World Bank

WEST BANK AND GAZA
TELECOMMUNICATIONS SECTOR NOTE

INTRODUCING COMPETITION IN THE PALESTINIAN TELECOMMUNICATIONS SECTOR

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CONTENTS

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ABBREVIATIONS AND ACRONYMS

$	US dollar (unless otherwise indicated)
NIS	New Israeli Shekel
ADSL	Asymmetric digital subscriber line
ISP	Internet service provider
IT	Information technology
JTC	Joint Technical Committee
MoC	Israeli Ministry of Communications
MTIT	Palestinian Ministry of Telecommunications and Information Technologies
PA	Palestinian Authority
GOI	Government of Israel
SIM	Subscriber identity module
VoIp	Voice over Internet protocol

EXECUTIVE SUMMARY

This note highlights key issues in the Palestinian telecommunications sector, and suggests possible recommendations for policy and regulatory reform. The sector is characterized by the presence of a private regulated monopoly, unauthorized competition, and overall weak governance and regulation. Increasing competition and efficiency in the telecommunications sector will have far reaching effects throughout on the Palestinian economy. It will reduce the cost of doing business in all sectors and help raise government tax revenues. In addition, by developing the capacity to regulate the largest monopoly in WBG and spur competition in the telecommunications market, the PA will develop its ability to provide a better regulatory environment for the entire economy.

The sector legal framework is defined by Telecommunications Law 3/1996 and by regulatory provisions under the Oslo Agreement.[1] The agreement affects the interim relationship between Israeli and Palestinian companies, attributing rights and obligations to Palestinian and Israeli operators in the territory of the West Bank and Gaza, and defining the role of the Palestinian government in the sector. The PalTel group, which includes companies in all main sectors of the telecommunications and information technology (IT) market, is the dominant operator. Unauthorized competition exists in the mobile market, where Israeli operators, authorized under the Oslo Agreement to offer services to the settlers, cover a large part of the territory of the West Bank. PalTel's market dominance, and the problems related to unauthorized competition, could be mitigated by the entry of a second mobile operator. The Ministry of Information Technologies and Telecommunications (MTIT) has awarded a mobile license to Wataniya. There is in principal an agreement at Ministerial level on the release of the frequencies for Wataniya. However at the time of this note's publication they have not yet been released. The entry of competitive mobile and data operators would strengthen considerably the market and improve its key indicators. The data market segment is also characterized by a combination market dominance and unauthorized competition, but MTIT is in the process of awarding data licenses. Overall regulatory capacity is weak, governance and accounting standards have room for improvement.

The complex nature of the regulatory relationship between the PA and GOI has given rise to several areas of concern. In addition to the unauthorized competition in mobile and data, the Palestinian Authority (PA) raises the following main issues: (a) Palestinian operators are compelled to route international communications through a licensed Israeli operator; which increases costs (b) the lack of a direct long-distance connection linking the West Bank with the Gaza strip; and (c) difficulties in obtaining permits from the Israeli authorities to build infrastructure in large parts of the country. The note illustrates the different viewpoints on these contentious issues, assesses the actual nature of the constraints, and offers possible solutions.

[1] "*Oslo Agreement, Annex III, Protocol on Israeli-Palestinian Cooperation in Economic and Development Programs*" and "*The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95), Annex III, art 36*)

In terms of policy recommendations, the following five actions are recommended:

(a) *Introduce full competition* through Israel speeding release of the frequencies for Wataniya and allocating frequencies for new wireless operators and MTIT tackling Paltel's monopoly position. Internationally, full competition has been proven to be the best policy to stimulate market growth and reduce prices. This is also the case in low-income and highly distressed (civil war, post conflict) environments. To enable effective competition, the following measures are crucial:

- (i) Enabling effective competition in the mobile sector, by releasing frequencies for Wataniya
- (ii) Implementing the policy announced by MTIT to introduce competition in the data sector by issuing new competitive licenses.
- (iii) Regulating and monitoring anticompetitive behavior and the concentration of monopoly power in PalTel;
- (iv) Addressing and agreeing on distribution of frequencies crucial for the attribution of wireless data licenses (e.g., Wi-Max).

(b) *Promote technical cooperation between Israeli and Palestinian technical teams, to mitigate the existing issues.* The existing conflict hurt the work of the Joint Technical Committee (JTC) and the implementation of the provisions under the telecommunications sections of the Oslo Agreement. The structured negotiations mechanism of the JTC (which deals with mutual coordination of frequencies use, interference problems, diverse international issues, and other sensitive subjects of mutual importance), should be supported and encouraged. Issues include allowing Palestinian telecommunications firms smoothly import equipment and emplace necessary infrastructure in all areas of the country. Given the demographics and the geography of the area covered, it is practically difficult to create hard boundaries to prevent complete access to the Palestinian market by operators not formally licensed by MTIT. While operators not licensed by MTIT should refrain from marketing directly their services in the Palestinian territories, nevertheless, it is recommended to pursue market-based practical arrangements to ensure a fair and level playing field among all operators in the West Bank and Gaza territory, such as revenue sharing arrangements with the licensed operators to formalize any spill-over entry and compensate for paid license fees.

(c) S*trengthen MTIT's institutional, regulatory and enforcement capacity and create a regulatory unit within MTIT, which will be transferred to an independent telecommunications regulatory authority at a future date.* New regulations are under preparation and MTIT has published draft interconnection guidelines. MTIT is working on a new telecommunications law which aims to introduce a telecommunications regulatory authority. MTIT is exploring ways to create a regulatory unit within the MTIT to regulate the sector as needed until the telecommunications regulatory authority is established. Serious capacity building is needed for establishing and operating such a unit. MTIT needs additional resources to tackle the regulatory priorities that any ministry faces during the introduction of competition, including other aspects of interconnection regulation (e.g., dispute resolution; interconnection costing); enforcement; licensing; spectrum management and monitoring; number portability. There is also a need to train regulatory experts. A top priority is the introduction of a body of competition law and regulation, and the presence of regulatory tools to monitor and sanction anticompetitive behavior.

(d) *Improve tax collection and governance.* Effective competition between telecommunications operators can provide strong and reliable short-term and long-term fiscal gains. A more transparent system for generating and collecting tax revenues is needed. Improvements in tax collection, as well as an agreement on how to tax the revenues generated by Israeli operators serving Arab customers in the West Bank, is desirable.

(e) *Increase the overall transparency and improve the governance of the sector.* This includes: determining the exact legal status of the various subsidiaries of PalTel group; clarifying the priority between rights under the licenses and government guidelines and implementing industrial cost accounting.

SECTOR OVERVIEW

The telecommunications sector in West Bank and Gaza is characterized by the presence of a private regulated monopoly, namely PalTel and its subsidiaries, unauthorized competition, and overall weak governance and regulation. These issues are tied to, among other things, the complex nature of the regulatory environment under the Oslo agreement and the lack of cooperation between the Israeli and Palestinian authorities.

