Contribution from Palestine
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Preface

Information technology and telecommunications play a significant role in the development of society and the increase in the human levels of education, knowledge and economy. They also improve the global standard of living and contribute to inter-society integration. Thus the convening of this World Summit and the presence of such a magnitude of interested professionals and dignitaries strongly confirms this fact.

Information technology has provided our Palestinian people with an opportunity, a people that has suffered for many years from the continuous inability to join the telecommunications and information technology revolution which is considered the backbone for establishing and consolidating social and economic development.

Information technology in Palestine has a distinctive and unique role to play due to the continued Israeli occupation and the transformation of Palestinian areas into tiny islands and isolated cantons by erecting military checkpoints, imposing siege and continuous closures and the building of the racist apartheid wall around Palestinian communities restricting the free movement of people and goods.

As a result, the use of telecommunication and information technology applications and services became Palestine’s nerve and a principle means of communication and interaction among Palestinians.

Although Israel considers itself an advanced country in the field of telecommunications and information technology, Palestine’s scientific and practical benefit from this advancement is minimal and limited. In contrast, Israeli companies benefit commercially and economically from the captive Palestinian market.
1. Introduction

The Palestinian telecommunications sector experienced significant turning points during recent years. The sector was exclusively controlled by Israel prior to the signing of the Oslo Accords (Declaration of Principles) in 1993 and the emergence of the Palestinian National Authority. Israel considered the growth of this sector a security threat and resorted to Israeli military orders and regulations to limit it throughout the ongoing occupation of Palestine.

As a result, teledensity (fixed telephone lines per 100 inhabitants) never exceeded an average of 3.14% in the West Bank and Gaza, whereas in Israel it stood at 30%. The waiting time required to obtain a telephone line from the Israelis was no less than 10-15 years! Often, the use of fax machines and other forms of communications were banned. The lack of Israeli services in Palestine, and their disinterest to develop the telecommunication network left this sector in its primitive form.

Immediately after the establishment of the Palestinian National Authority (PNA), an emergency plan was prepared to expand and improve the devastated situation it inherited from the Israelis. The PNA launched measures to build and equip a new telecommunications system to include infrastructure development, rehabilitation of telecommunication networks, reorganizing building and operating within the framework of granting a license to the Palestinian telecommunications company.

The Palestinian National Authority paid great attention to the strategic role of the telecommunications and information technology sector and its development. The PNA took the decision to build and privatize the telecommunications sector, which culminated in the establishment of the Palestinian Telecommunications Company - PALTEL. Paltel was granted the license to provide landline and mobile phone services in 1997. The company built the infrastructure and equipped an advanced digital network that enabled Palestine to re-connect with the world through a distinctive leap that resulted in achieving a teledensity of 10% and its services covering approximately 90% of the Palestinian territories.

Likewise, the first Palestinian mobile telephone company, JAWWAL was established. The number of Jawwal mobile phone users have now reached 265,000.

However, these efforts did not contribute to ending Israeli control of the telecommunications sector and its power over its development and growth.
2. Telecommunications and Information Technology in Palestine today

Despite the Israeli control of all aspects of Palestinian life and the political and economic constant deterioration, Palestine has been able to achieve the following:

- Partial recovery of control over the telecommunications sector
- Provision of new and modern infrastructure for the telecommunications and information technology sector

1. Landline Network

- PALTEL began working on the landline network on 1 January 1997 and provided fixed telephone services, information exchange and other value added services.
- The number of subscribers increased from 80,000 in 1996 to 350,000 subscribers in 2003. The current capacity of the network is 450,000 lines and the rate of penetration is currently 10%.
- The network was transformed into a digital network using digital exchanges operating on the TDM Platform system in addition to providing digital leased lines at various speeds.
- Establishment of fiber optic links using SDH technique in the Palestinian territories.
- Additional services for the fixed telephone network such as ISDN
- Despite the fact that Palestinian remote and rural areas have been deprived of phone services during the Israeli occupation, these services are now available to most Palestinian communities.
- Palestine now has 3378 public telephone booths distributed in 70 areas and residential communities.
The following table clarifies the development of the Palestinian fixed telephone network from 1996-2001.

