

INTERNATIONALIZATION OF COMMUNICATION IN GREATER EASTERN
MEDITERRANEAN REGION
TURKEY, GREECE AND ISRAEL

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

FİGEN GÜLÇİN ÖZYURT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
DOCTOR OF PHILOSOPHY
IN
INTERNATIONAL RELATIONS

SEPTEMBER 2007

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ABSTRACT

INTERNATIONALIZATION OF COMMUNICATION IN GREATER EASTERN MEDITERRANEAN REGION TURKEY, GREECE AND ISRAEL

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September 2007, 349 pages

This thesis analyzes the current and possible impacts of the new global information and communication order regime institutionalized by the 1993 WTO agreements, GATS and TRIPS, and the following 1997 BTS agreement on Turkey, Greece and Israel, telecommunications markets, three important countries of the GEMED region. Since the early 1980s these countries have showed significant efforts to establish telecommunications systems and computer networks based on high- technology. They have adopted corporate-oriented strategies and complemented necessary changes consisting up of four stages: liberalization, deregulation, corporatization and privatization in order to internationalize and to realize full liberalization of their national telecommunications markets. Full liberalization and resulting internationalization process has increased interests of global telecommunications giants seeking new markets for their IT products and services based on NGN technologies to enter into the Turkish Greek, and Israeli telecommunications markets. Huge costs of NGN technologies will inevitably accelerate merging and resulting concentration process in the hands of the very few numbers of conglomerates will likely conclude with “back to natural monopoly position” whose rules will be defined by private monopoly consisting up of merging two or three the most powerful private conglomerates.

Keywords: Liberalization of Telecommunications, Internationalization of Communication, New Global Information and Communication Order, Greater Middle Eastern Mediterranean Region (GEMED), TGI (Turkey, Greece, Israel) Countries

ÖZ

BÜYÜK DOĞU AKDENİZ BÖLGESİNDE İLETİŞİMİN ULUSLARARASILAŞMASI TÜRKİYE, YUNANİSTAN VE İSRAİL

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Tez Yöneticisi: Doçent Dr. Mehmet Fatih Tayfur

Eylül 2007, 349 sayfa

Bu çalışma 1993 DTÖ anlaşmaları, GATS ve TRIPS ve bunu izleyen 1997 BTS anlaşması tarafından kurumsallaştırılan yeni küresel bilgi ve iletişim düzeni rejiminin GEMED bölgesinin üç önemli ülkesi olan Türkiye, Yunanistan ve İsrail telekomünikasyon pazarları üzerindeki şu anki ve olası etkilerini analiz etmektedir. 1980li yılların başından bu yana bu ülkeler yüksek teknolojiye dayalı telekomünikasyon sistemleri ve bilgisayar ağları kurmak için büyük çabalar göstermişlerdir. Bu ülkeler şirket odaklı stratejileri benimsemişler ve telekomünikasyon pazarlarını uluslararası hale getirmek ve ulusal telekomünikasyon pazarlarının tamamen serbestleştirilmesini gerçekleştirmek için gerekli değişiklikleri tamamlamışlardır. Tamamen serbestleştirme ve bunun sonucu olan uluslararasılaşma süreci yeni nesil ağları (YNA) teknolojilerine dayalı bilgi teknolojisi (BT) ürün ve hizmetleri için yeni pazarlar arayan küresel telekomünikasyon devlerinin Türk, Yunan ve İsrail telekomünikasyon piyasalarına girmek için ilgilerini arttırmıştır. Yüksek maliyetli YNA teknolojileri bu piyasalarda kaçınılmaz olarak birleşme ve bunun sonucu olan toplanma sürecini hızlandıracaktır. İletişim kaynaklarının artan bir biçimde çok az sayıdaki holdinglerin elinde toplanması muhtemelen kuralları iki ya da üç tane en güçlü holdinglerin birleşmesinden oluşan bir özel tekel tarafından belirlenecek olan “doğal tekel durumuna geri dönülmesi” ile sonuçlanacaktır.

Anahtar Sözcükler: Telekomünikasyonun Serbestleştirilmesi, İletişimin Uluslararasılaşması, Yeni Küresel Bilgi ve İletişim Düzeni, Büyük Doğu Akdeniz Bölgesi (GEMED), TGI (Türkiye, Yunanistan, İsrail)Ülkeleri

In Memory of My Father

ACKNOWLEDGMENTS

The author wishes to express her gratitude to her supervisor Assoc. Prof. Dr. M. Fatih Tayfur who brings a new perspective to her economic understanding with his guidance throughout the thesis period.

The author would also like to thank Prof. Dr. Eyüp Özveren and Assoc. Prof Dr. Sevilay Kahraman for their suggestions and comments.

The author would like to dedicate this thesis to her family for their continuous supports and encouragements.

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LIST OF ABBREVIATIONS

3G	Third Generation Networks
ARPU	Average Revenue Per User
B2B	Business to Business
B2C	Business to Consumer
BT	British Telecom
BTS	Basic Telecommunications Services Agreement
CATV	Cable TV
DTH	Direct-to-Home Services
DTTV	Digital Terrestrial Television
DVB	Digital Video Broadcasting
EETT	Greek National Regulatory Authority
ERDF	European Regional Development Fund
FCC	Federal Communications Commission
FDI	Foreign Direct Investment
FFI	Free Flow of Information
GATT	General Agreement on Tariffs and Trade
GATS	General Agreement on Trade in Services
GEMED	Greater Middle Eastern Region
GII	Global Information Infrastructure
HPPA	Housing and Public Participation Administration
ICTs	Information and Communication Technologies
Inmarsat	International Maritime Organization
Intelsat	International Telecommunications Satellite Organization
IPTV	Internet Protocol Television
ISPs	Internet Service Providers
IT	Information Technology
ITU	International Telecommunications Union
MAI	Multilateral Agreement on Investment
MENA	Middle East and North America

MoC	Ministry of Communication
MoT	Ministry of Transport
MT&C	Ministry of Transport and Communication
MSOs	Multiple Systems Operators
NETAŞ	Northern Electric and Telekomünikasyon A.Ş
NGN	Next Generation Network
NICs	Newly Industrialized Countries
NII	National Information Infrastructure
NT	Northern Telecom
NTOs	National Telecommunications Organizations
NWEO	New World Economic Order
NWICO	New World Information and Communication Order
OPIS	Operational Program for the Information Society
RBOCs	Regional Bell Operating Companies
R&D	Research and Development
RTÜK	Radio and Television Supreme Board
SEM	Single European Market
SMEs	Small and medium Scale Enterprises
SMP	Significant Market Power
STAR	Special Telecommunications Action for Regional Development
Telcos	Telecommunications Corporations
TMA	The Telecommunications Mergers Associations
TMSF	Turkish Savings and Deposits Insurance Fund
TNCs	Transnational Companies
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TUENA	Turkish National Information Infrastructure Master Plan
USO	Universal Service Obligation
USAID	United State Agency for International Development
VANS	Value – Added Network Services
VSAT	Very Small Apparatus Terminals

WATTC World Administrative Telephone and Telegraph Conference
WTO World Trade Organization

CHAPTER 1

INTRODUCTION

From the mid-19th century to the beginning of the 1980s, there was a worldwide consensus determining rules of telecommunications policies in the areas such as technical compatibility of networks, price levels for benefiting various communications services, provision of public service etc. Until the early 1980s, telecommunications sector had distinct characteristics. First, in all countries telecommunications was accepted as a natural monopoly, defending strongly the view that a competitive telecommunications market structure was not an optimal solution. Before the 1980s, it was generally argued that the provision of telecommunications services had required such large economies of scale that it was the most efficient, provided that one operator should meet whole communication needs to all. (Hamelink, 1997:71) Second, public service provision based on discriminatory price applications was the dominant feature of telecommunications sector. Public service provision aimed at providing minimum cost services to customers through cross-subsidization mechanism which meant that tariffs for small users were not based upon real costs but were kept affordable by subsidies from such revenue generation services as international telephony. Third, telecommunications of tariffs were determined by political and social conditions rather than purely economic considerations. Governments applied the same averaged tariff rates (the same charge whatever the distance) on both “thin traffic routes” in rural areas and “thick traffic routes” in urban centers. (Humphreys and Simpson, 2005:22) Fourth, generally a government department was responsible for both network operation and regulation of the sector. Fifth, from the end of the Second World War to the early 1980s, each of the major industrial countries, such as the US, Britain, France, Germany, and Italy, had their own manufacturers, like Siemens, Alcatel, Philips, etc., protected aggressively from external competition through various tariffs and non-tariffs barriers to foreign telecommunications equipment manufacturers competition. (Hills,1998:102). Sixth, in the non-industrialized countries, telecommunications revenues were not

allocated to upgrade networks. Instead Treasury could transfer significant parts of PTT's profits and fund to politically determined development programs.

This situation prevailing in telecommunications sector has begun changing significantly since the early 1980s. Main reason of this shift was the breakdown of Keynesian economic understanding, giving popularity neo-liberal policies in the late 1970s. Neo-liberal economists defended strongly that deregulation of related laws for private telecommunications firms and privatization of state-owned telecommunications organizations would result in significant efficiencies and benefits. As a result, the view defending the structure of telecommunications should be a natural monopoly has begun losing its importance and first significant change in the sector; "liberalization of telecommunications" has emerged. Prime factors of this change were new technologies and neo-liberal policies applying aggressively into the telecommunications sector.

In the 1940s innovations in communications area – such as early digitization theories, transistor technology etc. - were resulted in series of technological advancements and expansion of communication possibilities. In the late 1950s, as a result of economic boom in the US, demands for long-distance and international communication, especially use of international telephone and telegraph, by American-based corporations increased dramatically. In order to meet long-distance communication requirements, telecommunications companies, AT&T in particular, sought to new methods for improving speed, quality, and capacity of overseas telephony system. An important innovation relating to this aim was high capacity coaxial submarine cable systems. The first high capacity undersea coaxial telephone cable was installed in 1956 in order to provide international telephony services between two sides of the North Atlantic. With the construction of submarine telephony system, the US-based corporations obtained a very useful tool facilitating their international operations. In that period, all of the early submarine cables were operated by joint-ventures between the AT&T and foreign telecommunications monopolies. (Dizard, 2001:33)

Cold War conditions had forced Eastern and Western bloc countries, especially the two superpowers; the US and the SU, to give prime importance for military security and had accelerated arms race. This situation strengthened links between electronics industry, including computer and communication companies, and the defense industry.