Legal and Regulatory Context of the Sector

The PA is responsible for regulating the telecommunications sector areas under the PA's jurisdiction (Areas A and B) as provided in the Oslo Agreement[2], which subject many regulatory areas (e.g., radio spectrum, import of telecommunications equipment, permits to build infrastructure) to coordination between the Palestinian and the Israeli authorities. Sector policy and regulation are presently the responsibility of Ministry of Telecommunication and Information Technologies (MTIT) of the Palestinian Authority. The sector is regulated by Telecommunications Law 3/1996, approved in 1996. A new draft law has been prepared but was not passed by the Palestinian Legislative Council due to political instability in recent months.[3] There is no competition law or competition authority. The regulatory agreements under the Oslo agreement (Annex I to this note, "*Oslo Agreement, Annex III, Protocol on Israeli-Palestinian Cooperation in Economic and Development Programs*" and Annex II to this note, "*The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95), Annex III, art 36*) have important implications for the sector.

These agreements affect the interim relationship between Israeli and Palestinian companies, attribute rights and obligations to Palestinian and Israeli operators in the territory of the West Bank and Gaza, and define the role of the PA in the sector. Many aspects of these agreements are a matter of contention between the Palestinian and the Israeli authorities. As appropriate in a fast-changing environment, the agreements leave important regulatory decisions to the works of a joint technical committee (JTC), including specialists from both sides. The JTC had met only twice since 2000 for two perfunctory meetings in 2004, leaving important issues unresolved. Recently, the JTC meetings have resumed, a positive sign for bilateral Israeli-Palestinian cooperation. The most recent meeting took place at the end of November 2007 and follow up bilateral discussions are ongoing.

Consistent with MTIT's policy directions, a new sector law has been prepared, introducing an independent regulator and modern principles of regulation and competition in telecommunications. There is an active debate around this law, which has not yet been approved by the Palestinian Legislative Council. Telecommunications

[2] *Oslo Agreement, Annex III, Protocol on Israeli-Palestinian Cooperation in Economic and Development Programs*" and "*The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95), Annex III, art 36*)

[3] The law introduces an independent regulator and modern principles of regulation and competition in the telecommunications sector.

licenses have been granted to PalTel, the dominant operator, and to its mobile subsidiary Jawwal. A new license for mobile services and networks was granted to Wataniya in March 2007.

The PA has the right to collect taxes on all telecommunications services billed in the West Bank and Gaza, subject to the provisions of the Protocol on Economic Relations in Annex V of Oslo II. This also applies to international communications originated in or terminated in West Bank and Gaza. A contentious issue emphasized by the PA in the area of taxation is the leakage of tax revenues from the PA to Israel through unauthorized Israeli mobile operators (Orange, Cellcom, Pelephone and Mirs) operating in the West Bank and Gaza.

The PA points out, correctly, that revenue collected by Israeli operators in the West Bank is not subject to taxation from the PA and produces a fiscal loss.[4] The PA estimates that the lost annual tax revenues due to unauthorized Israeli operations amounts to $60 million. The Israeli Ministry of Communications (MoC) emphasizes the fact that since the Israeli operators' activities in the West Bank and Gaza are mainly on a pre-paid basis, there would be a double taxation issue if the PA were to tax the operations of Israeli operators in the West Bank and Gaza.[5] In addition, Israel's MoC indicates that, according to the interim agreement, paragraph 36 (D)(6), the PA is supposed to tax all the incomes that are billed in the PA territories, but since the billing for the prepaid services is done in Israel, any taxation from the PA would be unlawful.

Sector Structure

Figure 1 illustrates the main players in the telecommunications market in West Bank and Gaza before the entry of a second mobile operator, Wataniya, expected in the next few months. The entry into the market of Wataniya has been delayed by several months. The process to release the necessary frequencies has not been completed at the time of the publication of this report. There is in principal agreement from the GOI at the Ministerial level on the release of the frequencies for Wataniya, but no progress beyond the stated intention of the GOI to do so. At the time of the publication of the note the technical details of this issue are being handled by the Joint Technical Committee.[6] The delay of

[4] This interpretation is substantially correct. If all of the Palestinian customers were to subscribe to Palestinian licensed operators, all the fiscal revenues would be captured by the Palestinian authorities. However, by providing services in the West Bank where no services would otherwise be available at the moment, the Israeli operators are also generating fiscal revenues through taxation of interconnection revenues for PalTel and Jawwal and revenues from calls from Jawwal to the Israeli operators. While this amount may be low, due to the preference of the customers for "in-network" calls, the fiscal loss due to the presence of unauthorized operators in the West Bank should be estimated net of the present fiscal gain from taxation of interconnection revenues and from calls between Jawwal and Israeli operators.

[5] Israel's MOC indicates that "Since the Israeli operators activities in these areas is largely in the pre-paid services market with products purchased in Israel on which Israeli taxes have been paid, and the local Palestinian dealers are paying taxes to the Palestinian Authority on their gains, taxing the Israeli operators again in the Palestinian areas would be a double tax."

[6] "*Future needs for frequencies shall be agreed upon by the two sides. To that end, the Palestinian side shall present its requirements through the JTC which must fulfill these requirements within a period not exceeding one month. Frequencies or sections of frequencies shall be assigned, or an alternative thereto*

the entry of Wataniya has costs in terms of sector development and loss of fiscal revenues. The existence of these costs is beyond doubt, but it is difficult to estimate their full cost. Wataniya's targets are to reach a subscriber base of 400,000 customers after one year of operation and 600,000 after two years. Wataniya has committed to invest about $600 million of investment. The delay in starting operations means a loss of fiscal income for the PA which could be estimated at about over $13 million in the first year and $28 million in the second year.[7] This is in addition to the delay in receiving the $355 million related to the sale of the license.

Figure 1 also illustrates the different links among players (the links are labeled with numbers). PalTel operates a fixed-line network and is the only provider of fixed-line services in Palestine. PalTel and Jawwal (its subsidiary), also need to rely on Israeli infrastructure to link West Bank with Gaza, and to link different West Bank villages via links going through Area C. For the purpose of international communications, PalTel is compelled to use the gateway of an Israeli licensed operator (*link 1 in the figure).*[8] Presently Bezeq, Barak and GL have entered into commercial agreements with PalTel.[9]

The annex to the Oslo Agreement stipulates that Palestinian operators will have the right to establish their own gateway once the network at the local level is partitioned between Israeli and Palestinian operators. This issue has been widely discussed by the parties and technical and regulatory solutions have been proposed but not adopted. Disputes over the separation of the network in Jerusalem have held off the implementation of this provision. Despite its strategic and political relevance, the economic impact of this restriction on the Palestinian consumer may not be particularly high. The World Bank team did not have access to the commercial agreements among PalTel and the Israeli international operators. However, and based on incomplete information, it appears that the high retail charges for international communications are mainly related to PalTel's monopoly power at retail level.[10]

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providing the required service within the same band, or the best alternative thereto acceptable by the Palestinian side, and agreed upon by Israel in the JTC. "Annex III, art. 36 C. 2 of the Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95)

[7] These figures assume that half of this growth is churn (and that half of the churn comes from Israeli operators operating in the West Bank), and an average revenue per user of $16/month (declining by 5 percent in year two).

