government, and French grant possibilities.⁴⁴

⁴¹ USAID's « Compete » Project signs agreement with Dawlah Investment <http://www.ameinfo.com/usaidsupportsangelinvestorseedfundpalestinianterritories345584>

⁴² For more information see : www.palinfo.com

⁴³ <http://www.wamda.com/2013/07/new-incubator-seeks-to-send-palestinian-startups-to-silicon-valley>

⁴⁴ http://www.pipa.gov.ps/investment_climate.asp

VII. ICT APPLICATIONS

A. E-GOVERNMENT

The Palestinian eGovernment is still under construction through many cooperation projects. The Palestinian eGovernment academy is one of these projects, it is a European cooperation project within the Tempus framework, it spread over two years and ended in 2012. The primary objective of the Academy was to build the Palestinian capacity and prepare for the construction of electronic services.⁴⁵ In fact, the eGovernment infrastructure is ready to receive e-services upon it, since there is a secured data network that connects governmental entities since 2010.⁴⁶

A plan for the implementation of eGovernment is developed with the cooperation of the Organization for Economic Cooperation and Development (OECD). This plan identifies the priorities for the period (2012-2014) and set specific the timetable to be followed to develop eServices accessible through a single window.⁴⁷

B. E-BUSINESS

Perhaps the outstanding capabilities of the Palestinian developers are most visible in the areas of software development and corporate services such as outsourcing of business process. These business and services depend almost entirely on communicating via the Internet, but e-commerce still faces many obstacles due to the political, economic and social situation in Palestine. There are, for example, difficulties in logistics and in deploying e-banking, in addition to the low Internet penetration rate and the lack of the necessary legal framework to ensure the proper functioning of e-businesses.

Nevertheless, there are local attempts to improve the present situation. For example, the Ministry of Communications and Information Technology is proceeding to an extensive modernization of postal services, and this will help grow e-commerce by ensuring reliable delivery of purchases.⁴⁸ Similarly, some banks offer innovative solutions to promote e-commerce, such as the online shopping card issued by the Arab Bank in Palestine which is specifically designed to be secure for shopping online like any Visa card.⁴⁹

There are a limited number of attempts to launch e-commerce platforms such as the auction site 1000mazad.com, or travel services site yamsafer.me, or the individual advertisement site Safqaonline.com. Most of these platforms address the Arab world and are not limited to Palestine because of the limited size of the domestic market and lack of maturity. The site shobiddak.com is a counter-example as it exclusively targets the Palestinian territories.

C. E-LEARNING

Since the nineties of the last century, the Palestinian curriculum includes IT materials starting from the fourth grade, but the lack of resources and the destruction due to the Israeli occupation make equipping schools with computers and Internet connectivity mainly dependent on foreign aid funds. However the Palestinian Ministry of Education strives to prepare the infrastructure and to train the teachers to create an effective and creative environment ready to use ICT tools in education.

⁴⁵ <http://www.egovacademy.ps/about/>

⁴⁶ <http://zinnar.pna.ps/E-Government/governmentNetwork/>

⁴⁷ Ibid.

⁴⁸ <http://www.palpost.ps/postcodes/index.php?p=home>

⁴⁹ <http://www.arabbank.ps/ar/perscardinternet.aspx>

As mentioned before, the ministry launched, in August 2013, the program "Abjad Net" that aims to connect 1,000 schools to the Internet. After though, the proportion of connected schools will attain 50%. The ministry also works on a project to promote e-learning in schools, with the support of the Belgian government. The project includes among other objectives, teacher training and the development of an educational portal (www.elearn.edu.ps).

The NGO "Partners for sustainable Development "(PSD) launched in 2012 an initiative, called "Netketabi", to equip Palestinian students with specially designed laptops. The first phase of the project aims to provide 130,000 students, the second phase plans to provide 150,000 new students.

Regarding the higher education, the blockade frequently imposed by Israel made the Palestinian universities the pioneers in the Arab world to adopt e-learning tools and platforms, in order to communicate with their students and provide them services. Almost all the Palestinian universities have IT centers of excellence that provide training to teachers and students and work on the development of eCurricula.⁵⁰

D. E-HEALTH

E-health in Palestine is still in need a lot of efforts. The Ministry of Health recognizes the importance of the application of ICT in health and the need of a modern health information system. Hence, in accordance with the ministry strategy for the years 2011-2013, the ministry assigns the task to the Centre of health information.⁵¹

Since 2010, some applications in telemedicine have been launched, such as the project, supported by the German Heart Centre in Berlin. This project aims to create a "network of competence for defects congenital heart".⁵²

According to the Ministry of Health, some hospitals and clinics and health departments possess health information management systems. These systems are mainly for patient Records management and pharmacy management, but they are still local and not linked to each other through any network.⁵³

E. E-EMPLOYMENT

Most web sites of governmental entities offer special pages to advertise vacancies. The General Personnel Council provides an electronic service that allows job seekers to register online and participate in governmental employment competitions.⁵⁴

The Ministry of Communication and Information Technology also maintains a Data Bank for job seekers. There are also local sites that classify job offers in the private sector, such as <http://jobs.ps> and <http://getjobs.ps>.