Satellite technologies were the most important component of these strong linkages between the two sectors. (Hills, 1998:104) Satellite technologies, at the same time, would serve the international communication needs for the US-based corporations. In the late 1950s, American private telecommunications corporations developed plans for satellite communication systems to enhance international communication capacities. Detailed action program for communication satellite technologies gained acceleration after Soviet Sputnik-I satellite was launched in 1957. First communication satellite programs emphasized that satellite technologies would increase possibilities for global communication, education and ideological propaganda. Advancements in new satellite technologies have created communication-related myths. One of the most powerful telecommunications based myth was developed by Marshall McLuhan in 1962. This myth assumes the image of a global village where advanced electronic communication technologies would create a world of multiple and harmonized communication centers, providing necessary conditions to human beings for easy access, gather and exchange information. (Parker,1996:52). Satellite technology accelerated Cold War competition between the two superpowers in the exploration and utilization of space. Therefore, a new dimension aiming to provide national superiority in science and technology field as a mean of claiming global leadership had been added to Cold War competition. (Slotten, 2002:316)

After came into power, President Kennedy invited all nations to join a global communications network. Kennedy administration followed a policy that reflected a joint government- private sector approach in order to build and manage a communication satellite enterprise in cooperation with other countries. The US government wanted to play an active role in a global communication satellite network. Main aim of the desire was to guarantee the condition that this network would certainly serve to American global strategic interests and its free flow of information (FFI) ideal. (Dizard,2001:41)

At the 1964 ITU Conference, the US and the Western European states agreed on an interim agreement known as Intelsat (a global communications network), which would initially serve the needs for North Atlantic region. None of the Third World countries representing more than half of the world population participated to interim

negotiations. Meanwhile, socialist bloc countries did not join the interim Intelsat agreement. During this period, China strongly criticized the interim global satellite communications network system and used this agreement as a propaganda tool for proving the American imperialist intentions. Soviet approach to the interim Intelsat arrangement could be defined as cautious. SU was different from China in that it was a member of ITU and therefore it could participate to the Intelsat system but it refrained to join such kind of system. In addition, it had also capacity to form its global network system and to call for other countries for participating in it. This initiative could clearly obstruct American plans on creating the global communications system operating under its supervision. In addition, SU continued its propaganda efforts by claiming to satellite consortium as a “rich man club” (Slotten, 2002:347)

As time for permanent Intelsat agreement negotiations, which would started in 1969, approached, the US communication policy-makers began considering that Third World nations’ involvement in such permanent agreement would strengthen Intelsat system. Moreover, Third World participation would ultimately weaken the Soviet endeavors for convincing Third World nations to join the Inter-Sputnik network. At the end of the 1960s, the US conducted a campaign aiming to persuade newly independent Asian and African countries’ governments to join Intelsat system. To this end, American policy-makers sought to solutions for facilitating developing countries’ participation into Intelsat system. They prepared a plan for financing high costs satellite equipments for linking Third World nations’ telecommunications systems to the global satellite network. American officials provided Export-Import Bank guarantees, USAID Technical Assistance and Ford Foundations grants. The US satellite equipment manufacturers also offered convenient conditions to Third World countries. (Dizard, 2001:51) Meanwhile in 1968, the SU declared its plans for building up its own global communications satellite system, Inter-Sputnik. Like the Americans, the SU had also aimed to maintain its strict control over the Inter-Sputnik network. Initially, Inter-Sputnik members consisted of the Soviet bloc states in Eastern Europe, Cuba and Mongolia. Subsequently, Algeria and North Vietnam joined the system. However, Inter-Sputnik did not start its operations until 1972. Permanent Intelsat treaty was approved on 20 August, 1971. Intelsat was truly a new kind of global organization in that for the first

time a part of traditional nationalistic monopolistic power was transferred to a transnational organization. (Dizard, 2001: 54) Intelsat determined low tariff levels for “thin routes”. Therefore, Intelsat soon became dominant for international communication of developing countries in Africa and in Australia. (Hills, 1998:104) Intelsat network system proved the success of the US in using space technologies and in convincing superiority of American social and economic institutions in the eyes of the world countries. (Slotten,2002: 347) On September 3, 1976, the European national telecommunications organizations (NTOs) established International Maritime Satellite Organization (Inmarsat) in order to provide mobile communications to shipping and airplanes.

As went into effect as, the Intelsat agreement faced strong challenges from NTOs and from alternative technologies. NTOs preferred to use their own submarine cable systems. Moreover, a number of accidents on launch, short of launch facilities, and enormous costs of insurance made satellite technologies uneconomic. In addition, Intelsat could not allocate sufficient investments for new satellite technologies. Intelsat members were permitted to develop alternative communication satellite network systems that could become as potential competitors against Intelsat system. (Dizard,2001:49) In the interim agreement period, Western European states had already plans for development of their national satellite systems that would provide links to North America, to Africa from Europe. Therefore, Intelsat system could not take consider the possible effects of inter-regional satellite communications networks, first in Europe and then in the Asia-Pacific, on the global communication satellite system. Inter-regional communication satellite networks provided a significant market opportunity to privately owned satellites. (Hills,1998:105)

In the 1970s, microchip and microprocessor technologies had revolutionized computer technology which made possible digitization (in which all information is converted into digital signals and is then capable of being processed by sophisticated electronic hardware) High capacity of fiber-optic cables made from glass fiber and using laser beams gradually reduced Intelsat’s share of international communication traffic since the beginning of the 1980s. Fiber-optic cables could transmit digitized messages and massive amounts of information without repeaters necessary for coaxial cable.

Undersea fiber-optic cable networks directly challenged Intelsat's intercontinental traffic because of their high circuit capacities. One significant result of the sub-marine fiber-optic networks was that they provided opportunities to corporations in order to create their own private networks within the US. (Hills, 1998:106) Therefore, international communication infrastructure became predominantly owned by private companies.

Intelsat Treaty had created a global village expectation that every point in the world would be linked through electronic communication technologies. However, in the 1980s, this expectation dramatically disappeared due to the distortions in communication traffic. Approximately 80 percent of communication traffic intensified mainly in the North Atlantic and North Pacific regions where communications systems were primarily used for commercial aims. The TNCs were the major beneficiaries of this network. They used Intelsat system in order to strengthen links with their international operations and to expand market particularly in Western Europe and East Asia. Intelsat's operations in developing regions were limited to "thin route" communication involving less than 10 percent of the system's total traffic. (Dizard, 2001:54)

In the 1980s merging of satellite, telecommunications and computer technologies created information revolution that led to digital convergence of data processing and telecommunications transformation from analog to digital system. Digital networks have provided the wide possibilities to firms, offering a various Value-added network services (VANS) that could transmit data at unprecedented speeds and capacities and flexibilities. This merge has created faster and more efficient forms of communication and has eroded the boundaries between different networks or systems of communications. One result of this erosion is wider electronic communications capacity carrying all forms of communications and information. (Negrine, 1993:51)

In the late 1990s, digital cellular technology was developed. The EU introduced Group Special Mobile (GSM) technology and exported it to the rest of the world. Today GSM is the dominant mobile communications technology. In the 1990s, satellite technology has been linked with that of cellular radio by a number of consortia to offer global mobile personal communication. The consortia include; Iridium (US) led by Motorola; Globalstar (US) with Loral of the US as the main investor; Odyssey (US); and ICO, the privatized offshoot of Inmarsat. The service reduced international traffic

revenues of NTOs. (Hills,1998:106) Finally, the internet utilizing telecommunications infrastructure to transmit digital data raised questions of international regulations of internet.

High costs new digital technologies led pressure to liberalize telecommunications network systems. Large telecommunications services users began looking for the cheapest networks available. (Hills, 1998:104) In addition, there was increasing pressure from the largest users to reduce tariffs. These users discovered that cost reductions were possible, if they used new communication alternatives to the traditional networks controlled by the national telecommunications organizations having monopolistic character. Alternative communication networks had caused significant reductions in tariffs. Since NTOs had to compete these alternative systems capable of bypassing public networks. Corporate users demanded not only low costs but also specially modified communications services for their needs. National telecommunications organizations having outmoded technology and low investment capacity for networks upgrading could not manage to meet these demands from corporations. The only way to meet wide range specific corporate users' demands was to offer new advanced services. Business users seeking lower prices and more alternatives for value- added networks began pressuring to open up communication markets consisting up of a diverse range of information and communication services to competition. (Humphreys and Simpson,2005:25) A view emphasizing that a country lacking in modern telecommunications system can not manage to participate effectively into the global economy began emerging during the 1980s. (Giray, 2003:195)

As a consequence of technological advancements in telecommunications area, Universal Service provision has begun replacing public service concept (This concept based on discriminatory price applications among different users. It applies such prices so as to encourage access to the telecommunications services by the largest number of citizens). Since the beginning of the 1980s, Universal Service concept has aimed at providing access to telecommunications services at an affordable price, independent from one's particular position.

All of these technological developments in the communication field have removed the existing natural monopoly understanding in the telecommunications sector.

Advanced communication technologies have increased pressures in order to liberalize telecommunications sector.

Worldwide neo-liberal policy applications have led loss of government control over national telecommunications systems in order to provide necessary conditions for more open market through deregulation and privatization policies. Deregulation altered national monopolistic and security-related telecommunications structure based upon public service principle and cross-substitution mechanism, substituting it with a competitive telecommunications structure operating under market conditions; universal service principle; and cost-related pricing policies. Therefore, telecommunications sector has transformed from being a security related, primarily state-owned monopoly of supply equipment network to being a partially privately owned company based state – industry.

In the meantime, the recession of the 1980s subordinated the demands of Third World nations for a more equitable sharing of world communication and information resources. In the early 1980s, the perspective known as “telecommunications for development” emerged. This research and policy program pointed to the role of telecommunications in overall economic development. The program aims at increasing awareness of the significance of telecommunications for economic growth; giving first priority to telecommunications in all national development and public investment programs; realizing resource and technology transfer to expand, improve and upgrade telecommunications networks in developing countries through international assistance; and creating concepts and indicators to measure and to quantify the economic value-added of interactive telecommunications. The program, however, was met cool by both large corporate users in the developed northern (core) countries and by the northern governments that had begun adopting more open market conditions in telecommunications area through deregulation and privatization mechanisms. (McDowell, 1996:114)

By the mid-1980s, approaches to communication issue began radically changing. In part, this was the result of an influential 1984 study known as Maitland Report. Report argued that there would be no significant improvement in Third World countries’ communications resources until governments gave up political controls over local

communication resources, allowing more private investment and ownership. (Hills, 1998:108) Maitland Report resulted in reduction of funds and aids directing to the Third World countries. The provision of aid forced developing countries to relinquish economic sovereignty and to adopt economic policies prescribed by the IMF and the World Bank.

As a result of these developments by the early 1990s countries have begun agreeing on a new consensus in favor of neo-liberal package changes consisting up of four steps. First step was liberalization which aims the abolition of state monopoly and the removal of the barriers to market penetration. Second was the establishment of independent regulatory agencies to promote competition. Third was corporatization in order to reorganize of telecommunications sector. Fourth was privatization of formerly state-owned telecommunications operators, selling state's share to private investors. (Humphreys and Simpson, 2005:23) With the liberalization of telecommunications large corporations have begun shaping the sector. In this framework, it is possible to define the liberalization of telecommunications process as a mean of redistribution of communication resources away from residential customers, the labor force and manufacturers to the large businesses. (Hills, 1998:108)

Meanwhile, the process of globalization has accelerated internationalization of production process. Large TNCs operating globally have begun increasingly integrating their plants and offices by using advanced international telecommunications services. This situation has created strong pressures for competition in international telecommunications.

Introduction of competition in international communication has the second significant change in telecommunications area and it represented a milestone in development of global communication. Trade considerations gained prime importance with competitive international communication initiative. This initiative has accelerated expansion of digital based world trade. This situation has created the necessity in order to regulate world information and communication trade.

Inclusion of liberalized telecommunications services into the Uruguay Round of WTO institutionalized information and communication trade. The inclusion of services trade agreement was the most heated issue on the Uruguay Round agenda. Initially,

many countries met cool the idea of competition in their own national services, particularly finance and telecommunications. Due to the possibility of a significant increase in the provision of services by foreign companies, many countries resisted proposals to include services trade within the WTO. They claimed that a global services trade agreement would certainly serve the overall US interests since American-based TNCs were the fastest adopters of the high-tech services. The US position at the GATT reflected the American political economy advocating market-oriented policies and political purposes of Reagan and following Bush administrations. The strength of American-based TNCs' pressures was the main factor in putting international services trade on the US government agenda. The US has particularly interested in trade in information services since it has a balance of payment surplus in this area. (Langdale, 1989:206) A US proposal 1989 for services trade during the Uruguay Round negotiations focused on information and capital intensive services which the US had already competitive power. Proposal aimed at opening services to competition to the maximum extent possible. It suggested that service providers would be free to operate in foreign countries in order to compete like local firms and governments would provide a fair and transparent environment for foreign services providers (i.e., governments would apply national treatment principle to the foreign services providers). (Mc Dowell, 1997:104) Western Europe had exhibited somewhat different attitudes on the trade in telecommunications services issue during the Uruguay Round negotiations. For instance, Britain had represented the more liberal views on services trade issue. The UK supported liberalization of trade in services since the country has always strong international position in international banking and finance, insurance, advertising and computer services. Britain showed particular interests in removing restrictions on international flows, arguing that these flows were important both to facilitate trade in other services and also as a tradable commodity itself. The UK defended strongly the expansion of international services trade by reducing barriers to international information flows. (Langdale, 1989:203) France represented the more conservative views on both internal markets and trade in communications issues. It defended the view that public monopoly over voice telephony and data transmission should be maintained

but value-added services should be operated under competitive conditions. (Woodrow and Sauve,1994:109).