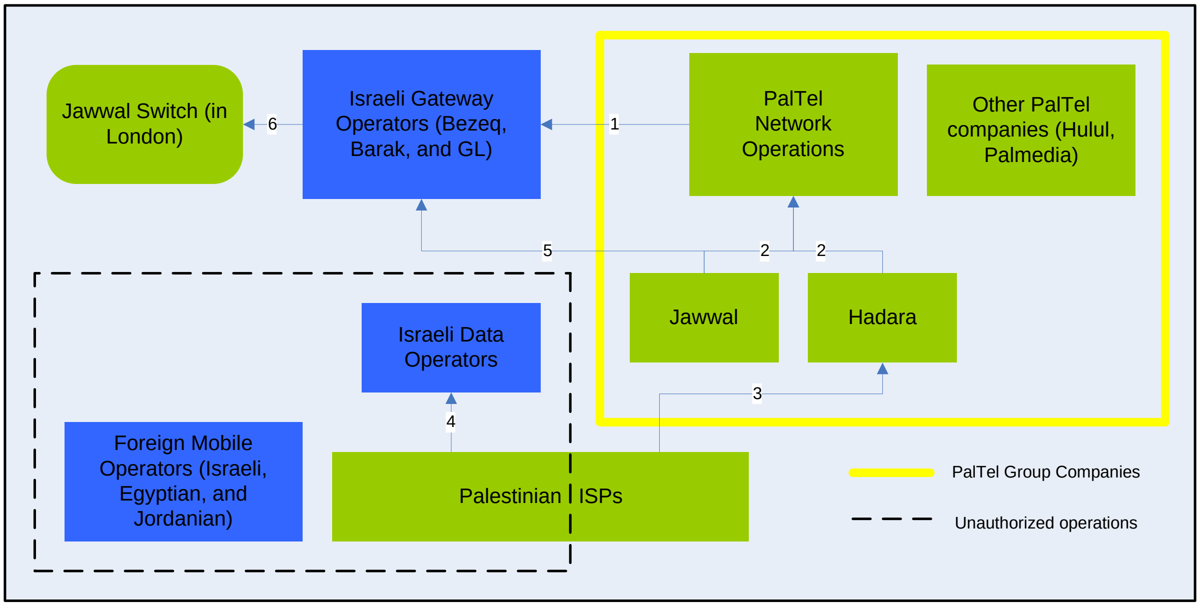
[8] Link 1 also includes Bezeq fiber optic backbone between some of the Palestinian cities and villages and between the West Bank and Gaza Strip.

[9] Israel has full competition (e.g., no restriction on market entry) in international communications. Any operator can obtain a license provided that they meet basic criteria. Due to consolidation, at present there are four infrastructure-based operators offering international communications services in Israel. Other operators offer VoIP and other international communications services. PalTel has not entered in an agreement with the fourth infrastructure based operator, Xfone, Inc. (www.xfone.com), which tends to have lower retail international fees than the other operators.

[10] At wholesale level, PalTel buys capacity from multiple operators in Israel in a competitive environment, and the cost of bringing the traffic from PalTel facilities to the Israeli gateway—while not negligible—it is unlikely to account for a large percentage of the final price for the Palestinian consumer. For example, interviews with PalTel officials indicated that PalTel buys capacity to the United States from Israeli operators at the average wholesale cost of $2c/min. To this cost, PalTel adds the cost of bringing the call from the local network to the Israeli gateway. Assuming that this additional cost would double the cost per

Figure 1

The Palestinian Telecommunications Market (prior to Wataniya entry)



Through its subsidiary Jawwal, PalTel controls about 65 to 80 percent of the mobile market in West Bank and Gaza.[11] Jawwal relies on PalTel's infrastructure for domestic long distance communications (*link 2*), and on the three Israeli gateway operators, for international communications (*link 5*). Because of the fact that Israeli customs recently did not allow the import of particular switching equipment,[12] Jawwal indicates that it was compelled to host part of its mobile switches in London and to route communication through that switching equipment through one of the Israeli operators.[13] Jawwal has also

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call to the United States, it would bring the wholesale cost to $4c/min. The difference between the retail price of about $20c/min and this assumed cost of $4c/min. is due to PalTel's monopoly position in this specific market segment. The same consideration appears to hold for some of the top traffic destinations. For example, in Israel the best competitive *retail* price for a call between Israel and Saudi Arabia is around $25c/min and about $17c/min if using VoIP. PalTel charges NIS 1.5 or about $37cmin for a call to Saudi Arabia. High termination charges and PalTel's monopoly position at retail level seem to be the key determinants of the price to the Palestinian consumer.

[11] The 80 percent market share was suggested by Jawwal.

[12] The difficulty in importing equipment (telecommunications and computer equipment) in West Bank and Gaza was been identified by all players in the telecommunications as well in the IT market as a crucial obstacle to doing business. There are pending lawsuits on this matter. The obstacle is both in terms of delays and in terms of added costs (storage fees). The operators do have the choice to purchase most of the same equipment from dealers in Israel without incurring in delays or storage fees. This is a controversial matter. The firms interviewed by the World Bank indicate that delays and costs occurred when importing equipment have the consequence to place the dealers in Israel at a competitive advantage, and placing them in the position of acting as intermediaries. Telecommunications and IT firm in West Bank and Gaza would normally prefer to have direct access to foreign vendors.

[13] Most of Jawwal's mobile switching equipment is hosted in West Bank and Gaza.

indicated that the Israeli authorities have not granted the necessary permits to build infrastructure in Area C, causing Jawwal to incur in higher infrastructure costs than needed.[14] This is a contentious issue and one wherein the positions of the two sides are quite divergent. Israel's MoC has communicated to the Bank that, "*According to [MoC]'s records, the majority of cellular sites requested by Jawwal were approved*". According to Jawwal, the fact that not enough frequencies were granted required the installation of more infrastructure than needed, for example in downtown Ramallah (Annex 3), leading to extra costs and lower quality. .

Market Dominance

PalTel is the dominant operator in the Palestinian market. PalTel is a vertically integrated network operator, and a monopoly in almost all market segments. The PalTel group is privately owned and includes fixed-line operations, a mobile subsidiary (Jawwal), and Hadara, a company that is both a data operator and an internet service provider (ISP). The PalTel group also controls other companies, including the biggest IT company and network integrator in the country (Hulul), a media and digital content company (PalMedia) and computer hardware and accessories retail stores (Best Buy). PalTel's dominance is expressed both in terms of high market share in all relevant market segments (most of them controlled as a monopoly), and being the only company able to operate in a wide range of segments.

PalTel and its subsidiary Hadara (a company born after the acquisition by PalTel of the three strongest ISPs), is also a dominant operator in the data segment. Hadara relies on PalTel's transmission infrastructure and is a facilities-based ISP. Hadara offers to its customers both asymmetric digital subscriber line (ADSL) and Internet access, as well as access to its Internet facilities to some 20 to 25 Palestinians ISPs. None of the ISPs has its own infrastructure or facilities, and they, therefore, act as resellers of Hadara's capacity (*link 3*). According to Palestinian sources, there are also Palestinian ISPs that lease capacity from Israeli broadband operators (*link 4*),[15] and offer Internet access services. Taking the unauthorized data access market into account, Hadara controls about 66 percent of the access to data infrastructure market.[16] Without taking the unauthorized market into account, Hadara has 100 percent share at infrastructure level. This is because, for now, no other operator license has been granted. At retail level, Hadara controls 66 percent of the retail ISP market, and the other ISPs control the remaining

[14] "*In Area C, although powers and responsibilities are transferred to the Palestinian side, any digging or building regarding telecommunications and any installation of telecommunication equipment, will be subject to prior confirmation of the Israeli side, through the CAC*" Annex III art. 36 A 2.a. of the Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95). PalTel indicated that several dozens letters requesting authorization to build infrastructure in Area C have been sent to Israel's MoC and only one of them has been favorably accepted.