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<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>8%</td>
<td>5.9%</td>
<td>4%</td>
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2. Mobile Telephone Network

- In mid 1998, the GSM project was granted to JAWWAL Company to create and build a network that consists of 2 MCSs and 140 Bs.
- In October 1999 the first phase of the mobile telephone network – JAWWAL, started in Palestine in accordance with the license granted to the telecommunications company.
- In the year 2000, JAWWAL was expected to launch the second phase of its project according to the prepared plan for the development of the network; however the Israeli occupation - as usual- placed obstacles and restrictions such as preventing Palestinian companies from using the complete frequency spectrum assigned to Palestine.
- Today, the number of mobile telephone subscribers is around 265,000.
- JAWWAL only provides telephone and SMS services due to the impediments imposed by the Israelis which aim to prevent the development of the Palestinian mobile telephone network.

Coordination between the Palestinian Authority and the private sector together with their combined effort to support the information technology and telecommunication sector has enabled Palestine to achieve the following:

- Encourage and create a favourable environment for national and international investment (Palestine Investment Law), ban monopolies, reinforce network security, protect consumer rights and intellectual property rights.
• Establish a dedicated ministry known as the Ministry of Telecommunications and Information Technology (MoTIT).

• Launch Palestine’s Internet naming authority (Palestine’s electronic Internet address .PS)

• Create a local competitive environment by providing the political, organizational and legal framework through real and active cooperation between all stakeholders.

• Establish industrial parks among which figure Khadoury park for information technology (funded by USAID and recently destroyed and declared a closed military zone by the Israeli army).

• Establish an information technology incubator.

In addition to these achievements the number of information technology companies has increased from 25 in 1994 to 80 in 2003. Likewise teledensity has tripled and internet connectivity has quadrupled. It has also led to the improvement of computer facilities, the introduction of initiatives to build technology parks, the establishment of IT centers of excellence and the introduction of the first Palestinian computing subjects integrated into the Palestinian curricula backed with the introduction of a plan to provide more computers to as many schools as possible.

However, the last three years of the Palestinian Uprising (Intifada) have seen a significant increase in hardships and decline in Palestinian living standards and further worsening of the socioeconomic conditions of the Palestinian society. This was (and still is) due to the continuing Israeli aggression and closure policy.

Disturbing figures were reported in recent poverty reports. The proportion of the Palestinian poor has almost tripled (living on less than $2 a day); unemployment has also tripled to affect a third of the total workforce. Real income has dropped by 30% reaching a level lower than that of the late eighties. Over 60% of the population lives below the poverty line, double that reported in the year 2000.

Given above state of affairs, it is difficult to imagine that the Palestinian IT sector would grow and develop, but in fact it did and at a rate of 50%. Some experts put this growth rate down to the continuous state of siege the Palestinians are subjected to and the desire of many to arrive at alternative means to communicate locally and internationally.

Internet time: this Palestinian invention was invented to reflect the geographical insignificance for the Internet and to unify the time of all the Internet applications, devices and servers, and global communication systems. The Internet time can be used in a wide range of applications such as Internet chatting and conferencing, e-commerce applications, timing of the satellites and global communications network, etc.
The collective social shift towards the Internet has been outstanding especially since Palestinians have recognized the importance of the Internet in their daily lives and conducting their business and education remotely in addition to its significant role in delivering their news about their cause to the outside world. The number of Internet cafes (approximately 300) has also contributed to encouraging their interest in information technology. This shift was further strengthened as Palestinians towns and villages were divided and people forced to spend significant proportions of time under total curfews. Fresh interest, defiance and reliance on the internet thus emerged and the increase reached a level of 8% in internet connectivity which ranked Palestine sixth in the Arab world.

The Palestinian Authority’s introduction of policies and laws on equality and equal opportunities for both genders in education, training, employment, interchange and self development contributed to an increase in the participation of women in all aspects of life, especially information technology.

Private sector IT companies seriously affected by the current political and economic situation, were quick to adapt. Some have used available time to improve the skills of their staff through placing them in specialized training. Furthermore, most Palestinian companies established fresh links with mainly Arab companies seeking to target the wider Arab market.