The 1993 WTO agreements represented a significant milestone in information and communication goods and services trade, defining basic standards and dispute resolution procedures and creating a series of follow up agreements advocating more open approaches to information and communication trade. The 1993 WTO agreements did not include trade rules for ordinary telephony voice.

However, the Uruguay Round WTO agreements did not include trade rules for ordinary telephone voice and data traffic. In April 1994, countries agreed to negotiate on Basic Telecommunications Services (BTS) issue. BTS negotiations continued almost three years. During the negotiation process the US imposed to the rest of the world that countries should obey the basic WTO rules and they should fully open up their domestic communications markets into foreign competition. In practice this imposition meant that removing of national telecommunications monopolies through international agreements. In February 1997 the BTS agreement was signed. 55 countries committed themselves to open up their markets to international competition by the end of 1997, 15 other countries undertook commitments, 48 countries pledged to allow hundred percent of foreign investment in local network enterprises and other remaining countries committed a gradual regulatory movement that would ultimately to conclude fully open up domestic markets to foreign competition. (Dizard,2001:156)

At this point it is possible to say that The US imposed a new world trade order, including communication services trade, to the nations of the world, and formed a normative structure in communications area and a new international communication regime having strong neo-liberal philosophy through the 1993 WTO agreements, GATS (General Agreement on Trade in Services) and TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights), allowing liberalization of telecommunications services trade. According to the new information and communication goods and services trade order states must be bounded by its rules and norms.

Liberalization movement has caused the third important change; deregulation (or more precisely re-regulation) of telecommunications sector.

Since the first liberalization of the networks in the mid-1980s, strategies of telecommunications organizations have shifted from nationally-oriented towards internationally-oriented. Major factor in the focus of the change was not only the possible economic opportunities offered by advanced communications technologies and re-regulatory initiatives but also the demands of large communication services users to reduce costs of public telecommunications services. As a result of this situation, public telecommunications organizations have begun seeking outsourcing possibilities. That is, public telecommunications organizations have begun providing international communications services from specialist companies through preparing re-regulatory legal frameworks. Re-regulation of telecommunications sector has accelerated foreign private investment in national telecommunications markets through joint-ventures with the NTOs or through foreign direct investments (FDI) in national telecommunications markets. FDI by foreign telecommunications operators has primarily taken place in developing countries relying heavily on external loans from either multilateral or commercial institutions. In sum, under these conditions, it is possible to claim that increasing penetration of international capital into the national telecommunications market has made almost impossible to issue regulations aiming at serving mainly national priorities.

Emergence of Information Society idea has provided a new dimension to the world information and communication system. In the late 1990s, world economy was transforming into a new structure which was shaped by the effects of globalization process gaining a significant momentum after collapse of the socialism, spreading capitalism around the world and revolution in information and communication technologies. As a result of this transformation, today two trends have emerged in the world economy. First trend is globalization of businesses which has led to the introduction of new markets, deregulation of trade and capital flows and greater determining role of international trade and investment in each country's economic policy than previous decades. Second trend is revolution of ICTs through rapid improvement in the quality and the prices of ICT equipment and software and the convergence in communication and computer technologies (Pohjola, 2002:134)

These two trends have gained impetus for the aim of the creation of Information society since the 1990s. Rapid development in ICTs has led to the emergence of a global Information Society idea, claiming that its main principles would be based on democracy and transparency. New information technologies have been accepted as the major contributors for the creation of a modern democratic state. States have been in a new process moving to the creation of Information Society through various e-government projects. Main aims are to modernize public administration, to improve relations between state and citizens and to reinforce democratic institutions. It is expected that Information Society will provide new opportunities for economic development, jobs prosperity and better quality of living standards. It is also hoped that digitization process and better classified information will permit effective and rational administration and better services to the citizens.

Emergence of Information Society has accelerated new impositions about information and communication technology (ICT) goods and services trade. After forming a new global regime, the US launched Global Information Infrastructure Project (GII) in 1994, emphasizing the need of reducing trade restrictions on ICT goods and services, arguing that only in this way it would be possible to eliminate information gap and digital divide between developed (core) and developing (dependent) countries of the world. This was a new US imposition to the world countries. Main target of this regime was to create new markets for the Western, particularly US,-based IT companies' products. The US also imposed a developmentalist communication view that having advanced telecommunications and computer networks would serve the economic development of developing countries. To this end, developing countries should give priority for establishment of sophisticated telecommunications and computer networks, exporting ICTs from the Western world. This state-of-the-art communication system should mainly serve the communication needs of the business sector since it would play an engine role for economic development.

New methods of information processing, gathering and distribution of information constitute the most important elements shaping the Information Society process. New sophisticated ICTs and communications technologies such as internet, digital TV, cell phones have all served to the realization of Information Society.

Telecommunications has been seen as one of the most significant medium for Information Society since the early 1990s. At the G-8 Summit held in Okinawa, Japan, on 21-23 January 2000, G-8 members accepted ICTs as the most important tool to assist economic development and they pledged to support emerging global Information Society. (Başaran,2005:80) However, all movements for creating competitive market conditions, the rapid development and continuing convergence of communication technologies, and the huge costs of new ICTs have all increased social inequalities and digital divide among world countries, in regard to usage and access advanced communications networks. All of these factors have also enlarged digital divide among social groups within a country. This situation has increased significance of ICT policies aiming to prevent digital divide among various social groups constituting a society. These policies have mainly focused on diffusion and distribution of ICTs.

At this point, it may be asked “What have been impacts of the new communication and information order on the core Western countries and the remaining countries of the world?” The new global communication and information order has provided advantageous position to the core Western countries and their TNCs, creating rampant inequalities between the rich (core) and poor (dependent) countries of the world. Despite the neo-liberal promises committing widespread and inexpensive usage of ICT goods and services; creation of more democratic and equal structure through these technologies; realization of “global village” (it aims that every point in the world would be linked through electronic communication technologies in order to facilitate masses’ access and gather information) and “Global Information Infrastructure” (it aims at closing the information and communication resource gap between industrialized and developing countries by removing trade restrictions on information technology goods and services), internationalization of telecommunications movement has created an advantageous position in favor of core countries and their TNCs, ignoring communications needs of dependent developing countries.

Advanced communications technologies, deregulation (re-regulation) of markets, and corporate-oriented strategies which have continued since the 1980s have changed focus of telecommunications policies, moving from the communication needs of masses to the communication needs of corporate. These developments have created a significant

communication and information gap between rich and poor countries of the world, increasing concentration of communication resources in the hands of the very few numbers of TNCs and leaving a little room for states to control their own telecommunications networks.

In this thesis, impacts of new communication and information order regime institutionalized by the 1993 WTO agreements, GATS and TRIPS, and the following 1997 BTS agreement on the Greater Eastern Mediterranean Region (GEMED) and on the three significant countries', Turkish, Greek and Israeli, telecommunications markets will be analyzed.

This study consists up of six main chapters. In the second chapter, theories of political economy of communication and the contributions of the American, European and Third World communication researchers to this field will be reviewed. In this chapter question of "What have the main contributions of the communication researchers to the field of the political economy of communication?" will be studied. These approaches providing regional perspectives have significantly contributed to development of political economy of communication. In the second chapter, theories of political economy of communication and contributions of scholars will be examined within three subsections. In the first subsection contributions of North American scholars will be studied. North American scholars have mainly focused on the issues of characteristics of the transnational media and information corporations and changing character of international organizations (e.g., Herbert I. Schiller); relationship between centers of political power and media power (e.g., Dan Schiller, Robert McChesney, William H. Melody); media ownership and concentration and in this way control of public mind (e.g., Edward Herman, Noam Chomsky, Robert McChesney); impacts of advanced communication technologies on the global political economy of communications (e.g. William H. Melody, Edward Comor); the rise of a post-Fordist economy; worldwide tendency of deregulation and privatization of national telecommunications organizations, ongoing process of globalization, 1993 WTO agreements and its follow up 1997 BTS agreement and as well as efforts for international organizations recommending liberalization and privatization of national telecommunications systems since the 1990s (e.g., Robert McChesney, Nicholas Baran);

Information Society (e.g. Nicholas Baran, Heather Menzies, Vincent Mosco); and creation of a more democratic and, by extension, a more just societies through communication and information policies (e.g., Adam Jones). In the second subsection, contributions of European scholars will be reviewed. European researchers have generally used neo-Marxist theoretical approach and Frankfurt School's critical theory in order to examine communication issues. European communication scholars have mainly concentrated on the issues of industrialization of mass communication (e.g., Graham Murdock, Peter Golding); impacts of advertising on the mass media (e.g., Nicholas Garnham, Armand Mattelart); Information Society (e.g., Armand Mattelart, Graham Murdock, Peter Golding); convergence of communications technologies and changing roles of international organizations and their impacts on culture (e.g., Peter Golding); impacts of internet on the mass media (e.g., Colin Sparks); role of corporate mass media in controlling and manipulating the minds of people (e.g., Kaarle Nordenstreng, Tapio Varis); bourgeois concept of communication (e.g., Armand Mattelart); impacts of communication technologies on promoting democratic interests (e.g., James Curran); Post-Fordism (e.g., Susan Christopherson, Michael Storper, Michael Piore and Charles Sobel); relationship of finance and banking to the new information industries (e.g., Jees J. Hamelink, Jill Hills, Stylianos Papathassopoulos, Nicholas Garnham). In the third subsection, contributions of Third World Scholars (Latin American, Asian and African) and the US-based modernization theses will be examined. Third World scholars have developed strong criticisms against modernization/ developmentalist approaches, using dependency theories. Latin American scholars have mainly concentrated on the issues of impacts of transnational media companies on communication; role of new technologies in the integration of business activities as well as in the production of global commercial culture. African communication researchers have mainly focused their studies on the consequences of the neo-colonial media systems. Main focus of Asian political economy of communication scholars has been the impacts of new communication and information technologies on economic development. Main aim of modernization projects defenders was to determine conditions of "how to integrate the Third World nations into the global economy", using the mass media as a vehicle to reach this goal. (e.g., Daniel Lerner, Everett M. Rogers,

F.Floyd Shoemaker). Since the early 1990s, advocates of the developmentalist view have been focusing on role of new technologies in the global economy.

In the third chapter, major changes in the US, Britain, the EU and Japan telecommunications markets and the US and the EU efforts for constitution of a new communication and information order regime and EU-wide regional communication and information order regime respectively will be discussed. The questions of “How deregulation and privatization policies have affected these major players’ telecommunications systems?” and “How the Information Society and its byproduct of information economy requirements have affected these major players’ ICT policies?” will be studied. Liberalization and privatization of telecommunications sector in the US and Britain have forced the EU to develop a community-wide telecommunications policy. EU has showed great efforts in order to impose an EU-wide new information and communication regime through various directives and initiatives. It has continuously imposed its members that full liberalization of telecommunications sector and transposition of EU’s regulations into national regulatory framework would provide competitive advantages position to them in the global communication market operating under highly competitive conditions. Neo-liberal applications have created significant transformation in the EU’s ICT policies, reducing the role of state and giving private sector a more powerful player role in shaping Information Society policies. EU Directives stress importance of the creation of flexible regulatory framework in order to make the European ICT market more competitive and enable the EU to integrate into Information Society, pointing out only potential economic benefits of commercialization of ICTs while ignoring social aspects of Information Society. Main target of these policies is to create a strong European challenge to the US’ and Japan’s superior positions in the global ICT market.

In the fourth chapter impacts of the new global information and communication order regime on the GEMED countries’ telecommunications markets will be discussed.