[15] The research done for this note did not allow studying this specific link in detail. Israel's MoC has commented that if more specific data will be provided one the unauthorized ISPs connections to Israeli operators, suitable action will be taken to stop this kind of operation.

[16] According to various interviews of IT companies and retail ISPs in West Bank and Gaza.

third of the market.[17] The unauthorized operators control about 33 percent of the access to data infrastructure market. Without taking into account the unauthorized market, Hadara is a monopoly infrastructure and has two-thirds of the retail market.

Interviews with the private sector highlighted the dangers of anticompetitive behavior on the part of PalTel. In particular, it was mentioned that PalTel bundles mobile and ADSL services, making it difficult for other ISPs to compete. PalTel indicated that this offer only attracted 2,500 customers. Because of the importance of a healthy and competitive data and ISP market, the issue of bundling of services, and more in general, the presence of rules to monitor and sanction anticompetitive behavior, appears to be extremely important to the success of future development of the sector. In addition, PalTel's market power is feared by other IT and software companies. PalTel operates in the IT and software business through the controlled company Hulul.[18] The PalTel group also owns a hardware and accessories retail store called Best Buy in Ramallah, and it competes with local small computer shops.[19]

MTIT is now in the process of awarding new full operator licenses for data and voice over Internet protocol (VoIP) services. These licenses would significantly improve the competitive landscape in West Bank and Gaza, by introducing competition in voice and data infrastructure and services. The new licenses are important to strengthening competition in West Bank and Gaza and to introducing new technology.

Unauthorized Competition

Competition with PalTel mainly originates from unauthorized operations. Most of the West Bank, including the main cities, is covered by Israeli mobile operators. Jawwal estimates that Israeli operators presently cover 80 percent of the territory of the West Bank and capture at least 20 percent of the market.[20] Other sources suggest a higher figure, around 40 to 45 percent of the market.[21] There is some spillage by Egyptian

[17] Interviews with the local IT industry.

[18] Hulul also competes with private sector companies on building MIS systems as well as other software solutions.

[19] Informal interviews with the private sector indicated that customers can purchase computer hardware as well as peripherals such as printers, cameras, scanners, etc and have it amortized for one year. The payments can be made through the monthly telephone bill over a one year period, credit terms that small local shops cannot offer.

[20] The exact number of Palestinian Arab users in the West Bank using Israeli operators is unknown. Market research made by Jawwal suggests about 200,000 customers. Other sources, such as Arab Advisors, suggest a more customers,--about 500,000. The World Bank team witnessed that the coverage of Israeli mobile operators (such as Cellcom and Orange) in the West Bank reaches the center of large towns like Ramallah and Qalqilya. The Bank team also observed that the signal of Israeli operators is strong along main roads such as the Ramallah-Nablus road, and the Nablus-Jericho road, and observed that distributors and small shops in Ramallah and Qalqilya sell SIM cards and recharge cards of Israeli operators.

[21] Arab Advisors and the PLO's Negotiation Support Unit, among others.

operators in the city of Rafah and by Jordanian operators in Jericho.[22] The PA regards the Egyptian and Jordanian operations as a simple matter of coverage spillage, to be solved through interference coordination. There is also spillage of Jawwal's signal in Israel's border areas, including Natanya and Ashkelon.[23] The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2" - 9/28/95 - ANNEX III, Art. 36), grants the interim right to Israeli operators to serve settlers in the West Bank.[24] By the nature of the geography of the settlements (scattered, and usually located on high points), the mobile coverage reaches most of the territory of the West Bank, including many of the most densely populated Palestinian towns and villages.

This matter is extremely controversial. According to the PA, these operations are illegal, and suggest that Israeli operators are actively commercializing services to the Arab population in the West Bank.[25] According to MTIT these operations run contrary to the letter and the spirit of the Oslo Agreement, and has protested that Israeli operators are illegally commercializing services to the Palestinian population in the West Bank. The subscriber identity module (SIM) cards and recharge cards of Israeli operators are widely available at sub-distributors and in small shops in Palestinian towns and villages of the West Bank. The Israeli authorities challenge this view and indicate that the sale and marketing of Israeli SIM and recharge cards in the territory of the West Bank is done in areas that are not under civilian control of Israel, or under its jurisdiction.[26]

Israeli sources view the Israeli operations into densely populated areas as spillage of Israeli mobile operators which could be significantly mitigated through interference coordination by the JTC. Israel's MoC emphasizes the fact that paragraph 36 (A)(2) of the Interim Agreement grants the Israeli side the power and responsibility to supply telecommunications services in Area C to settlements and military locations. Israel's MoC indicates that taking into consideration the safety and security issues along the

[22] Informal interviews reported that it is possible to find SIM cards and recharge cards of Jordanian as well as Israeli operators in the city of Jericho.

[23] The Palestinian authorities indicated that such spillage is quite limited due to the regulatory provisions set by the Israeli authorities on the height of the antennas, and emphasize the fact that there is no active commercialization of Jawwal services in Israel.

[24] The nature of the rights conferred to Israeli operators in the West Bank is a matter of contention. The PA contests the right for Israeli operators to cover the main roads connecting Israel to the settlements.

[25] The PA indicated that according to the Advisory Opinion of the International Court of Justice these operations are contrary to international law.

[26] The PA indicated that the Israeli operators continue exceeding what is provided in Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95) - ANNEX III, Art. 36, and are deliberately targeting the Palestinian customers, for example, by installing significant infrastructure with high power in settlements of a few hundred settlers and which is directed towards densely populated Palestinian cities and villages and by installing infrastructure in Areas C with the pretext of providing coverage to the bypass Roads. In addition, according to the PA, Israeli operators use direct marketing in Arabic via SMS to Palestinian users. This view is strongly challenged by Israel's MoC, which commented that "*One should recognize that the Israeli cellular services in the areas A and B are maintained by the use of pre-paid SIMs and cards, sold mainly by Palestinian dealers in areas that are not under the civilian control of Israel, and of course not under its jurisdiction, and Israeli operators may not be aware that these cards, sold mainly for use inside Israel, are in use in these areas*."

roads in those areas, good coverage is imperative, and explains the cellular coverage in Areas A and B.

The unlicensed competition experienced from Israeli operators, while not a suitable or recommended environment, may have stimulated penetration levels and driven mobile prices down (Table 1). Nonetheless, full, regulated, and legal competition in the Palestinian cellular segment is a necessary factor in achieving the high penetration rates experienced by Algeria or Jordan.

TELECOMMUNICATIONS SECTOR IN COMPARATIVE PERSPECTIVE

The telecommunications sector of the West Bank and Gaza, in spite of political and economic obstacles, outperforms that of other conflict countries such as Afghanistan, Iraq, Sierra Leone and Liberia, and performs at roughly the same level as selected Middle East and North African benchmark countries (Table 1).

Palestinian Internet penetration per capita is approximately 7 percent, which is in line with values of Algeria, Egypt, Syria, and Tunisia. It out performs post-conflict countries such as Afghanistan, Iraq, and Sierra Leone. However, with further liberalization in this segment, a significantly higher potential could be achieved—and come closer to the current leading regional benchmarks of Morocco and Turkey, at 15 percent. In addition, prices in the data and international communications segment remain relatively higher than those of benchmark countries.