The role of the Internet is, in fact, fundamental in allowing Palestinian IT companies to communicate with customers all over the world, and this provides great job opportunities to the Palestinian engineers and developers.

⁵⁰ <http://www.itce.alquds.edu/>

⁵¹ <http://www.moh.ps/?lang=0&page=4&pid=84>

⁵² <http://telemed-palestine.org>

⁵³ Source: the Ministry of Health

⁵⁴ <http://www.gpc.pna.ps/diwan/startRegister.gpc>

Souktel is a pioneering company, based in Ramallah. It communicates job offers via SMS to reach the greatest part of the society that does not have Internet access. Analancer is another outstanding experience in eEmployment. The company runs an electronic work market that covers the Arab region, and that offers remote assignments and jobs in accordance with the principle of outsourcing.⁵⁵

⁵⁵ <http://www.analancer.com/ar/default/about>

VIII. CULTURAL DIVERSITY AND IDENTITY, LINGUISTIC DIVERSITY AND LOCAL CONTENT

A. USE OF ICT IN SUPPORT OF CULTURAL AND LINGUISTIC DIVERSITY

The Palestinian cause represents a major drive of cultural activities, in order to inform about it and defend it. Many political and social movements quickly adopted the ICT tools to preserve the cultural and historical legacy and identity, and to produce varied forms of content.

In addition to the active presence on social networks, great efforts have been made to document the facts and historical events, and to document images of Palestinian towns and villages to emphasize on their Palestinian identity.

Many governmental institutions such as the Ministry of Culture⁵⁶, the Ministry of Information⁵⁷, and the National Archives⁵⁸ of the Council of Ministers, as well as the Palestinian universities participate to the electronic archiving and conservation of heritage and history using IT tools. NGO's also take part in this mission. Examples include Badil: the Resource Center for Palestinian Residency and Refugee Rights⁵⁹, the web site "Palestine Remembered"⁶⁰ and the "Center of Heritage and Palestinian community Studies" founded by the Association "Ina'ash Aloussra"⁶¹.

B. LOCAL AND NATIONAL DIGITAL CONTENT DEVELOPMENT

A workshop discussing the enrichment of Arabic digital content (DAC) was held in August 2012. During the event, it was stressed that "digital content and specifically Palestinian content are part of the goals of the National ICT Strategy for the years 2011-2013, in order to support the establishment of a Palestinian state and to strengthen its presence on the Web." ⁶² To confirm this interest in Arabic digital content, the Palestinian incubator PICTI launched in June 2013, with the collaboration of the Ministry of Communications and Information Technology, a DAC contest. A first version of the contest was launched in 2008 under the auspices of ESCWA.

C. ICT SOFTWARE, TOOLS, AND R&D PROGRAMMES IN ARABIC LANGUAGE PROCESSING

Birzeit University Sponsors several computer software projects related to Arabic language processing. These projects come within the framework, of the "development of the Arabic language towards a knowledge society", approved by the Arab League, and they evolve through the participation of the Arabic Network for free software and open source "Tasharuk". Similarly Najah University participates in many of the projects related Arabic language processing.⁶³

D. ARABIC DOMAIN NAMES

The top-level domain name of the country in Arabic (فلسطين) was adopted at the beginning of 2011. The number of domain names registered in the upper level attained 173 domains.