Dissolution of the SU ending the Cold War period and still ongoing process of globalization have significantly enlarged the traditional notion of Eastern Mediterranean consisting up of the Middle East, Turkey, Greece, and Cyprus, adding into it the Balkans, the Black Sea, the Caucasus and to some extent, Central Asia. In the post-Cold

War era these region have become to be named as “Greater Eastern Mediterranean Region (GEMED)”. (Tayfur,2003:113) Main reason of this enlargement is the emergence of new energy resources.

Disintegration of the SU has created other possible energy alternatives to the Middle Eastern energy resources. Central Asia together with the Caucasus as rich oil and hydrocarbon resources areas, the Black Sea and the Balkans as strategic oil and gas transportation routes have gained particular importance in the eyes of the energy-dependent core Western countries.

In the post-Cold War period, the US and the EU are struggling to increase their influences and controls over GEMED. End of Cold War has created significant changes in the US foreign, security and economic policies. In parallel to these changes today GEMED has begun covering much more place in the US’ agenda than previous decades. The US aims at establishing its hegemony in the region in order to control the region’s rich oil and hydrocarbon resources and at guaranteeing the safe transportation of energy resources to energy-dependent Western markets, eliminating the regional (e.g., Russia and China) and global (EU) competitors. (Fouskas, 2003:19) The EU also aims at safe transportation of energy resources to the European markets through various energy-related programs and initiatives such as TACIS (Technical Assistance to the Commonwealth of Independent States) which created two programs: the 1993 TRACECA (Transport Corridor Europe- Caucasus-Asia) and the 1995 INOGATE (Inter-State Oil and Gas Transport to Europe), and recently, since 2000, Energy Dialogue with the Russia aiming at establishing a long-term energy partnership.

All of these efforts have increased energy-related activities in GEMED, attracting both major TNCs and regional investors. Efficiencies of these investors’ operations rely heavily on advanced communication and information networks providing them fast, secure, flexible and cost-efficient communication possibilities. Establishment of advanced telecommunication networks will make more efficient these investors operations, offering advantages for cost-efficient financial transactions, and more effective decision-making process over their operations. Therefore, GEMED has also offered significant investment possibilities for major global transnational telecommunications corporations (particularly for the US, European, Canadian and

Japanese-based corporations) and for major regional telecommunications players (particularly for Turkish, Russian, Israeli and Greek-based telecommunications companies). The 1993 WTO agreements and following 1997 BTS agreement have imposed GEMED countries the idea that adoption of the WTO's new global information and communication order regime is a sine qua non condition for joining the global community. International financial organizations serving the Western developed countries' interests also inject the view into the GEMED that competitive fixed and mobile telephony markets, allowance of foreign ownership in national telecommunications, and preparation of pro-competitive legal framework having strong neo-liberal philosophy are necessary prerequisites for realizing telecommunications development and ICTs growth. Main target of all these impositions is to provide new markets for Western (core)-based TNCs' information and communication goods and services. Western countries' ICTs sectors' long-term healthy growth is depend heavily on expansion of international markets because Western countries' domestic markets have already saturated.

Turkey, Greece and Israel following pro-Western policies in the GEMED are three significant countries in the region. These countries have had always close connections with the US and other Western-based transnational telecommunications corporations having high technology in both telecommunications equipment manufacturing and telecommunications-related services and ICTs areas. At the same time, Turkey, Greece and Israel have had also traditional, cultural and historical ties with the countries located in the GEMED. These three countries have also completed or have completed to a large extend necessary neo-liberal changes consisting up of liberalization, establishment of an independent authority, corporatization and privatization stages in their telecommunications sectors and in this way to adapt themselves into the conditions of highly competitive global communication market.

Turkey is one of the major important actors in the region resulting mainly from its geopolitical structure bridging Europe and Asia; its extensive historical, cultural and linguistic relations with the region's countries, Caucasian, Central Asian and the Balkans countries in particular; its Western-style democracy; its significant military capacity; and its being rapidly modernized telecommunications sector.

Since the collapse of the SU Caspian Sea energy basin has gained a prime importance in the eyes of Turkish political and economic decision-makers. Turkey has tried to control main energy routes forming a natural energy bridge between Caspian littoral states and intensively energy-demanded Western companies because of its geographical proximity and strong historical and cultural ties with the region. To this end Turkey completed Baku-Tbilisi-Ceyhan pipeline project in 2006. Turkey also supports projects such as the Kars-Tbilisi Railroad Project aiming at reducing Azeri and Georgian dependency on access routes controlled by Iran and Russia and in this way, exporting to the larger volume of Turkish goods the Caucasus; and the Great Silk Road Transportation Corridor Highway Project aiming at increasing economic interdependence and thus creating stability and prosperity in the region. (Köknar,2001, 92) The Baku-Tbilisi-Ceyhan pipeline project and all of these potential projects have begun attracting investors engaging mainly energy-related activities, and service activities such as banking and finance field into Turkey. Some of these investors have already significant partnerships in major telecommunications corporations.

Greece has a significant position in GEMED. The country is an integral part of the Balkans. In addition to its long historical and cultural ties with the countries of the region, Greece has also proximity to the Black Sea and oil-rich regions of the Middle East and the Caucasus. Aegean Sea where the country has a large location is very important oil and gas transportation route linking Black Sea and Mediterranean and Greece has a superior position in the sea transportation sector. The country forms a model for the Balkan countries targeting to become a member of the EU in the future since Greece is the only EU member among the Balkan countries and it has much stronger economy than any other Balkan states. Greece's strategic geographical position and its historical links with the GEMED countries will likely facilitate its aim to become a telecommunications hub in the region.

Israel following strong pro-American policies in the region seeks to possibilities for further strengthening political and economic relations with Turkey, and in this way the country aims at establishing good relations with the Central Asian countries in order to create new markets for its firms' goods and services, including telecommunications and ICT goods and services, and to break its geopolitical isolation in the region. The

Turkish military also prefers closer relations with Israel allowing transfer of electronic military technologies to the Turkish defense industry. (Inbar, 2002:171) The US also encourages closer relations between these two countries in order to provide a strong pro-US military cooperation.

In the fifth chapter, the questions of “How deregulation and privatization policies have affected the Turkish national telecommunications system?”, “How the worldwide Information Society and information economy requirements have affected Turkey’s ICT policies?”, and “What have been the impacts of the 1997 BTS agreement on the Turkish telecommunications market?” will be discussed. In this chapter, evolution of the Turkish telecommunications will be studied within three periods. In the first period from the establishment of the Turkish Republic until the early 1960s, impacts of étatist government policies applying comprehensive industrialization and nationalization policies through import-substitution mechanisms; liberalization policies which were began applying after the Second World War on the telecommunications sector have been discussed. In the second period from the 1960 military coup to the early 1980s, impacts of planning development strategies; military’s efforts for establishing and strengthening national telecommunications industry; economic crises emerging in the late 1970s and stabilization packages based on the standby agreements with the IMF on the telecommunications sector have been reviewed. In the third period from the early 1980s until the early 2000s, Turkey’s efforts to integrate itself into global markets through neo-liberal policy applications, seeing telecommunications has been an important component of these policies will be studied. In the third period, impacts of the 1984 national telecommunications plan inspired to a large extent from the suggestions of the Maitland Report; governmental decree of 1984/ 233 constituting legal framework for privatization; the 1986 Law of Privatization of State-Owned Enterprises; privatization of telecommunications equipment sector; reconsideration of financial strategies for a network development and modernization program by the Ministry of Transport and Communication (MT&C) and the PTT; governmental decree of 1993/406 allowing separation of PTT into two departments as postal and telephony services; the 1994/4000 Telegraph and Telephone Law; the 1997 BTS agreement; the 2000 Telecommunications Law; establishment of Telekomünikasyon Kurumu on the Turkish telecommunications

sector will be investigated. After reviewing of telecommunications sector development stages, in the following subsection privatization process of the Turkish national telecommunications organization will be analyzed and impacts of 1996/4406 Telecommunications Law; letter of intention given to the IMF on December 9,1999 pledging to create necessary legal environment for telecommunications sector; letter of intention given to the IMF on December 18,2000 committing acceleration of privatization process; the 2001 Telecommunications Law; letter of intention given to the IMF on June 19, 2002 pledging to approve a detailed telecommunications corporatization plan prepared by international advisors on the privatization process will be discussed. In the following subsections fixed-line, infrastructure, mobile and broadband and internet markets have been analyzed respectively. In the broadband and internet market subsection, the 1996 TUENA Master Plan and e-Europe+ Action Plan have been reviewed.

In the sixth chapter, the questions of “How Deregulation and privatization policies have affected the Greek national telecommunications policies?”, “How the European Commission’s telecommunications policies have affected the Greek telecommunications sector?”, and “What are the impacts of the 1997 BTS agreement on the Greek telecommunications market?” will be discussed. In the sixth chapter, development of the Greek telecommunications sector has been taken into consideration within four periods. In the first period from the establishment of the Greek Republic to the early 1980s, impacts of government policies on the telecommunications sector will be studied. In the second period from the early 1980s to the early 1990s, impacts of the PASOK government’s economic programs supporting increasing state’s role over the economy, particularly in telecommunications, energy and transportation areas; Greece’s EEC membership in 1981; and worldwide tendency of deregulation and privatization movements on telecommunications sector will be analyzed. In the third period covering throughout the 1990s, impacts of the European Commission’s Directives aiming to create a European-wide telecommunications regime; EU funds allocated for development of telecommunications in Greece through European Regional Development Fund (ERDF), STAR (Special Telecommunications Action for Regional Development) Program lasting from 1987 to 1991, and subsequent Telematique Program; the 1992

Telecommunications Law; Conservative New democracy Party's (1990-1993) privatization plans; the 1994 PASOK government plan for OTE's privatization and PASOK's revision of the 1992 Law in 1994; Simitis government's privatization program in 1996; the 1997 BTS agreement on the Greek telecommunications sector will be analyzed. In the fourth period covering the early 2000s impacts of the modified 1994 Law with the 2000 Telecommunication Act defining general principles for the organizational and operational structures of the Greek telecommunication sector and allowing the establishment of EETT as an independent regulatory authority; liberalization of OTE in January 2001; European Regulatory Framework; and modified Telecommunications Law of 2000 with the 2005 Telecommunications Law pledging to transpose EU directives into national telecommunications acts on the Greek telecommunications sector will be examined. In the following subsections fixed-line, infrastructure, mobile and broadband and internet markets will be analyzed respectively. In the broadband and internet market subsection, the 1999 White Paper (updated in 2002) Greece in the Information Society: Strategies and Actions and OPIS Program which covered 2000 and 2006 period aiming to implement e-Europe Action Plan and in this way to provide public sector involvement in the internet economy through various e-government projects will be reviewed.

In the seventh chapter, the questions of "How deregulation and privatization policies have affected the Israeli national telecommunications system?" and "How the worldwide Information Society and information economy requirements have affected Israel's ICT policies?" will be discussed. In the seventh chapter, evolution of the Israeli telecommunications sector will be studied within two periods. In the first period from the establishment of the Israeli State until 1984, impacts of the Labor Party's (Mapai) economic policies supporting strong government intervention in the economy, including telecommunications sector; the 1967 Arab-Israeli War causing transfer of Israel's own labor force towards advanced technology-intensive sectors; the 1973 October War leading to significant transformation of Israeli economy through a massive inflow of American capital permitting Israel to exploit advanced technological systems through American-Israeli joint-ventures; Likud Party government's "New Economic Policy" supporting strongly pro-business policies and its new telecommunications policy on the

Israeli telecommunications sector will be discussed. In the second period beginning after 1984 economic crisis, impacts of the Labor-led government's stabilization program prepared by consultation mechanism with the US experts and inspired from Reagan administration's strong pro-business policies and the suggestions of the 1984 Maitland Report ; the 1984 Telecommunications Law separating regulatory and operational functions of telecommunications sector and initiating first step towards telecommunications sector liberalization; Boaz Committee's privatization plan; Moaz Committee's privatization plan; and the 1994 new structural regime allowing formation of Bezeq's subsidiary companies on the Israeli telecommunications sector will be investigated. After reviewing of telecommunications sector development stages, in the following subsection privatization process of the Israeli national telecommunications organization will be analyzed. In the following subsections fixed-line, infrastructure, mobile and broadband and internet markets will be analyzed respectively.