West Bank and Gaza's fixed-line penetration, at about 9 percent, ranks similar to Algeria (8 percent) and Jordan (11 percent)—far above conflict zones such as Afghanistan (3 percent), and Iraq (4 percent) and above late fixed-line reformers such as Morocco (4 percent). However, West Bank Gaza does not reach the penetration levels of Egypt (14 percent), Turkey (26 percent), and Syria (15 percent). In the fixed segment also, sector reforms could markedly improve penetration rates.

West Bank and Gaza is among the leading benchmarked countries in terms of personal computer (PC) penetration per capita. At 5 percent, it is on par with Egypt, Jordan, Tunisia, Turkey, and Syria, and out performs conflict countries such as Afghanistan or Algeria.

In the cellular segment, West Bank and Gaza compares well to regional standards. With a penetration rate of 33 percent, it out performs Egypt, Iraq, Syria, and Yemen. However, it lags behind more open markets such as Algeria, Jordan, Tunisia and Turkey. The unlicensed competition experienced from Israeli operators, while not a suitable or recommended environment, may have stimulated penetration levels and driven mobile prices down (Table 1). Full, regulated, and legal competition in the Palestinian cellular segment is a necessary factor in achieving the high penetration rates experienced by Algeria or Jordan.

In sum, West Bank and Gaza is out performing other conflict countries and in some segments—notably mobile and PC penetration—is competitive with regional benchmarks. However, higher usage, penetration, or adoption rates can be achieved with the opening of the market to the reforms suggested in other chapters of this paper.

Table 1: Benchmarking West Bank & Gaza

	Population		*GDP*		*Main telephone lines per 100 inhabitants*		*Cellular mobile subscribers per 100 inhabitants*		*Internet*			*PCs*
	Total	*Density*	*Total*	*per capita*		*CAGR*		*CAGR*	*Hosts per 10,000 inhabitants*	*Users (000s)*	*Users 100 inhabitants*	*Per 100 inhabitants*
	(M)	*(per km^2)*	*(bill. US$)*	*(US$)*		*(%)*		*(%)*				
	2005	*2005*	*2004*	*2004*	*2005*	*2000 - 05*	*Q3-2007*	*2000 - 05*	*2005*	*2005*	*2005*	*2005*
Afghanistan	29.86	47	..	..	0.33	22.3	12	..	..	300	1.00	0.28
Algeria	32.91	14	83.2	2,569	7.82	6.2	72	175.5	*0.29*	1,920	5.83	1.06
Egypt	74.03	74	78.3	1,118	14.04	10.2	36	58.6	*0.50*	5,000	6.75	3.65
Iraq	26.07	59	..	..	4.00	8.0	42	..	..	36	0.14	..
Israel	6.90	332	122.5	17,856	42.56	-2.1	120	12.0	*789.56*	1,686	24.43	73.40
Jordan	5.70	59	9.9	1,814	11.36	-2.0	87	42.9	*5.28*	630	11.22	5.34
Liberia	3.28	29	0.6	174	..	..	20	154.5	*0.05*	..	..	..
Morocco	30.31	46	50.0	1,673	4.42	-2.6	60	39.5	*1.38*	4,600	15.18	2.46
West Bank & Gaza	**3.70**	**615**	**3.0**	**873**	**9.43**	**1.8**	***31***	**44.1**	**..**	**243**	**6.56**	**4.59**
Sierra Leone	5.53	76	1.1	201	..	..	17	111.7	*0.52*	10	0.19	..
Syria	19.04	103	19.4	1,133	15.24	8.1	30	150.3	..	1,100	5.78	4.20
Tunisia	10.09	61	28.2	2,822	12.47	4.5	74	116.6	*0.37*	954	9.46	5.63
Turkey	73.19	94	302.0	4,182	25.93	-0.8	79	22.0	*65.65*	11,204	15.31	5.13
Yemen	20.98	110	11.3	563	3.85	19.5	13	128.7	*0.08*	180	0.87	1.45

Source: ITU 2007. Items in itialics are for previous years.

POLICY RECOMMENDATIONS

Telecommunications and IT are regarded as dynamic sectors in West Bank and Gaza, generating fiscal revenues, investment, and jobs,[27] and particularly important to the economic and social development of West Bank and Gaza.[28] To contribute to the further development of the sector, this note identifies five major recommendations for action.

ISSUE: *Market Dominance*

The implementation of full competition in the sector is the recommended action to develop the sector. This involves awarding new licenses, tackling PalTel's monopoly position, completing the process to allocate frequencies to Wataniya and agreeing on the attribution of frequencies for new wireless data operators.

Of all the various issues affecting the development of the telecommunications sector in the West Bank and Gaza, the issue that would have the most immediate positive impact is Israel's release of the frequencies to allow mobile and data competition.

West Bank and Gaza customers face high charges for Internet connectivity and international calls (see Annex 3). Internationally, the implementation of full competition has been proven to be the best policy to stimulate market growth and reduce prices. This is the case also in low income and distressed economies (civil war, post conflict) environments. The success related to the introduction of robust competition in low-income/high-conflict countries such as Afghanistan and El Salvador should be a good reference point for West Bank and Gaza. To enable effective competition in the context of West Bank and Gaza, the following measures are crucial:

(a) enabling effective competition in the mobile sector by speeding the process to release the frequencies needed for Wataniya to start commercial operations;

(b) fully implementing the policy announced by MTIT to introduce competition in the data sector by issuing new competitive licenses,[29]

(c) regulating and monitoring anticompetitive behavior, and the concentration of monopoly power in PalTel (this implies strengthening the regulatory capacity

[27] A study commissioned by the mobile company Jawwal illustrates the contribution of Jawwal to the Palestinian economy (available at http://www.myjawwal.com/press/ExecutiveSummary-Final.pdf).

[28] The Palestinian authorities emphasized the fact that telecommunications has become a basic need of the population, due to the restrictions to the movement of people.

[29] Desirable features or guiding principles of the new data licenses are: (a) these licenses should be granted to a high number of competitors. No barriers to market entry (e.g., as many operators as the market can sustain) would be the recommended course of action; (b) the licenses should give the option to the licensee to be a full operator, that is to have the right to build or lease infrastructure; (c) no coverage requirements and low taxes and fees (in economic terms taxes and fees are an implicit barrier to entry).

of MTIT, and introducing antitrust and competition law principles in the legal and regulatory framework);

(d) addressing and agreeing on attribution of frequencies which are crucial for the attribution of wireless data licenses (e.g., Wi-Max).

Competition in mobile and data segment would be highly beneficial in terms of market growth and competitive pressure on prices. In itself, it would also contribute to mitigate or alleviate some of the other constraints related to the relationship between Israel and West Bank and Gaza (international gateway, requirements to establish infrastructure in Area C). The availability of spectrum is the crucial issue for the future of the sector in West Bank and Gaza. From the industry perspective, the business model of data operators incorporates more and more wireless solutions. Therefore, the availability of frequencies is of paramount importance to introduce modern competitors in the data segment. From the regulatory perspective, the global trend towards market-based and economic pricing of the spectrum is clearly incompatible with the rigid allocation of frequencies in this environment. Technical, long-term cooperation between the Palestinian and the Israeli authorities on this issue seems of the highest importance.