⁵⁶ Ministry of Culture <http://www.moc.pna.ps/index.php>

⁵⁷ adoption of Information <http://www.minfo.ps/arabic/index.php?page=home>

⁵⁸ The National Archive <http://www.pnac.pna.ps/ar/index.php?p=home>

⁵⁹ <http://www.badil.org/ar/about-badil>

⁶⁰ <http://www.palestineremembered.com/ar/MissionStatement.htm>

⁶¹ Center of heritage and community studies <http://www.inash.org/Heritage/Definition.aspx>

⁶² News about the DAC workshop <http://zinnar.pna.ps/News/ZinnarNews/DAC/>

⁶³ A related symposium in Birzeit University <http://www.birzeit.edu/news/2nd-palestinian-symposium-computational-linguistics-and-arabic-content>

IX. MEDIA

A. MEDIA DIVERSITY, INDEPENDENCE AND PLURALISM

Palestinians consider the use of media as a part of their struggle against the Israeli occupation. This struggle has been generally accompanied by freedom and independence of expression protected by the Law on Freedom of the Press. This law also confirms the right of the establishment of a media organization to anyone, and prohibits censorship and restrictions except by court order. The Palestinian media features a wide variety of radio and television stations, and traditional and electronic newspapers.

News Agencies

There are several news agencies, including:

- The official Wafa agency that was established in 1972, and that publishes news in Arabic, English, and Hebrew.⁶⁴
- Palestine News Network, which is the first independent Palestinian news agency established in 2003. It publishes news in six languages.⁶⁵
- "Ma'an" (together) News Agency that was launched in 2005. It publishes news in Hebrew as well as in Arabic and English.⁶⁶

It is to be noted that Palestine News Network launched the first Palestinian web radio. Its news bulletins are distributed to several local and European radio and TV stations.⁶⁷

The "Ma'an" Agency is part of the network "Ma'an": a non-profit media organization founded in 2002 to promote independent media in Palestine.

Written press

Most daily newspapers have active web sites. Few examples are "Al-Ayyam"⁶⁸, "Al-Quds"⁶⁹ and "Palestine" with its web site "Palestine Online"⁷⁰, etc.

Online Journals

- "Palestine times", a Palestinian news site in Arabic.⁷¹
- "Alwatan Voice" that were issued in 2003.⁷²
- "Palestine today" based in Gaza.⁷³

⁶⁴ http://www.wafa.ps/arabic/index.php?action=receive_page&id=16

⁶⁵ Palestine news network <http://www.pnn.ps/index.php/home/pnn/pnn/aboutus>

⁶⁶ Ma'an news network <http://www.maannews.net/arb/ViewContent.aspx?PAGE=AboutUs>

⁶⁷ Radio Services at PNN <http://www.pnn.ps/index.php/home/pnn/pnn/aboutus>

⁶⁸ <http://www.al-ayyam.com>

⁶⁹ <http://www.alquds.com/>

⁷⁰ <http://felesteen.ps>

⁷¹ <http://paltimes.net/>

⁷² <http://www.alwatanvoice.com>

⁷³ <http://paltoday.ps/ar/>

Radio

Palestinian radio stations use the Internet as a means to reach the world. The site “Shobdak” counts 36 local radio channels that broadcast on the web.⁷⁴

B. CONVERGENCE BETWEEN ICT AND THE MEDIA

There is a growing convergence between the different media in Palestine, as many news and press sites provide the possibility of watching videos of broadcast televisions, or listen to local radio stations.

It should be mentioned that the Media Development Center at Birzeit University has an important role in reducing the gap between traditional and new media. The main goals of the centre are building capacity, maintaining sustainability, and promoting professionalism. Hence, the centre observes the challenges facing the printed media and collaborates with media centers and specialized forums to achieve the needed alignment with modern ICT technologies.⁷⁵

⁷⁴ Palestinian web radios listing <http://www.shobiddak.com/radios/>

⁷⁵ Media Development center <http://mdc.birzeit.edu/>

X. INTERNATIONAL AND REGIONAL COOPERATION

Palestine was granted an observer status in the International Telecommunication Union ITU in 2010. Another decision of the same year indicated the responsibility of the international community in assisting Palestine at the establishment of a modern telecommunications network. The resolution instructs the Telecommunication Development Bureau to take the appropriate measures to facilitate the establishment of international access networks, including terrestrial and satellite stations and submarine cables, and fiber optic and microwaves systems.⁷⁶

Some experts believe that the UN vote to grant Palestine a non-member observer status in late 2012 will greatly increase its chances to become a member with full rights at the ITU, and this will strengthen its position against the Israeli embargo which is blocking the evolution of the Palestinian telecommunication market.⁷⁷

A. WSIS FOLLOW-UP

Perhaps the most important actions that the Palestinian Authority is working on to achieve the goals of the World Summit, are building capacity and preparing the young generations to be active and innovative in the new information society. In addition, the governmental computer center provides many IT services to the governmental entities, such as training, maintenance and web hosting services. The ministry of Communications and Information Technology also manages the National Data Centre responsible for maintaining and protecting governmental data, and for the development of information systems using the best technology. All these activities are in fact, inscribed within the framework of the national ICT strategy.⁷⁸

Otherwise, infrastructure in Palestine still needs large investments in order to become fully prepared to serve the information society. This is mainly due to the restrictions imposed by Israel and to the lack of resources and funds. At the legal level, there are efforts to formulate the necessary legal framework to serve the economic and the governmental activities, but these efforts did not yet yielded the expected laws.