The Conclusion chapter has been devoted into evolution of current and possible changes in the Turkish, Greek and Israeli telecommunications markets.

CHAPTER 2

CONCEPT OF INTERNATIONAL POLITICAL ECONOMY OF COMMUNICATION

The concept of international communication can be broadly defined as a continuous and dynamic process involving political, economic and cultural factors. Scholars investigating about the international communication such as R.L. Stevenson, Cees J. Hamelink, Thomas McPhail, Hamid Mowlana have tried to make a description of this concept and they have focused, in their studies, on the question of “how can be defined the notion of international communication? They have a common view that international communication can not be abstracted from political, economic, and cultural structures of countries.

R.L. Stevenson in his book titled *Global Communication in the Twenty-First Century* (1994) has referenced his article “Defining International Communication as a Field” published in *Journalism Quarterly* (1992) in order to make a definition of this concept. In his article he has defended the view that international world communication must be combined with cross and comparative and then with national, cultural or global in order to complete the notion. (Stevenson,1994:5). In his work *The Politics of World Communications: A Human Rights Perspective* (1997) Cees J. Hamelink prefers the term “world communication” to other concepts such as “global” or “international” communication. He maintains that the term international carries too restrictive meaning. The term mainly focuses on a state-centric conception of world and ignores the existing situation that there are more players other than states in the world. These players are also affected by current and future developments occurring in the communication field. Hamelink aims to develop a wider communication concept which goes beyond the communicative relations between and among states. He tries to left state-centric notion of communication relations understanding. He emphasizes that communication relations involve the interactions of a states and non-state actors. Hamelink claims that these interactions can be more precisely described as world communication rather than international communication. He makes a definition of world communication as all cross-border traffic of data and information of knowledge. Hamelink also objects the

notion of global communication since he argues that there is still ongoing process of globalization but there is no emerging a global culture. He claims that globalization suggests the movement towards a one world community, emphasizing the term global accepts world community has achieved this condition; however, a global civil society today is not a reality. (Hamelink,1997:3-4). Hamid Mowlana in his study *Global Information and World Communication* (1997) focuses on inter-cultural communication dimension. Mowlana incorporates cultural components of studies into international communication. He asserts that the intercultural communication as an area of research study can not be separated from the broader perspective of international communication. Mowlana claims that international communication can not be understood without taking into account cultural context. Similarly, inter-cultural communication can not be studied without considering the political, economic, and technological dimensions. (Mowlana, 1997:5-6) Thomas McPhail in his book titled *Global Communication: Theories, Stakeholders, and Trends* (2002) states that international communication refers to the cultural, economic, political, social and technical analysis of communication pattern and affects relations across and between nation-states. (McPhail,2002: 2)

In the light of these approaches, it is possible to suggest that the international communication concept refers to all cross-border traffic of data and information between and among the nation-states. This process involves the transactions of states and multiple actors including international organizations, TNCs, NGOs, societal movements, and individuals.

Significant developments taking place in the international communication field have carried political economy of international communication to forefront since the Second World War. In the following section development of political economy of international communication will be examined.

2.1 Development of Political Economy of International Communication

After the Second World War, the political economy of international communication has emerged as an area of scholarship. The scholar study of political economy of communication has two main dimensions. First dimension examines how media (and communication) systems and content influence existing class and social relations. Second dimension focuses on specifically at how ownership support

mechanisms (e.g., advertising) and government policies influence media behavior and content. These two dimensions consider structural factors and the labor process in the production, distribution, and consumption of communication in a given society. (McChesney,1998:3-4). Political economy of communication is closely related to the classical study of political economy in the 19th century and is correlated with the most prominent figures ranging from Adam Smith to David Ricardo to John Stuart Mill ⁽¹⁾ and most importantly Karl Marx. Like classical political economists, the political economy of communication accepts capitalism as a historical process. The political economy of communication has been strongly influenced by Marx and Marxism. Like Marxism, the political economy of communication also examines the nature and logic of a capitalist society in order to understand the capital accumulation process. Communication researchers maintain that there are also close links between international political economy and political economy of communication. For instance, Edward Comor asserts that there are at least two interrelated levels connecting political economy of communication to complement international political economy. These are micro and macro levels of analysis. Much of political economy of communication scholars investigates the audience and its relationship to information and entertainment producers, distributors and the means of distribution. In most of these analyses, the audience is considered as participants in what has been termed the ongoing social construction of reality. Political economy of communication scholars also recognizes that the producer/distributor relationship with audience involves both the explicit and implicit exercise of power. The participants in this power relationship possess and usually benefit from their material sources and intellectual capacities. A political economy of communication perspective tends to focus on the material circumstances involved in the communication process. Importantly, this process and capacities of participants affect and are affected by the physical capacities of communication media used in the process. How and what human beings think (and therefore how they act) and who controls it and how this control exercised are directly conditioned by the communication process. The concern with both the audience and the communication process- a concern with what Comor termed the micro level of analyses. A micro level analysis creates a large scale communication concern what Comor termed as “macro

level of analysis” involving the notion of what Antonio Gramsci called “common sense” (Common sense is what people in common would agree: that which they "sense" in common as their common natural understanding.) ⁽²⁾. It is precisely this concern with the complex process of globalization and its indications link directly political economy of communication to international political economy. (Comor,1997:3)

During the Cold War period, PEC studies examined the growing links among the US government, the corporate communication sector, the military and the US foreign policy. In that period, scholars mainly focused on the issue of print media concentration. Since, the newspaper industry transformed into chains and became increasingly less competitive as the largest newspapers began acquiring other smaller papers. Political economy of communication scholars accepted the print media concentration as a byproduct of the emergence of monopoly capitalism beginning at the end of the 19th century. They argued that this concentration was assisted by the emergence of advertising and therefore communication became integrated into the capital accumulation process. During the earlier years of the Cold War, the legitimacy of newspapers owned by the wealthy and supported by advertising was increasingly criticized. In order to struggle distortions created by the corporate media structure, communication scholars suggested development of professional journalism which would provide neutral, trustworthy journalism uninfluenced by media owners, advertisers or the biases of journalists themselves. ⁽³⁾ (McChesney, 1998:5)

The PEC reached its apex in the 1960s and 1970s. In that period, scholars mainly concentrated on the issues of the increasing advertising and increasing concentration and resulting conglomeration of media ownership. Political economists of communication, therefore, have examined “how advertising and commercial values affect the media system?” Moreover, political economists have focused on the expansion of advertising into new areas such as education, politics, public media etc.

The reach of political economy of communication at its highest point in the 1960s and the 1970s has been accompanied by the rise of anti-imperialist sentiments worldwide. During the 1960s, newly independent nations in Asia and Africa began joining the UN as a result of decolonization process and they raised a widespread criticism against the dominance of Western media over the Third World countries.

During this period there was a growing discontent among the newly independent countries. Since they realized that formal political freedom did not mean the same as the freedom of the global capitalist system that was dominantly controlled by the Western developed countries' interests through international regulatory organizations such as the World Bank, the IMF and the GATT/WTO. In the 1970s, prevailing international economic order and international information and communication order was challenged through the movement of New World Economic Order (NWEO) and New World Information and Communication Order (NWICO). The NWEO demanded a redistribution of economic resources in order to compensate exploitation of the much of the Third World countries by ex-colonial powers in previous periods. The NWICO demanded redistribution of information and communication resources for similar reasons. (Stevenson,1993:44). Third World countries argued that control of information flows from North American and Western European centers was a component of neo-colonialism. Control of the information flow shaped the resources of periphery for the advantage of the center and reduced the newly independent countries to a reliance position in the international system. They saw TNCs based in the centers were the main agents of neo-colonialism. Hence, they strongly defended the view that there was a need to restrict activities of the TNCs. (Alleyne, 1993:121).

As a result of these developments in global communications arena, political economy of communication researchers tried to reveal how the US and Western corporate control international media and communication systems. Political economy of communication scholars argued that corporate media systems were central aspects of a neo colonialism preventing much of the Third World capable of real self-determination. They also claimed that commercial corporate media have caused much of the US population entirely uninformed or misinformed about the US foreign policy and global politics. (McChesney,1998:11). Political economy of communication researchers supported the movement of Third World nations in the 1970s to establish a NWICO in conjunction with the NWEO in order to improve the imbalances in the global political economy.

In the 1970s, study of political economy of communication has focused on the issue of the establishment of democratic communication guaranteeing an informed

participating citizenry. Political economy of communication scholars have maintained that this can only be provided through a strong and independent media system. Therefore, political economy of communication researchers has focused on the issue of “how capitalist control and commercial support of media tended to serve elite interests resisting the idea of the creation of an informed citizenry as a core democratic value?” Main aim of these studies was to help transformation of social change from a capitalist society towards a post-capitalist and more democratic society through media policies securing participatory democracy. Many of the political economy of communication researchers have been influenced by scholars like Jurgen Habermas,⁽⁴⁾ whose work aimed at establishing a more democratic media system, in particular forming a public sphere which will provide an operating principle for democratic media. Public sphere refers a place where citizens interact without controlling by businesses and the state. Following this logic, main aim of the much political economy research in communication field was to establish a well-funded, non-profit, non-commercial communication sector decentralized and controlled in a democratic fashion. (McChesney,1998:8)

However, the NWICO movement was pressed resulting from various reasons. First reason was harsh opposition from corporate media that strongly defended private ownership of mass media and rejected strongly to any kind of implication of government control. They expressed their discontents against NWICO movement. Second reason was a strong criticism of UNESCO in the US. Congress criticized UNESCO funds, like International Program for the Development of Communication (IPDC) funds⁽⁵⁾ as wasted. (Dizard,2001:89) Consequently, the US, and Britain, both withdrew from UNESCO in the mid-1980s, expressing their dissatisfaction of Third World countries’ demands for restricting the operations of the global media corporations. By the end of the 1980s, NWICO lost much of its support in the UNESCO’s bureaucracy. In addition, UNESCO had no authority as an institution to make necessary reforms and to establish in binding norms and rules in international communication. The shortcoming has made it difficult to describe UNESCO as a regime for international communication capable of affecting changes demanded by the South. (Alleyne,1995:119)

Today, there is a limited form of multilateral cooperation on the issue of mass communication development. This issue is not supported by binding and robust accords. There is discord on fundamental principles and a general unwillingness in the developed regions of the world to provide communication development of assistance. The most powerful players in the communication arena do not fulfill their promises and commitments. (Hamelink,1997:213)

In the meantime, in the late 1960s and the early 1970s, economic and political problems began emerging in American and European economies. In that period, there was a slow or even decline in manufacturing sector perceived as engine of growth and development in most countries. As a result, a de-industrialization process occurred in all developed countries. The oil price shock of 1973/74 and 1979/80 further aggravated economic situations of these countries. Economic depression reduced tax revenues that states need to carry out committed social programs and narrowed expansion of job market. During that period, Keynesian policy- premised on no inflation, economic growth, balanced foreign exchange and full employment targets- faced stagflation problem that was hitherto unknown. Inflationary price increases coupled with stagnating output and increasing unemployment. Stagflation conditions forced economic and political decision-makers of Europe and the US to reconsider post-war economic policies. Neo-liberal economic understanding based on the principles of the Chicago School has become increasingly popular. Neo-liberal approach rejects Keynesian style macroeconomic management by criticizing state's role in economic life in general. It strongly opposes welfare state economics, by arguing that such policies not only prevent economic growth but also undermine personal liberty. This approach defends that only a capitalist economic world order based on private property and free competition market could bring about prosperity and freedom for individuals. Neo-liberal economics of Chicago School found supporters among Conservative politicians refusing the social policies of the post- war welfare state understanding. (Schröter,2005:128). Since the early 1970s, neo-liberal economists have appeared to dominate much of the communication agenda by arguing that deregulation of private telecommunication carriers and privatization of government-owned telecommunications system would result in substantial efficiency gains. The neo-liberal argument was premised on the

assumption that new technologies could easily overcome national barriers to entry thereby creating new products and competitive telecommunications related services and equipments markets. (Trebbing, 1996: 314) Neo-liberal economic policies reached their apex in the 1980s. Main defenders of neo-liberal policies were Reagan and Thatcher. They defended free markets in domestic sphere with minimum state intervention, except security. They designed policies to reduce state control over private sector activities.