ISSUE: Unauthorized Competition and Technical Coordination Issues

Technical cooperation between Israeli and Palestinian Technical Teams should be promoted, to mitigate the existing issues. While it is accurate to state that frequency allocations for the PA were carried out through the JTC, Including the attribution of GSM frequencies for Jawwal, the existing conflict has hurt the work of the JTC and the implementation of the provisions under the telecommunications sections of the Oslo Agreement. Until 2000, the JTC held regular meetings but it has met only twice during in the period of 2000 to 2007. Many existing issues could be solved or at least mitigated, through good technical cooperation, including the completion of the process for the release of frequencies to allow Wataniya into the market, the presence of Israeli operators serving Arab customers in the West Bank, the establishment of long-distance communications and infrastructure developments in Area C.

The structured negotiations mechanism of the JTC (which deals with mutual coordination of frequencies use, interference problems, diverse international issues, and other sensitive subjects of mutual importance), should be supported and encouraged in the future. Given the demographics and the geography of the area covered, it is practically difficult to create hard boundaries to prevent complete access to the Palestinian market by operators not formally licensed by MTIT. While operators not licensed by MTIT should refrain from marketing directly their services in the Palestinian territories, nevertheless, it is recommended to pursue market-based practical arrangements to ensure a fair and level playing field among all operators in the West Bank and Gaza territory, such as revenue sharing arrangements with the licensed operators to formalize any spill-over entry and compensate for paid license fees.

ISSUE: Weak Sector Institutional and Regulatory Capacity

MTIT's institutional, regulatory, and enforcement capacity should be strengthened; this involves creating a regulatory unit within MTIT to be transferred to an independent telecommunications regulatory authority at a future date. New regulations should be issued to allow effective entry of new competitors in the market. New regulations are under preparation and MTIT has taken the initiative by publishing draft interconnection guidelines and subjecting them to the review and feedback of the operators and market players. MTIT is working on a new telecommunications law which aims to introduce a telecommunications regulatory authority. The delay is due to the internal changes in the Palestinian government and the Legislative Council's inability to conduct regular legislative business. As a quick protective measure, MTIT is exploring ways to create a regulatory unit within the MTIT to regulate the sector as needed until the telecommunications regulatory authority is established. Serious capacity building is needed to establish and operate such a unit.

MTIT also needs additional resources to tackle the various regulatory priorities that any ministry faces during the period of introducing competition, including other aspects of interconnection regulation (e.g., dispute resolution, interconnection costing); enforcement; licensing; spectrum management and monitoring; and number portability. There is also a need to train regulatory experts to ensure that effective competition develops in the market (this is a priority in light of Wataniya's entrance). The introduction of a body of competition law and regulation, and the presence of regulatory tools to monitor and sanction anticompetitive behavior, is a top priority.

Tax collection should be improved. Effective competition between telecommunications operators can provide a strong and reliable tax base, generating both short-term gains (from the tax revenues related to issuing new competitive licenses) and long-term fiscal gains (through value-added taxes imposed on a sector in rapid growth and expansion). This will require establishing a more transparent system for generating and collecting tax revenues from the sector and will also involve dealing with the commercial and financial issues related to the presence of unauthorized operators. Improvements in tax collection, as well an agreement on how to tax the revenues generated by Israeli operators serving Arab customers in the West Bank, would be desirable. Another important angle is improving the transparency of the accounts of the companies operating in the sector.

The overall transparency and governance of the sector should be enhanced. This set of issues includes various items. For example, the exact legal status of the various subsidiaries of PalTel group is not fully determined; the priority between rights under the licenses and guidelines issued by the government is not fully clarified; present operators do publish balance sheets and income statements, but are not subject to implementation of cost accounting; as a result, there is a potential for cross subsidies and other anticompetitive practices.

ANNEX 1

RELEVANT LEGAL AGREEMENTS

Oslo Agreement, Annex III, Protocol on Israeli-Palestinian Cooperation in Economic and Development Programs

The two sides agree to establish an Israeli-Palestinian continuing Committee for Economic Cooperation, focusing, among other things, on the following:

1. Cooperation in the field of water, including a Water Development Program prepared by experts from both sides, which will also specify the mode of cooperation in the management of water resources in the West Bank and Gaza Strip, and will include proposals for studies and plans on water rights of each party, as well as on the equitable utilization of joint water resources for implementation in and beyond the interim period.
2. Cooperation in the field of electricity, including an Electricity Development Program, which will also specify the mode of cooperation for the production, maintenance, purchase and sale of electricity resources.
3. Cooperation in the field of energy, including an Energy Development Program, which will provide for the exploitation of oil and gas for industrial purposes, particularly in the Gaza Strip and in the Negev, and will encourage further joint exploitation of other energy resources. This Program may also provide for the construction of a Petrochemical industrial complex in the Gaza Strip and the construction of oil and gas pipelines.
4. Cooperation in the field of finance, including a Financial Development and Action Program for the encouragement of international investment in the West Bank and the Gaza Strip, and in Israel, as well as the establishment of a Palestinian Development Bank.
5. Cooperation in the field of transport and communications, including a Program, which will define guidelines for the establishment of a Gaza Sea Port Area, and will provide for the establishing of transport and communications lines to and from the West Bank and the Gaza Strip to Israel and to other countries. In addition, this Program will provide for carrying out the necessary construction of roads, railways, communications lines, etc.
6. Cooperation in the field of trade, including studies, and Trade Promotion Programs, which will encourage local, regional and inter-regional trade, as well as a feasibility study of creating free trade zones in the Gaza Strip and in Israel, mutual access to these zones, and cooperation in other areas related to trade and commerce.
7. Cooperation in the field of industry, including Industrial Development Programs, which will provide for the establishment of joint Israeli- Palestinian Industrial Research and Development Centers, will promote Palestinian-Israeli joint ventures, and provide guidelines for cooperation in the textile, food, pharmaceutical, electronics, diamonds, computer and science-based industries.
8. A program for cooperation in, and regulation of, labor relations and cooperation in social welfare issues.

9. A Human Resources Development and Cooperation Plan, providing for joint Israeli-Palestinian workshops and seminars, and for the establishment of joint vocational training centers, research institutes and data banks.
10. An Environmental Protection Plan, providing for joint and/or coordinated measures in this sphere.
11. A program for developing coordination and cooperation in the field of communication and media.
12. Any other programs of mutual interest.

The Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip ("Oslo 2"— 9/28/95) - ANNEX III, ARTICLE 36, Telecommunications

A. General

1. This sphere includes, inter alia, the management and monitoring of the use of the radio frequency spectrum, the use of the geostationary satellite orbit, the planning, formulation and implementation of telecommunications policies, regulations and legal frameworks. The above shall be in accordance with, and subject to, the following provisions:
2.
    a. In Area C, although powers and responsibilities are transferred to the Palestinian side, any digging or building regarding telecommunications and any installation of telecommunication equipment, will be subject to prior confirmation of the Israeli side, through the CAC.

    b. Notwithstanding paragraph a. above, the supply of telecommunications services in Area C to the Settlements and military locations, and the activities regarding the supply of such services, shall be under the powers and responsibilities of the Israeli side.