B. PARTICIPATION IN INTERNET GOVERNANCE ACTIVITIES

Palestine participates in the ICANN meetings and workshops. It has specifically participated in the last two meetings of: ICANN 45 in October 2012 and ICANN 46 in April 2013.

Similarly, Palestine is active since 2010 in the organization of several remote hubs during the Internet Governance Forum (IGF) meetings. It has also participated in the organization and preparation for the Arab Internet Governance Forum in 2012 in Kuwait, and in the Second Arab Forum, held in Algeria in October 2013.

⁷⁶ ITU decision, 2010 · <https://itunews.itu.int/Ar/Note.aspx?Note=1144>

⁷⁷ <http://www.al-monitor.com/pulse/originals/2013/01/internet-palestine-israel-itu.html>

⁷⁸ National data center http://www.mtit.pna.ps/ar/index.php?p=5_4

XI. BUILDING THE ICT SECTOR

A. ICT FIRMS

According to Palestinian ICT Association of Companies PITA, Palestinian IT companies include: distributors of computer hardware and networking equipments, software developers, service providers, office automation, and Internet service providers, telecommunications companies, and corporate training and consulting services. 50 per cent of the Palestinian companies work in the domain of services and solution development. Also that 50 per cent of them hold partnerships with foreign companies, and 305 companies issued its services and products to the outside of Palestine. Their estimated contribution to the economy attains nearly \$530 million.⁷⁹

B. GOVERNMENT FACILITATION

The Palestinian Authority seeks through a series of laws to improve the investment climate and attract foreign investors. Some of these laws, such as competition laws and anti-corruption laws are still under study, while work is under way on the second review of the investment law amended in 2011 to add a range of new incentives to it.⁸⁰

C. CONTRIBUTION OF ICT SECTOR IN THE NATIONAL ECONOMY

The ICT sector is one of the promising sectors. It currently offers jobs to approximately 3% of the labor force (more than 5,000 people, according to various sources). With estimated investments of \$ 700 million, the sector generates 8 per cent of the income in the country⁸¹, and contributes to nearly 13 per cent of GDP, with an estimated growth rate of the sector of 30 per cent annually. It is to be noted that exports are limited to software and services, while all the equipments needed to activate this sector are imported.⁸²

D. R&D AND INNOVATION IN THE ICT SECTOR

There are great efforts to promote innovation in the Palestinian ICT sector. These efforts materialize through the support of international companies such as Cisco, Google, and through the activities of the incubators and growth accelerators that are proliferating in Palestine and in the region in general.

Palestinian universities have already a long tradition in research and development, and they are capable through their bonds with international reputable universities to promote the spirit of innovation among their students and make of them reliable occupant of incubators.

E. INVESTMENTS IN THE ICT SECTOR

Analysts agree that in spite of the instability caused by the political situation, which affects the competitiveness, the growth of the ICT sector in Palestine is unprecedented, and this makes this sector attractive to many foreign and domestic investments.

Many foreign governments such as the Governments of the United Kingdom and the United States, encourage their national companies to invest in Palestine to benefit from its skilled and available youth.

⁷⁹ <http://www.pita.ps/content/ict-sector-profile>

⁸⁰ Investment law is under revision, Sep. 2nd 2013, <http://www.maannnews.net/arb/ViewDetails.aspx?ID=626301>

⁸¹ Palestinian ICT Sector 2.0 (SOLUTIONS FOR DEVELOPMENT CONSULTING CO., April 2013)

⁸² Data about the Palestinian Market . <http://export.gov/westbank/palestinianmarketbriefs/index.asp>

There is actually a growing list of giant international companies, such as Google, Microsoft, Cisco, and Intel, which are investing in Palestine.

Nevertheless, it is necessary to note that the existence of this dynamic environment lacks, in addition to the political stability, the legal framework that investors are still waiting for it. A framework that includes e-commerce laws, especially those related to the e-payment. The Palestinian Authority has in fact to consider the issuance of such laws as one of the priority topics on its agenda in order to create the appropriate environment allowing the development of the ICT sector, and more globally the Information Society.