During the 1980s notions of deregulation and globalization had dominated the communication issue. Deregulation has led to relaxation of the entry conditions in communications market for companies. Pressure of globalization, technological change and diffusion of neo-liberal ideas from the US and the UK increased the need for liberalization throughout the 1980s. As a result of deregulation policy, public sector was increasingly weakened and communications law relating to monopolies and mergers were relaxed, by allowing big companies to organize according to global rules. The application of deregulation policy paved the road for globalization process. (Mohammadi,1997:67). Other important factor which has led to the emergence of globalization process has been technological developments, notably merging of telecommunications systems with computer systems, internet and digitization process in which all information is converted into digital signals and is then capable of being processed by sophisticated electronic hardware and market change. The merging of computer with telecommunications systems means the transition from the more traditional forms of communications via the wire telephone network to a sophisticated system of communication which links three systems namely computer, telephone (including mobile telephone) and satellite system. This merge has created faster and more efficient forms of communication and has eroded the boundaries between different networks or systems of communications. (Negrine, 1993:51) Deregulation and globalization process have resulted in the domination of world markets by TNCs which face very little competition or resistance due to their overwhelming market force. The wider process of globalization in the international economy has created new demands on telecommunications policies from TNCs. Efficiency of their operations is increasingly depended on fast and secure international telecommunications using cable, satellite, and computer technologies. They challenge to national telecommunications monopolies by

promoting more competition and demanding reductions in costs and prices of telecommunications equipments and services.

Globalization process has significantly affected states, national firms, TNCs, NGOs and individuals. Advanced communication technologies and ongoing process of communication have broken governments' monopoly on the gathering and control of large amounts of information. As a result governments have been not only losing its control power in a globalizing economy but they have begun sharing their sovereign powers in political, social and security areas with businesses, international organizations and non-governmental organizations. Companies that were previously domestic market oriented have been forced to adopt policies in order to penetrate rapidly into much larger markets operating under competitive conditions. New communications technologies and still ongoing process of globalization and the convergence of computer and telecommunications technologies have resulted in weakening the role of government while strengthening the power of TNCs. Global scale liberalization policies have created a closely interconnected world economic structure in which TNCs' production structures have realized an important transformation. TNCs have begun to operate in accordance with the new requirements of the world economic structure. Therefore, intra-corporate trade system has enormously increased. New advanced communications technologies have facilitated intra-corporate trade and have also provided this kind of trade economically more efficient. While this kind of trade was about 20 percent of overall world trade in the early 1970s, it has reached about one-third of it by the early 1990s. (Herrmann and McChesney, 2001:27) Today these international corporations account for approximately one-third of world output and two-thirds of world trade. In addition, at least one-quarter of world trade occurs among TNCs. (Nadesan, 2001:259)

An expansion of information together with enhanced and improved telecommunications systems have led more efficient decision-making, have provided extension of markets across geographical boundaries and have increased competition and allowed resources to be allocated more rapidly and efficiently. Advanced technologies have also changed production system from Fordist structure based on standardization, mass production, economies of scale, oligopolistic competition, and protection of national markets, vertical integration, and coordination of the institutions

of state, banking and industry to post-Fordist structure. Global deregulation of financial markets and technological innovations in communication and transportation has paved the way towards post-Fordist production structure. Global deregulation of financial markets has made financial transactions simple, fast, and inexpensive. As a result, a new phenomenon which can be called as “digitization of money” has emerged and control has shifted towards private financial groups (Dizard,2001:12) Attempts by governments’ central banks to intervene in the market have been relatively weak against huge amounts of private financial transactions. The effect of global digitization of money, today, is increasingly undermining long-standing sovereign rights of the state in the economic realm, i.e. erosion of economic sovereignty. These trends have reduced the authority of nation-state with the emergence of powerful TNCs in the financial markets. Deregulation of financial markets has both brought about expansion of offshore (outside official exchange controls) financial markets and market integration fueled by deregulation of international trade restrictions. Post-Fordist production structure has provided TNCs to great flexibility to shift their production from one country to another in order to find the cheapest sources of labor without regarding the well-being of labor force in foreign countries. They can also lower their tax bills by using internal pricing to shift profits from high-tax countries to low ones. Their economies of scale and vertical integration capacities can make it possible for them to use economic power in the host countries in an abusing way. TNCs flexible production structure advantages make it harder for governments to raise revenue and protect the environment and security for working class. This situation has forced governments to reduce social protection expenditures for the sake of attracting investments by the TNCs.

NGOs have been significant players in the new process. Their prominence is now seen as a global phenomenon. According to a UN survey, in the beginning of the 2000s there were 28,900 INGOs in the world. (Dizard, 2001:7) They increase their influences over the governments’ domestic and international policies. NGO involvement in governments’ policies previously limited to a small group of elite organizations. Today with their various agendas, these groups using various electronic channels from faxes to internet web pages exist everywhere in order to shape governments’ domestic and

foreign policies, putting pressures for influencing domestic and international negotiations.

These new technologies connect people across borders with exponentially growing, simple and costless way. Increasing connections among individuals have led to emergence of new political and social identities around the globe by enabling more and more identities and interests scattered around the world to integrate. (Mathews, 1997:50)

In sum, recent developments in communications have led an important transformation which can be called as “post-industrial stage”. The most developed industrial nations of the world have tried to reduce their dependency on industrial technology, old source of power and they have directed information technologies, new sources of wealth and power. Since the early 1980s, the process has accelerated. Governments have begun to deal with electronic communication and information technologies. They are increasingly giving up control over telecommunications systems- an important indicator of national sovereignty- in favor of more open conditions. All of these developments have carried telecommunications sector to the level of international high politics. In the meantime, there is a considerable debate about globalization process as well as its political implications. Most critics of globalization argue that this process serves TNCs’ and developed nations’ interests, subordinating labor class’, environmentalists’ and poor people’s interests Critics of globalization argue that it has an anti-democratic aspect. Since globalization process forces national governments to obey with the rules of globally mobile capital or face disintegration of the global economy. As a consequence of these developments continuing since the early 1980s, political economy of communication researchers have begun to concentrate on the issue of the role of advanced communication technologies in determining the nature of media content and influence. (McChesney, 1998: 2)

The end of the NWICO debate has caused removal of anti-imperialist feelings in the Third World. Neo-liberal ideas aiming to realize the integration of national economies into the global market system has superseded the NWICO demands. Moreover, with the collapse of the Soviet bloc in the early 1990s, today, there is no an organized power resisting to the global capitalist system based on neo-liberal policies. Since the early 1980s, the context of world communication system has been changing

and new core issues concentrating mainly on “how does the emerging global commercial media and communication system operate under the globalization conditions?”, “how does the global commercial corporate media affect social, class, and international relations?”, and “how does global corporate media and communication systems influence efforts aiming to create a more democratic environment and communication system?”

Three approaches; North American, European, and Third World, have significantly contributed to development of political economy of communication, providing regional perspectives.

North American research has been extensively influenced by the contributions of two prominent figures; Dallas Smythe and Herbert I. Schiller. They used Marxist approach in their studies. They were less interested in providing a theoretical framework of communication. Rather, they concentrated on communication industry, claiming that it had become an increasingly integral part of a corporate order creating both exploitative and undemocratic media and communication structure. They started a communication research program aiming to reveal the growth and influence of transnational media companies throughout the world. European researchers have generally used neo-Marxist theoretical approach to examine communication issues. European political economy of communication scholars, such as Nicholas Garnham, Peter Golding, Graham Murdock, and Armand Mattelart, have emphasized in their analyses the importance of class power. European researchers following the Frankfurt School ⁽⁶⁾ tradition have concentrated on the integration of communication institutions, mainly business and state policy authorities into the capitalist economy and the resistance of subordinated classes and movements reflected mainly in opposition to neo-liberal state practices, promoting liberalization, commercialization and privatization of the communication industries. Third World research on the political economy of communication has grown as a reaction to modernization theses. Modernization theses claimed that media resources together with urbanization, education, and other social forces would certainly stimulate economic development and cultural modernization. These theses saw media growth as a significant indicator of development. By introducing various dependency theses, world system analysis, and other streams of

international neo-Marxist economy, ⁽⁷⁾ Third World political economists objected strongly modernization theses emphasizing only technological sides of media growth while neglecting the important aspect of power relations determining the terms of economic and social change between the First and Third World nations and multilayered class relations between and within them. (Mosco,1996:19-20).

In the next section, contributions of North American political economy of communication scholars to this field will be discussed.

2.1.1 Contributions to North American Researchers to the Development of Political Economy of Communication

North American political economy of communication research focusing mainly on the relationship between media corporations and states has strongly affected the world political economy of communication researches in the world, particularly in the Western Europe and Third World countries. Many American political economy of communication scholars aim to reveal the global structure of power relations in the media and telecommunications industries. American scholars have mainly focused on the issue of the emergence of the US as a superpower and transformation of America's standing into a global communication area after the Second World War. In the post-war period, the US has created a global communication environment where main players are TNCs and their industrialized nation-states that have supported these corporations through various political and economic means. As a consequence of this situation, American communication researchers have mainly produced studies over the characteristics of the transnational media and information corporations and over the changing character of international organizations.

The most prominent figures in the North American political economy of communication are Dallas W. Smythe, political activist and researcher focusing mainly on the mass media and telecommunications and Herbert I. Schiller, media critic, sociologist and scholar.

In the Cold war environment Dallas Smythe focused mainly on the issue of the increasingly powerful mass media in North America. ⁽⁸⁾ In the late 1940s, Smythe emphasized particularly in his works the need for public broadcasting and focused on the concept of audience commodity then he further developed his idea of audience

commodity implying audience was the main commodity in the mass media. In the 1970s, Smythe mainly concentrated on the two issues. First issue was American telecommunications policy. Second issue was the audience commodity. (Mosco, 1998:82).

In his article titled “Blindspot of Western Marxism” (1977). Smythe write about monopoly capitalism’s dissolution of the boundary between individual’s role as worker and buyer. He argues that in a capitalist system laborer’s leisure time is sold as a commodity to advertisers. He named this process as the audience commodity which perform marketing functions and work at the production and reproduction of labor power. Smythe argues that Western Marxist analyses have neglected the political and economic significance of mass media systems. He asserts that mass media communication and related institutions concerned with advertising, market research, public relations and product and package design represent a blindspot in Marxist theory in the European and American cultures. He claims that the literature of Marxism is extremely insufficient in analysis of the complex media industries which he calls as consciousness industry. (Smythe:1977: 438) He defends that much further analyze is needed in order to understand the mass media and mass media marketing of mass produced consumer goods and services.