B. Principles

1. Israel recognizes that the Palestinian side has the right to build and operate separate and independent communication systems and infrastructures including telecommunication networks, a television network and a radio network.
2. Without prejudice to subparagraph D.5.c of this section, the Palestinian side has the right to establish satellite networks for various services, excluding international services.
3. The Palestinian side has the right to establish its own telecommunications policies, systems and infrastructures. The Palestinian side also has the right to choose any and all kinds of communication systems (including broadcasting systems) and technologies, suitable for its future in, inter alia, basic and value added services (including cellular telephony).
4. Operators and providers of services, presently and in the future, in the West Bank and the Gaza Strip shall be required to obtain the necessary approvals from the Palestinian side. In addition, all those operating and/or providing services, presently and in the

future, in the West Bank and the Gaza Strip who wish to operate and/or provide services in Israel, are required to obtain the necessary approvals from the Israeli Ministry of Communications.

1. Both sides shall refrain from any action that interferes with the communication and broadcasting systems and infrastructures of the other side. Specifically, the Palestinian side shall ensure that only those frequencies and channels specified in Schedule 5: List of Approved Frequencies (herein - "Schedule 5") and Schedule 6: List of Approved TV Channels and the Location of Transmitters (herein - "Schedule 6") shall be used and that it shall not disturb or interfere with Israeli radio communication activity, and Israel shall ensure that there shall be no disturbance of or interference with the said frequencies and channels.
2. A joint committee of technical experts representing both sides shall be established to address any issue arising out of this section including the growing future needs of the Palestinian side (hereinafter referred to as "the Joint Technical Committee" or "JTC"). The JTC shall meet on a regular basis for the purpose of solving all relevant problems, and as necessary in order to solve urgent problems.

C. The Electromagnetic Sphere

1. The Palestinian side has the right to use the radio frequency spectrum, in accordance with principles acceptable to both sides, for present and future needs, and frequencies assigned or reassigned within the West Bank and the Gaza Strip covering all its required services within the bands L.F., M.F., H.F., V.H.F., U.H.F., S.H.F. and E.H.F. In order to satisfy the present needs of the Palestinian side, the frequencies detailed in Schedule 5 are assigned for the use of the Palestinian side in the West Bank and the Gaza Strip.
2. Future needs for frequencies shall be agreed upon by the two sides. To that end, the Palestinian side shall present its requirements through the JTC which must fulfill these requirements within a period not exceeding one month. Frequencies or sections of frequencies shall be assigned, or an alternative thereto providing the required service within the same band, or the best alternative thereto acceptable by the Palestinian side, and agreed upon by Israel in the JTC.
3.
    a. The frequencies specified in Schedule 5 shall serve, inter alia, for the transmission of a television network and a radio network.
    b. The television channels and locations of transmitters to be used by the Palestinian side are specified in Schedule 6. The production studios and related broadcasting equipment shall be located in the West Bank and the Gaza Strip.
    c. The radio transmitter shall be located in the area of Ramallah and Al-Bireh Cities, at the presently agreed site.
    d. The Palestinian side has the right to change the location(s) of radio transmitters according to an agreement between the two sides through the JTC, to serve the Palestinian plans in achieving the best coverage.

D. Telecommunications

1. Pending the establishment of an independent Palestinian telephone network, the Palestinian side shall enter into a commercial agreement with Bezeq - The Israel

Telecommunications Corp. Ltd. (herein, "Bezeq"), regarding supply of certain services in the West Bank and the Gaza Strip. In the area of international telephony, commercial agreement(s) shall be concluded with Bezeq or other duly-licensed Israeli companies. The above shall be without prejudice to subparagraph 5.c below.

2. As long as the Palestinian network is integrated with the Israeli network, the Palestinian side shall use such telephonic equipment as is compatible with the standards adopted and applied in Israel by the Ministry of Communications, and will coordinate with the Israeli side any changes to the structure and form of telephone exchanges and transmission equipment. The Palestinian side shall be permitted to import and use any and all kinds of telephones, fax machines, answering machines, modems and data terminals, without having to comply with the above-mentioned standards (accordingly, lists A1 and A2 of Annex V (Protocol on Economic Relations) will be updated). Israel recognizes and understands that for the purpose of building a separate network, the Palestinian side has the right to adopt its own standards and to import equipment which meets these standards (accordingly, lists A1 and A2 of Annex V (Protocol on Economic Relations) will be updated). The equipment will be used only when the independent Palestinian network is operational.

3.

   a. The Palestinian side shall enable the supply of telecommunications services to the Settlements and the military installations by Bezeq, as well as the maintenance by Bezeq of the telecommunications infrastructure serving them and the infrastructure crossing the areas under the territorial jurisdiction of the Palestinian side.

   b. The Israeli side shall enable the supply of telecommunications services to the geographically-dispersed areas within the West Bank and the Gaza Strip. This shall include provision, subject to the approval of the proper Israeli authorities, free of charge, of rights of way or sites in the West Bank for microwave repeater stations and cables to interlink the West Bank and to connect the West Bank with the Gaza Strip.

   c. Israel recognizes the right of the Palestinian side to establish telecommunications links (microwave and physical) to connect the West Bank and the Gaza Strip through Israel. The modalities of establishing such telecommunications connections, and their maintenance, shall be agreed upon by the two sides. The protection of the said connections shall be under the responsibility of Israel.

4. Without prejudice to paragraph 3 above:

   a. The Palestinian side shall take the necessary measures to ensure the protection of the telecommunication infrastructures serving Israel, the Settlements and the military installations, which are located in the areas under the territorial jurisdiction of the Palestinian side.

   b. The Israeli side shall take the necessary measures to ensure the protection of the telecommunication infrastructures serving the West Bank and the Gaza Strip and which are located in areas under Israel's responsibility.

5.

   a. The Palestinian side has the right to collect revenue for all internal and international telecommunication services originating and terminating in the West Bank and the Gaza Strip (except Settlements and military locations).

   b. Details regarding payment by the Palestinian side to Bezeq or other duly-licensed Israeli companies, and compensation by Bezeq or the said companies to the Palestinian side, referred to in subparagraph a. above, shall be agreed upon in the commercial agreement(s) between them.

   c. The provisions of subparagraphs a. and b. above will be applied between the sides until such time as the two sides agree upon installation and operation of an "international gateway", as well as the international code, for the Palestinian side and the actual commencement of operation of the said gateway.

   d. The Palestinian side shall enter into a discussion with Bezeq for the purpose of coming to an agreement for the use of a separate area code and numbering plan, pending the establishment of a separate Palestinian network.

6. The Palestinian side has the right to collect taxes on all telecommunications services billed in the West Bank and the Gaza Strip, subject to the provisions of Annex V (Protocol on Economic Relations).

   a. The Israeli side shall provide the Palestinian side with all operating, maintenance and system manuals, information regarding billing systems and all operating and computer programming protocols of all the equipment that will be transferred to the Palestinian side, subject to protection of rights of commercial confidentiality.

   b. The Israeli side shall also supply the Palestinian side with all contractual agreements between the Civil Administration and all domestic and international entities in the area of telecommunications. The timing of the provision of the above mentioned materials will be as provided for in this Annex.

   c. Bezeq, in accordance with the commercial agreement, will supply the Palestinian side with all legal verification of its purported ownership of any and all movable or immovable assets in the West Bank and the Gaza Strip, that are not part of the Civil Administration's present network.