3. **Obstacles preventing the development of the Palestinian Telecommunications and Information Technology Sector**

The ongoing Israeli imposed siege has affected the telecommunications sector in Palestine in the following ways:

- Occupation of land and continual control over the Palestinian frequency spectrum.
- Prevention of importing and releasing goods and equipment destined to develop the information technology and telecommunications networks.
- Israel refuses to allow linking the occupied areas of Jerusalem to the Palestinian network. This prevents the separation of the Palestinian network from the Israeli one.
- Despite signed accords with Israel as well as the resolutions and recommendations of the International Telecommunication Union to designate the Palestinian country code 970, Israel still prevents direct access to the international network.
- In 1999 an accord was signed with the Hashemite Kingdom of Jordan and the Arab Republic of Egypt on a project to connect Palestine to the outside world via a fiber optics network. This however, was denied by Israel.
- Hindrance and confiscation of telecom equipment. Israel had further refused delivery of such equipment for over two years.
• Illegal infiltration by Israeli Mobile Companies into the Palestinian telecom market. Thus the Israeli share of the mobile telecommunications market stands at 56% of the total market.

• Imposing unfair competition within the Palestinian mobile telecommunications market by illegally marketing tax-free unlicensed Israeli services while denying Palestinian reciprocation.

• Israel intends to adopt the 7-digit mobile telephony while blocking the delivery of the necessary equipment that would facilitates Palestine’s right to such change. Furthermore, Israel has for the last eight months deliberately hindered the delivery of new equipment desperately needed by JAWWAL for the expansion of the company’s network and the development of its services.

This collective Israeli occupation is omnipresent and spares no effort to control all aspects of Palestinian life inclusive of dominating and restricting the development of the Palestinian national economy. It systematically destroys the Palestinian infrastructure. This was evident during the military invasion of the West Bank in the first quarter of 2002 during which Israel broke into public, civil society, NGOs and university premises by means of force deliberately vandalizing such premises and stealing computer memories, hard disks and equipment. Israel has also destroyed communication towers, smashed public and private radio and television station transmitters and studio equipment using sledge hammers. Israeli tanks roamed the streets and deliberately destroyed communication and electricity poles and towers. The army occupied JAWWAL’s offices and fired at the transmitters’ antennae. Its forces completely destroyed some operational communication exchanges. In addition, they occupied the offices of the Ministry of Communications twice, destroying their contents including their entire facilities and equipment. They also ransacked and damaged all the incoming postal parcels arriving from all over the world.

As if this were not enough. Israeli bulldozers completely destroyed the Voice of Palestine radio broadcasting station (previously known as Near East Radio). This was one of the oldest radio stations in the world. They also destroyed the antenna tower, in turn, the second oldest radio tower in the Middle East. It was erected during the British mandate of Palestine 70 years ago and stood at a height of 240 meters.

These practices conspicuously contradict Israel’s claim to be a country that strives for the encouragement and elevation of the standards of ICT among peoples.

Israel imposes unfair trade using its dominance over the Palestinian society. It diligently works to serve the interest of its companies at the expense of Palestinian companies and systematically blocking every form of Palestinian development.
The initial draft of the ‘Deceleration of Principles’ of this Summit together with Israel’s proposed amendments confirm in principle the need for a global move to develop information technology in a way that improves the scientific and economic status of the peoples of the world allowing greater engagement and achieving total integration with the rest of the developed world. Israel’s position and recent claim made by its communications minister is nothing but deceiving. Its treatment of the Palestinian people confirms otherwise.

In this regard, it is essential to mention some of the international resolutions such as the ones adopted in Minneapolis (article 99 of 1998) and the two Kyoto resolutions 1994 in (articles 6 and 32 ) as well as the 18th resolution adopted in Istanbul in 2002, the 18th resolution at Valetta, the UN Charter and the International Declaration on Human Rights, and articles 6 and 7 of ITU’s constitution which reaffirms “the need to achieve the World Community’s global access to the privileges of the new telecommunications technology ” and “the promotion of the use of communication services to facilitate peaceful inter-relations”.