In his major academic study titled *Dependency Road: Communications, Capitalism, Consciousness and Canadian Dependency* (1981) Smythe analyses monopoly capital creating Canadian dependency on the US. ⁽⁹⁾ He also studied over the communication policies and practices in Chile, China, Japan, the UK and the Eastern Europe. He developed research on the communication reforms in Chile during the Salvador Allende’s Popular Unity government. (Mosco,1998:84)

Herbert I. Schiller has written a series of books and articles aiming to define political economy of communication in the US and has developed a critical perspective on the issue of mass communication. In his book titled *Mass Communication and American Empire* (1969) he examines the development of mass communication in the US. In his second book titled *The Mind Managers* (1973) Schiller has developed a critical approach to the emerging Information Society idea, pointing out the growing integration and transnationalization of information and cultural industries. He claims that

American commercial corporate media control the circulation of images and information determining beliefs, attitudes and behaviors. As a consequence, the media managers become mind managers by producing intentionally messages. He maintains that these manipulative messages cause a false sense of reality and produce a consciousness that can not comprehend the actual conditions of personal or social lives. In his book he mentions the view of Paulo Freire, Brazilian educator and theorist of education, on the manipulation of human minds. In accordance with this view manipulation of human minds is one of the means by which the dominant elites to conform masses to their objectives. (Schiller,1973:1)

In his *Communication and Cultural Domination* (1976) Schiller has addressed the question of imperialism and he has mentioned Chile's effort in order to create an alternative communication system under Salvador Allende regime. In *National Sovereignty and International Communication* (1979) he and Kaarle Nordenstreng have prepared a collection focusing on the central issues in the New World Information and Communication Order (NWICO) ⁽¹³⁾ debate. In his book *Who Knows: Information in the Age of the Fortune 500* (1981) Schiller examines the current interconnections between domestic and foreign economic, cultural and political developments in the information sector. He analyzes the international and national factors promoting the development of the emerging information society and examines the weakness of existing information systems. In *Information and Crisis Economy* (1984) he has focused on the issues of communication and information systems used by TNCs for their operations. Schiller has examined the role of advanced information and communication system for overcoming the crisis of accumulation that creates problem for capitalist system. In his *Culture Inc.* (1989) Schiller examines the effects of fifty years of corporate growth on American culture, arguing that corporate control over such arenas of culture as museums, theaters, performing arts centers, and public broadcasting stations has resulted in a broad manipulation of consciousness, removing democratic forms of independent meaning. In *Hope and Folly: The United States and UNESCO, 1945-1985* (1989) written with William Preston Jr. and Edward Herman, Schiller defends UNESCO's efforts for creating a new informational order and accuses the American media of supporting the Reagan administration's anti-UNESCO policies. *Triumph of the Image: The Media's In*

War in the Persian Gulf: A Global Perspective (1992) along with Hamid Mowlana and George Gerbner, Schiller has provided a perspective on the Gulf War with a collection of papers from international media scholars. This book contains studies assembled from many countries throughout Europe, Asia and the Middle East. The book introduces contributions from the media of several regions. The authors have focused on the social, economic and political context of media coverage in their countries. A second collection with Kaarle Nordenstreng (1993) *Beyond National Sovereignty: International Communications in the 1990s* they have examined the demise of the call for a new information order. They have addressed current and emerging issues. Problems have been examined from the perspectives of journalism, social sciences, international politics, law and emerging technology. They have mentioned various topics, including mass media communication across borders, communication satellites and Third World nations and the need to establish a new world information order. (Mosco, 1998:86-88)

In his book titled *Information Inequality: The Deepening Social Crisis in America* (1996) Schiller has mentioned inequality of information access and impoverished content of information issues. He argues that these problems deepen national social crisis. He draws attention to enormously growing corporate economy and maintains that the corporate economy today faces very little challenges in the economic and political areas. He claims that as the corporate influence rises in the political arena and independent voices are increasingly eliminated or ignored. As a result, anti-democratic views and practices are increasingly proliferating at the national levels. He argues that the voices that can manage to reach to the masses are those that supported and financed by the large corporations. (Schiller,1996: xi-xvi)

North American political economy of communication scholars has also focused on the relationship between centers of political power and media power. Scholars such as Dan Schiller, Robert McChesney, and William Melody have developed their works, emphasizing the relationship between government and corporate power. In this framework, Dan Schiller's work *Telematics and Government* (1982) is particularly important. It identified the development of a powerful force in the telecommunications industry, well organized large business users that signaled a significant shift in the industry power structure. (Mosco, 1997: 89)

One of the major themes in North American research is media ownership concentration and in this way control of public mind. (Mosco,1998:90)The most systematic efforts to address this theme for the print industry are Edward Herman and Noam Chomsky's *Manufacturing Consent: The Political Economy of Mass Media* (2002). The authors have argued that American governments and the US-based corporate giants holding major communication resources in their hands have controlled what a person read, see and hear.

In his text titled "Propaganda and Control of the Public Mind" (1998) Noam Chomsky sees corporate propaganda as one of the main issues in the 20th century US history. He claims that principal goal of the corporate propaganda is to control the public mind because the independent public mind has always created the greatest threat to corporations' interests. He draws attention to concentrated media systems in the hands of few media tyrannies. He asserts that media concentration is very harmful to democratic process since it is built at public expense. In his text he concludes that the media concentration is likely going to end up in the hands of a half dozen media corporations operating globally. This situation will likely conclude a new mode of information and communication being handed over by private sector. (Chomsky, 1998:180)

In his text titled "The Political Economy of Global Communication" (1998) Robert McChesney examines the emerging global media system. According to him the most striking development in the 1980s has been the emergence of commercial media market utilizing new technologies and the global trend toward deregulation. He claims that formation of a global commercial market has been resulted from the efforts of the dominant firms, new technologies that make global systems cost efficient, and neo-liberal policies encouraged by the World Bank, the IMF, and the US government in order to breakdown regulatory barriers to a global commercial media and telecommunications market. According to him the most significant reason for the creation of a global market is the growth in commercial advertising worldwide, especially by Western, usually by the US-based firms. McChesney maintains that these global media companies prefer to establish joint-ventures in order to reduce the capital requirements and risks. In this work he establishes a link between de-politicization process and the global media system. In his viewpoint a capitalist society works more

efficiently when the large part of population is demoralized and effectively depoliticized and when people lost the hope that social change for better is possible and therefore subordinated the public life, leaving decisions to those at the top of the social pyramid. The global commercial media are integral to this de-politicization process and serve to depoliticized masses giving priority personal consumption over social understanding and activity (McChesney, 1998:12-17)

Other important issue in the North American political economy of communication research is the impacts of advanced communication technologies on the global political economy of communication. For instance, in his text titled “The Information Society: Implications for the Economic Institutions and Market Theory” (1996) William H. Melody examines TNCs using intensively new advanced communication technologies. He argues that new technologies have intensified oligopolistic rivalry among TNCs on a worldwide basis. An intensive struggle aiming to obtain a long-run position of market in foreign national markets is increasingly emerging. (Melody, 1996:23) To this end TNCs are assisted by governments at their home countries. As oligopolistic rivalry becomes more intense industrialized governments are more actively attempting to manipulate the terms of international rivalry to the advantages of their TNCs. Thus, TNCs are increasingly determining the global system and are ignoring systems that are best suited for small business and developing countries.

In his text “Communication Technology and International Capitalism” (1996) Edward Comor examines the effects of the direct broadcasting systems (DBSs) and globalized commercial TV system. He argues that DBS will expand the marketing and advertising capacities of much TNCs. Globalized commercial TV system will enhance opportunities influencing periphery cultures. By promoting a consumerist life style transnational advertising can severely weaken the effectiveness of formal government policies attempting to restrict TNCs access to limit the commercialization of their societies. He signs a paradoxical position. On the one hand the US transnational corporate push for an international free-flow regime constitutes an essential step towards America’s economic recovery. On the other hand, however, the success of such a project could reduce US-based TNCs dependency on the US itself. He concludes that the

success of the US cultural imperialism may paradoxically come about the eventual peripherization of the US. (Comor, 1996:96-97)

The rise of a post-Fordist economy is other important issue contributing to the development of political economy of communication research. North American scholars have begun to focus on the issue of how TNCs the most benefited from the post-Fordist production structure, bypassing the risk on to smaller firms. Janet Wasko is one of the first scholars to address the implications of the post-Fordist economy. In her text “New Methods Analyzing Media Concentration” she focuses mainly on how should be thought about and measured communication markets and media concentration. (Mosco, 1998:91)

Worldwide tendency of deregulation and privatization of national telecommunications organizations, ongoing process of globalization , 1993 WTO GATS and TRIPS agreements, the 1997 BTS agreement, as well as efforts of international financial organizations like World Bank recommending the liberalization and privatization of national telecommunications systems through its Information Development (InfoDev) programs since the early 1990s have considerably affected the world countries’ telecommunications policies. These developments have led North American scholars have given considerable attention to the developments taking place in telecommunications.

In his text “The Political Economy of Global Communication” (1998) McChesney examines privatization and commercialization of telecommunications sector and transformation of this sector from the system of non-profit state-owned monopolies. He claims that the process was formalized in 1997 when the WTO generated a landmark agreement for telecommunications deregulation and has permitted foreign ownership. This process emerging in the 1990s has led the largest transnational telecommunications companies to form global alliances. He argues that the end point of this movement may be the emergence of four or six “global gangs” within the few years. He also claims that the global media oligopoly will link to the handful of telecommunications global gangs and will make agreements with the leading computer firms. (McChesney, 1998:22-23)

In his study titled “Privatization of Telecommunication” (1998) Nicholas Baran examines the US’ worldwide initiative for deregulation and privatization of national telecommunications companies. He claims that the 1997 WTO agreement to open up

national telecommunications market to foreign competition has only accelerated privatization movement on a global scale and overwhelming domination of telecommunications giants. This agreement has made clear that market forces will determine when and where telecommunications infrastructure will be modernized. He also argues that as telecommunications are increasingly becoming a product controlled by private enterprise on a global scale, a huge segment of the world population will be excluded the benefits of high speed telecommunications and technology will go where the money is to be made. (Baran,1998:132)

North American Political economy of communication scholars have also considerably interested in the Information Society issue. For instance, in her work titled “Challenging Capitalism in Cyberspace” (1998) Heather Menzies points out that with the computerization process all data and all managerial control can then be changed, moving away from grounded institutions (de-institutionalization of information) into the high capacity networks of the information highway (re-institutionalization of information). She maintains that with the re-institutionalized information highway the existing international structure is shifting from national machine based economies into a global post industrial economy (recent developments in communications have led an important transformation which can be called as “post-industrial stage” The most developed industrial nations of the world have tried to reduce their dependency on industrial technology, old source of power and they have directed information technologies, new sources of wealth and power). She defines post-industrial economic structure as an economy dominated by global scale corporations operating particularly in the information, finance, and services sectors using intensively the high network systems. She argues that what is emerging in this global system’s economy is a “Lego set” of costless, interchangeable global production units operating entirely its own self-styled rules and is a technological extension of the international investment market. (Menzies,1998:91) In this global economic environment she asserts that machines are replacing people. As a result, high levels of unemployment and underemployment have occurred in the North America and Western Europe in the late 1990s. She concludes that the new global economy based on this information high network is growth but it is largely a jobless growth (Menzies 1998:,94)

Baran (1998) has examined the internet's development and its transformation. He argues that until its commercialization, ⁽¹¹⁾ the internet was an example of a potentially positive development emerging from the so-called telecommunications revolution. He claims that if developed with international global sponsorship and cooperation, the internet could become an international communication network, available to people of all nations, rich and poor alike. However, today the internet is in the process of becoming a communication network for the rich segments of society and is being transformed into an electronic shopping malls and sales catalog. (Baran,1998:124)

In his text titled "Capitalism's Chernobyl? From Ground Zero to Cyberspace and Back Again" (2002) Vincent Mosco examines the post-industrial society idea within two periods; pre-9/11 period which he named as "From Ground Zero to Cyberspace" and post-9/11 period which he called as "Return to the Ground Zero". Mosco states that in the pre-9/11 period, the post-industrial society idea grew into a myth, Cyberspace. He argues that the global computer communication beginning intensively in the 1990s has broadened the meaning of Cyberspace. A set of myth has been connected to the notion of cyberspace. These are the end of geography, the end of history and the end of politics. The end of geography means Cyberspace opens the door to a new era no longer restricted by geographical, spatial and time limitations. The end of history myth promises to close politics by undermining organizational constraints on building networked democracies and by removing old strategic military thinking. The end of politics redefines the means of politics by grounding power in networks, rather than in institutions. Real time and 24- hour network of information flows subordinate the physical city and the nation-state, creating new laws to which politics must comply of them. The end of politics also means the end of fear of military attack because computer communication enables a defense against it.