ANNEX 2

BENCHMARKING INTERNET ACCESS AND INTERNATIONAL CALLS IN WEST BANK AND GAZA

According to the ITU, 20 hours of Internet connectivity cost Palestinians 17 percent of their gross national income per capita. In comparison, 20 hours of Internet connectivity cost Lebanese 2 percent, Algerians and Egyptians each 5 percent, Jordanians and Tunisians each 6 percent, and Syrians 14 percent of their gross national income per capita. Compared with data connectivity rates in other countries, Palestinian rates are high for both businesses and residential use. Since business ADSL connection rates are 2.6 times residential ADSL connection rates and monthly charges are three times higher for businesses than for residential users, and demand for residential accounts is higher than that for business accounts (demand for residential increased by 266 percent in 2006 and 97 percent of all ADSL accounts are residential), presumably small businesses are signing up as residences (Arab Advisors Group Strategic Research Service, 2007).

Table A2.1. Residential and Commercial ADSL Rates

	Residential Rates ($)			Commercial Rates ($)
Speed (Kbps)	Connection Fees	Monthly Subscription	Connection Fees	Monthly Subscription
128	35	14	--	--
256	35	23	--	--
512	35	28	94	94
1,024	35	47	94	142
2,048	--	--	94	235

Source: Arab Advisors Group 2007, Hadara

In comparison, the monthly subscription charges in benchmark countries with similar purchasing power are several factors lower:

Table A2.2. Comparison of Monthly Subscription Charges

March 2006	Monthly Subscription Fee for Internet Connectivity ($)	Total Cost for 20 hours of Internet Use (connection + hrs of use) ($)
Algeria	9.41	9.41
Egypt	4.97	4.97
Israel	22.02	22.02
Jordan	10.92	11.14
Lebanon	10.00	10.00
Palestine	(see above)	15.57
Syria	9.44	13.97
Tunisia	3.19	12.38
Turkey	7.17	11.61

Source: ITU 2007, "Measuring the Information Society 2007"

Palestinian consumers and businesses would also benefit from a market-based price for international calls. Currently, best practice for a three minute call to the United States (as a proxy) would be between $0.25—$.0.50 while Palestinians pay $1.17 per three minutes. Benchmark countries that have not opened their long-distance sector to competition have similarly high rates, are shown in Table A2.3.

Table A2.3. Benchmark Countries with Long-distance Sector Unopened to Competition

	Cost of call to US $ per 3 minutes	Monthly price basket for residential fixed-line ($)	Monthly price basket for mobile ($)
	2005	**2005**	**2006**
Afghanistan	0.39	11.3	10.8
Algeria	*2.08*	6.3	7.5
Egypt	*1.45*	4.0	5.8
Israel	*0.59*	*10.5*	9.3
Jordan	*1.44*	10.0	6.7
Lebanon	*2.19*	15.0	20.1
Morocco	1.69	*23.0*	16.3
Turkey	2.40	*14.7*	12.6
West Bank / Gaza	1.17	7.5	9.8

Source: World Bank, WDI 2007. Prices in italics are for 2004.

ANNEX 3

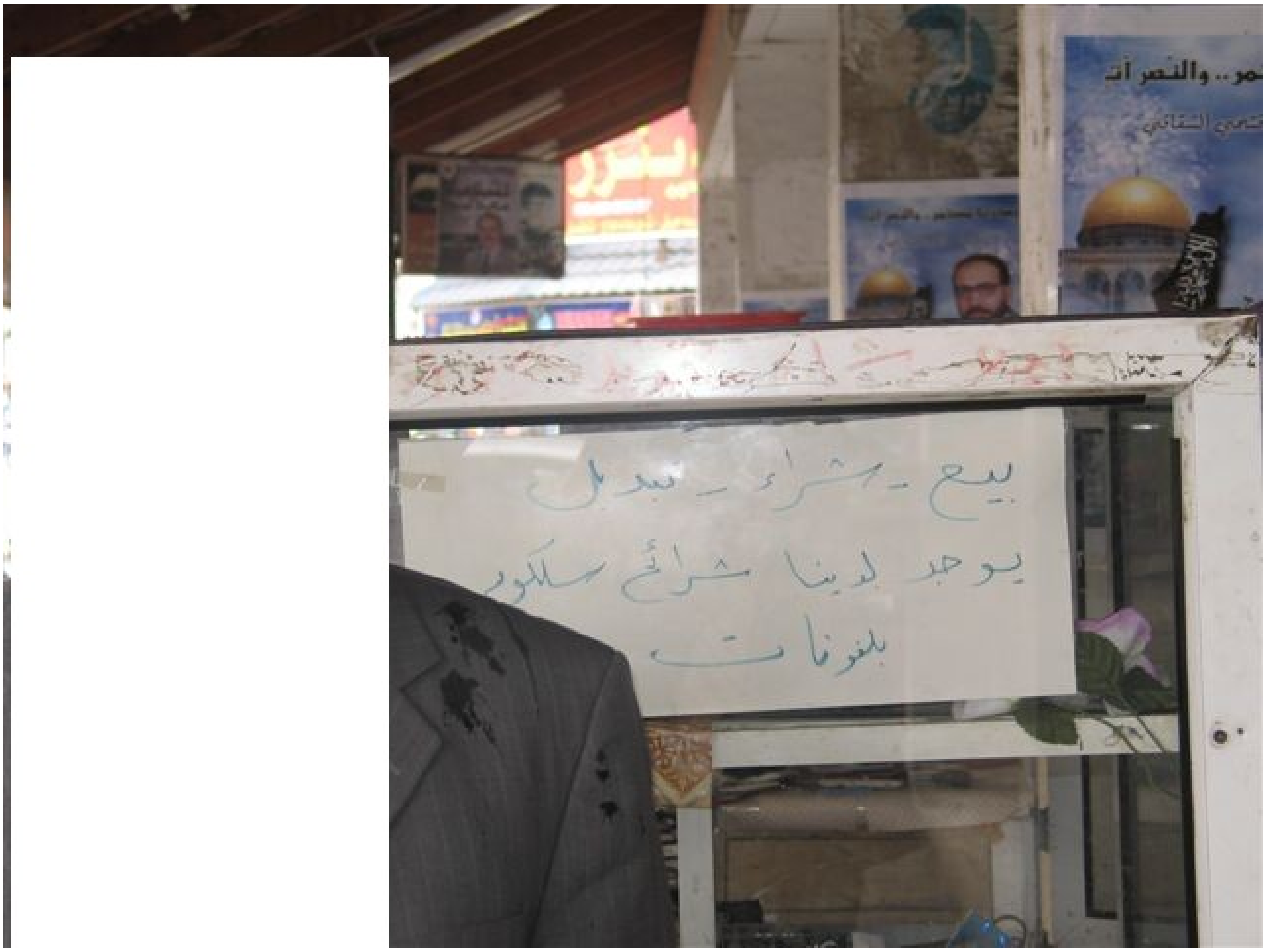
DIGITAL MAP OF MOBILE COMMUNICATION COVERAGE IN THE WEST BANK

(see separate file)

ANNEX 4

ADVERTISING MATERIAL OF ISRAELI OPERATORS IN QALQILYA

The photo displays advertisement material for Israeli operators at a Jawwal sub-dealer in downtown Qalqilya. The photo was taken on 11/07/07, in the presence of the World Bank mission.


والنصر آت
بيع - شراء - تبديل
يوجد لدينا شرائح

The photo shows a small cart in downtown Qalqilya offering recharge cards of Israeli operators. The photo was taken on 11/07/07, in the presence of the World Bank mission.