It is equally essential to commend the ITU’s support for the Palestinian Authority’s strive to develop the communications sector as well as the Union’s professional vision which, sadly, has not materialized in Palestine given the existing conditions.

In the light of above, Palestine demands the international community to back its strive towards the acquisition of its full rights, including its rights to operate the international gateway in its totality, including wire based, wireless and satellite access to neighboring countries as well as to the rest of the world. Furthermore, Palestine demands an immediate halt of Israeli infiltration into the Palestinian frequency spectrum.

We - the Palestinians- are a small but energetic, young and educated people that are globally well positioned to achieve notable advances and accomplishments once occupation is ended. This will enable the return to Palestine of brains and capital, also of local, Arab and international investment that will assist in growth and participation.

4. IT Projects Sponsors and Players

A. Public sector

When the Palestinian Authority assumed control back in 1994, the public sector became responsible for the development of the Palestinian information society. Consequently the number of different projects offered by the sector increased through direct funding or deployment of donor country funds dedicated towards such development. The public sector’s efforts revolve around the following activities:
Ministry of Telecommunications and Information Technology (MoTIT):

The re-organization process of the telecom and information technology sector started once this Ministry was established as part of the Palestinian’s National Authority’s reform initiatives. MoTIT therefore initiated moves that would regulate the telecom and information technology sectors. These initiatives included measures to update existing laws and the introduction of new laws. The decision of the establishment of a regulatory authority was then taken in order to monitor and regulate the sector’s performance. In addition MoTIT assumed the responsibility for the Government Computer Center (GCC) which was previously managed by the Ministry of Planning and International Cooperation (MOPIC). Upon its establishment, the GCC’s main objectives were focused on managing the governmental and ministerial computer network in addition to developing public sector’s human resources in accordance with the sector’s needs and desired areas of specialization. The Ministry is currently working to list the e-government initiatives on its new strategy plan. It is also moving to adopt the public sector’s e-transformation.

National Institute of Information Technology (NIIT): This institute was established by the Palestinian Economic Council for Development and Reconstruction (PECDAR) in order to provide specialized training for all sectors.

Ministry of Labor (MOL): The MOL offers computer training to its technicians and professionals from all disciplines in an effort to strengthen IT integration in different professional sectors.

B. Private Sector

Palestinian Telecommunications Company (PALTEL): The only telecommunication operator in Palestine. It offers land and leased line services within the Palestinian territories in accordance with an exclusive license awarded by the Palestinian National Authority that expires in 2007.

Jawwal: The exclusive provider of cellular telecommunications in Palestine. Its support of local community covers the establishment of several computer labs. It also employs a significant number of technical staff specializing in IT and cellular telecommunications.
Software and hardware companies: A significant number of such companies exist in Palestine some of which are authorized dealers of products of at least 15 international companies working in the field of IT and telecommunications. A number of software companies play a pivotal role in the revitalization of national economy by providing computer packages in the areas of student registration, management, and training as well as standard and specialized education for people with special needs. The list also includes further packages in the areas of library and archiving systems, GIS, image and document management systems.

Specialized training centers: There are significant numbers of such centers in Palestine. Some centers are linked to international IT companies mainly through training agreements that enable these centers to become certified examination centers offering international certifications.

C. Non-Governmental Sector

The Non-Governmental sector is one of the main sectors that supports the spread and consolidation of the information society in the Palestinian community. What distinguish, this sector’s work are the organizations and bodies that fall under its umbrella. These organizations pay great attention to information society projects that deal with development and especially education. Such institutions are:

Universities: Palestinian universities have for a long time been the pioneers in introducing information technology in education. These universities have also been responsible for launching a varied and distinctive range of projects and began attracting donor community interest. In addition to the interest of international companies some of which have signed numerous educational and training agreements with certain universities. Among some of the unique projects are the IT Centers of Excellence. Al Quds University IT Center of Excellence in Abu Deis, Jerusalem, has been completed and work has begun on an IT Center of Excellence at Hebron University. The Islamic University in Gaza and Al Najah University in Nablus will follow. (These centers are funded by Diaspora Palestinians). Work has also begun to initiate electronic learning projects, educational gateways and knowledge centers in addition to technical training projects, continuing education programmes, development of public sector human resources and others. The role Palestinian universities play in developing specialized programmes and scientific research in the information society field has rapidly expanded. One of the more important programmes Birzeit University has completed is a database of Palestinian laws all the way from the Ottoman rule, to the British, Egyptian, Jordanian, Israeli and present Palestinian rule. This programme is called Al-Muqtafi. Palestinian universities provide a suitable environment to help blossoming locally created information technology.
Palestinian Information Technology Association (PITA): PITA current membership has 75 Palestinian IT companies. The Association offers a solid platform for the Palestinian information society by providing training, rehabilitating and marketing. PITA has a commercial representative office based in Dubai Internet City and is tasked with opening the Gulf region to Palestinian IT products.

Palestinian National Internet Naming Authority (PNINA): PNINA was established to administer Palestine’s Internet address (.PS). PNINA enjoys representation from the public, private and non-governmental sectors.

Internet Society - Palestine Chapter: ISOC-PS is concerned with spreading Internet culture to Palestinian communities, protection of users and contributing in the drafting of Information Technology laws.

The Welfare Association: The Welfare Association oversees several international commercial company projects such as Future Kids, Microsoft, CISCO and Intel through their academies and computer training centers for different society sectors especially those in remote, impoverished and deprived areas in addition to universities, schools and women’s centers.

PC & NET 4 All: PC & NET 4 All aims to increase the number of computer users and Internet connectivity in Palestine.

Paltrade: The Palestinian Trade Center concentrates its efforts upon information technology in two ways. Firstly by reinforcing the understanding of maximum spread of information technology in all sectors of society in what has become known as IT Diffusion. Secondly, Paltrade markets Palestinian information technology at international exhibitions, or through important strategic planning related to the information technology sector.

IT Special Interest Group- (ITSIG): This virtual group was established several years ago by Birzeit University. Not long after its inception it became a centralized think tank for Palestinian information technology professionals and the leading electronic platform for information and opinion exchange and materialization of positions and even revising IT draft laws.
D. International Organizations

United Nations Development Programme: This organization has the credit of introducing Internet into Palestine. The first subscription to the Internet was made from the UNDP website. UNDP also established the first Palestinian university Internet network. UNDP implements several projects dedicated to the development of information technology in Palestine especially in the educational and health sectors.

United States Agency for International Development (USAID): This Agency offers funding especially for the development of information technology through a group of US institutions such as ANERA, AMIDEAST and CATHOLIC RELIEF.

EUMEDIS: A number of Palestinian projects have been funded by the European Union through the EUMEDIS programme, in particular computers for some virtual libraries and universities.

International Telecommunications Union - (ITU): The ITU has provided advice, experts, training, technical and practical support in addition to a number of projects and equipment.

The World Bank: Offers continuous support to several local projects including information technology.

JICA: This Japanese organization continues to offer unique training courses and other projects.
To this non comprehensive list of international organizations we can also add the Islamic Development Bank, the Ford Foundation, the European Union, the British Council, the French Cultural Centre, individual European countries, Japan, Canada, Australia, South Africa, Argentine, Norwegian People’s Aid, the German Support Programme, GTZ, Spanish Cooperation and all states, bodies, international organizations that have funded and are currently funding information technology projects in Palestine.

5. Conclusion

In conclusion, and in light of the above, we would like to re-emphasize the importance of international community support for the total and unequivocal acquisition of Palestinian telecommunications rights, inclusive of its international gateway rights and its wired, wireless and satellite communications both regionally and internationally. We also call upon the international community to back our demand for Israel's immediate halt of control over the Palestinian telecommunications frequency spectrum which is a national asset as well as a local need. The complete frequency spectrum should enable the Palestinian move towards building all communication and information networks so that all Palestinian society sectors, without exception, are connected. This will also help overcome present geographical barriers including the apartheid separation wall and its consequent suffocating siege and strangle hold of all forms of normal human life and national development. In short we demand of this distinguished international platform moves towards helping us in achieving total telecommunication and information society sector independence and recuperation of full Palestinian rights in accordance with the ITU’s resolutions and recommendations. It is high time that the longest occupation in today’s world is ended.