Mosco points that digitization provides enormous speed and flexibility for electronic communication. At the same time he emphasizes that digitization takes place along with the process of commodification [process of transforming use values into exchange values is extended into the social field communication products, of audiences, and of labor- Mosco,1996:139)]. Both digitization and commodification contributes to the integration of communication sector and the concentration of corporate power within

it. The adoption of digitization process across the communication industry is breaking down barriers that once separated print, broadcasting, telecommunications and the information technology or computer data sectors. The growing integration of communication sectors into a consolidated information and entertainment arena has created an unprecedented acceleration in mergers and acquisitions. Mosco points that in the 1980s, TNCs and political leaders conducted a campaign to liberalize trade investment rules and to expand corporate communications. To this end nationally controlled institutions would have to be eliminated or at least marginalized and public service principles would have to be sharply reduced or eliminated entirely. He claims that government initiatives, private economic diplomacy, bilateral negotiations between states and multilateral organizations such as the World Bank, the IMF and the WTO, the Free trade agreement between Canada and the US and NAFTA ⁽¹¹²⁾ were played important role in this process signing a new period for the liberalization of free trade and investment within the organizational context of the frameworks established by the WTO.

He draws attention social movements posing significant threats for corporate in the pre-9/11 period. These movements using intensively new and advanced telecommunications technologies fostered anti-globalization movements. He maintains that main target of these global social movement is to reveal not only exploitation of labor but also commercialization of life worldwide and destruction of environment. For some, these global social movements hold out hope for a renewed public sphere, cosmopolitan citizenship and a genuinely democratic cyberspace. Mosco argues that people have begun losing their hopes for such expectations due to developments undermining faith in neo-liberalism in the post-9/11 period. (Mosco,2002:212-225)

Creating a more democratic and, by extension, a more just societies through communication and information policies forms another significant issue contributing to North American political economy of communication research. For instance, Adam Jones in his study titled “Wired World: Communication Technology, Governance and the Democratic Uprising” (1996) has examined impacts of communication and information technologies on democratization process. He points that information revolution constitutes a major step towards removing closed societies and therefore, can be seen as a liberating force when applied to authoritarian governance. However, at the

same time, he draws attention that these technologies develop in an increasingly interconnected world that for all the decentralization and democratization of information the new technologies permit is still dominated by Western state interests and TNCs. Consequently, they serve to strengthen the power of the West's cultural and political motifs and values. (Jones, 1997:162)

European researchers' contribution to the political economy of communication will be reviewed in the next section.

2.1.2 Contributions to Western European Researchers to the Development of Political Economy of Communication

James Halloran, was the Director of the Center for Mass Communication Research at the University of Leicester and from 1972 to 1990 he was the president of the International Association for Mass Communication Research, has been a leading figure in the development of communication studies. At the University of Leicester two communication scholars Peter Golding and Graham Murdock have contributed to development and to set the research agenda for political economy of communication in Europe.

Core works of the European approach include Murdock and Golding's *For a Political Economy of Mass Communication* (1974) and their *Communication and Class Relations* (1979), and Nicholas Garnham's *Contribution To Political Economy of Mass Communication* (1979) and Armand Mattelart and Seth Sieglaub's work titled *Communication and Class Struggle Vol.1: Capitalism Imperialism: Capitalism, Imperialism* (1979) and *Vol. 2: Liberation, Socialism* (1983) and Kaarle Nordenstreng's contributions to political economy of communication. Nordenstreng has played a leading role in development of international communication studies in Europe.

In "For a Political Economy of Mass Communications" (1974) Peter Golding and Graham Murdock have examined the industrialization of mass communication stages in the British media industry. They have defined three stages in British media industry. They have described these stages as "from differentiation to concentration". In this phase, firstly small scale cultural production expands, then, distribution and selling become separated and commercialized. As new technologies enter the medium production becomes industrialized and consumption becomes and large scale and

impersonal. This is the process of differentiation. This step is followed by a period in which the growth of industry reaches saturation and is faced by a series of pressures resulting from raising costs, declining revenue and changing pattern of demand. This is process of concentration. Second stage is “consolidation” it is the pattern of increasing involvement with each other of media sectors. Third stage is called by them as “dimensions of concentration” meaning the increasing concentration of control and influence in the hands of a few large companies. This situation is the outcome of three inter-linked processes; integration, diversification and internationalization. Golding and Murdock have defined two types of integration; horizontal and vertical. Through horizontal integration firms acquire additional units at the same level of production. This situation facilitates companies to strengthen and to extent their control within a particular sector of media production and to maximize economies of scale. Firms obtain additional units at different levels of production through vertical integration enabling them to extend their operations to other branches of industries such as supply of raw materials, the provision of capital equipment etc. In order to realize both horizontal and vertical integrations it is needed to takeovers and mergers. These two integrative processes realized through takeovers and mergers have accelerated consolidation meaning the control of few leading companies having a dominant position within each media sector. In the diversification dimension of concentration, the big companies (media corporations) are also becoming incorporated through joint investments, reciprocal shareholdings and interlocking directorships. In the internationalization dimension of concentration, foreign investments as well as foreign ownership of national media companies are included into this process. Internationalization dimension also involves oversea investments by media corporations. Golding and Murdock maintain that this dimension will likely be concluded by suppression and manipulation of public mind. (Golding and Murdock, 1997:5-21)

Peter Golding in “Redrawing Map of Communication Industries: Concentration and Ownership in the Era of Privatization” points a series of major acquisitions and mergers in the communication industries around the world. He maintains that there is a need to identify the key changes in operating environment of the leading corporations that are facilitating the current wave of expansion and shaping its direction in order to

assess the significance of these problems. Two processes have been particularly important in restructuring the corporate playing field; technological innovation and privatization. He defines privatization as a multinational movement with four distinct components; denationalization, liberalization, the commercialization of public sector and the re-organization of the regulatory environment. Denationalization involves selling share in public companies to private media investors. It has operated to reinforce and extend the power of leading communication, service and industrial conglomerates, rather than to create new source of countervailing power. Liberalization process is designed to introduce competition into markets that were served solely by public enterprise. Commercialization of public sector faced with raising costs and government upper limits imposed on the income they derive from the public treasury. This situation has forced public sector to consider new competitive steps to overcome the high costs. This has become an imperative for many public institutions. Re-regulation, from public to corporate interests, is often called deregulation. Deregulation has caused a significant shift from dependence of public interest towards the promotion of corporate interests. Communication corporations benefit from this shift at two levels. They not only gain from changes to general laws governing corporate activity but more importantly, they have also gained considerably from the relaxation of the additional rules designed to prevent excessive concentration in the marketplace. (Golding, 1997:317-320)

Scholars such as Nicholas Garnham and Armand Mattelart have examined the impacts of advertising on the mass media. In his study titled “Contribution to a Political Economy of Mass Communication” (1979) Nicholas Garnham sees mass media as economic entities having a dual role. First, it has an economic role as creators of surplus value through commodity production and exchange. Second, it has an indirect role through advertising in the creation of surplus value within other sectors of commodity production. (Mosco, 1996:105)

Likewise Armand Mattelart in his book *Advertising International: The Privatization of Public Sphere* (1991) defines media as communication apparatus which determines the elaboration and exchanges of messages, corresponds to the general mechanism of production and exchange conditioning all human activity in capitalist society. Mattelart in his book examines political economy of advertising in Europe. He

addresses the integration of advertising industry into all other media sectors and he focuses on the transformation of advertising from a commercial break in the media flow to a fundamental means of communication and essential actor in the public service. Mattelart has maintained that as a result of the process of deregulation and privatization systems of information and communication beginning in the 1980s, advertising worldwide expanded considerably. He maintains that deregulation and privatization of information and communication systems have facilitated to entrance into some areas for advertising which, previously were protected in the name of public service interests or the protection of vulnerable categories of population. In his book Mattelart also mentions the hegemony of the corporation and their roles in restructuring our societies and the parallel decline of the welfare economy He claims that new communication networks contribute to strengthening new corporate identity. Mattelart argues that the networks of the world market try to create for the calculable and predictable individual. (Mattelart,1991:205-207)

Emergence of Information Society idea that has gained greater acceleration with the information revolution has led European political economy of communication researchers to concentrate on this issue and its social, political, economic, and cultural consequences. For instance, in his book titled *The Information Society: An Introduction* (2003) Armand Mattelart examines the information revolution process. He argues that information revolution makes all residents of the world candidates for a new version of modernization. In the new world speed becomes a major factor creating the foundation of a lawless world in which the *res publica* (public good) is abolished. Regulation is refused by both producers and users in the information technology market. Since, neither producers nor users have any time or patience for regulation. He maintains that in the name of the speed the cumulative historical process of building culture is being rapidly changed by imposing a new version of modernization through new information technology products. He has named the information revolution process as the “informational neo-Darwinism” and he advocates strongly that the informational neo-Darwinism must be balanced by new conceptions of technological systems, providing the creative forces in science, the arts and social innovation. This will require various interconnections among the modes of social, cultural, and educational compromise

through which the uses of digital technology are formed which are sources of democratic life. (Mattelart,2003:161-162)

Some European communication researchers, like Graham Murdock and Peter Golding, have drawn attention that Information Revolution has created digital divides both within and between countries. The scholars have made some suggestions in order to prevent digital divide. For instance, in “Dismantling the Digital Divide: Rethinking the Dynamics of Participation and Exclusion” (2004) Graham Murdock and Peter Golding examine the shift from analog to digital technologies. They point out that the launch of World Wide Web (WWW) in 1990 and development of the first easy-to-use web browsers (Netscape Navigator in 1994, and Internet Explorer in 1995) created the expectation of universal participation. Promoting universal participation also addressed the tensions about the future of citizenship in the digital age resulting from substantial gap in internet access. Corporations and governments have also interested in internet and they envisage e-society. To this end they are constructing shopping malls, entertainment districts, distance learning networks, an e-government system that allows users to download and complete required forms and send e-mails to politicians and ministers. Alongside these heavy interactions, the net also provides new opportunities individuals such as communicating with family and friends, posting their opinions and creative works and participating virtual communities based on shared interests, beliefs or experiences. However, all of these opportunities creating expectation for full citizenship do not guarantee access these networks. It requires command over the resources that increase people’s capacity to use the Net as a space of self expression and social participation. According to them, to use the internet means individual expression and social communication, rather than just a device for downloading and interacting with prepared materials. People also need to have a sufficient training and skill levels requiring operating effectively and creatively. They defend strongly that constructing this new communal space guaranteeing full digital citizenship requires minimal conditions to be met. First it must operate horizontally as well as vertically. Second, it must productive way of benefiting both the expertise and resources offered by public broadcaster and other public institutions with mass participation fostered by social movements and community groups on-line. Third, it must guarantee universality of

access by making the necessary equipment available to anyone who wants it. All conditions are necessary to provide the minimal conditions for digital citizenship. (Murdock and Golding,2004:258)

Convergence of communication technologies and changing roles of international organizations, like International Telecommunications Union (ITU), and their impacts on culture have been examined by European political economy of communication researchers. For instance, in “Global Village or Cultural Pillage? The Unequal Inheritance of the Communication Revolution” (1998) Peter Golding examines convergence of the communication and information industries. He asserts that in the 1990s, transformations occurring in the global arena have led incorporation of international organizations into the project of international capital aims. He gives ITU as an example and maintains that this organization has increasingly transformed from a cooperative regulatory body into a solidly commercial power supporting and enforcing free market infrastructure to global telecommunications. In order to resistance this emerging structure in global communication system, he proposes five approaches. First is the formation of “impassive audience” which means creating capacity of audiences to resist the messages they receive. Second is to create “local power”. To this end, he points many centers in the Third World having important sources of influential and widely distributed material, films, TV programming and music and he asserts that these centers have played an important role not only in meeting immediate needs for culturally relevant material, but also in training local people. Third approach is to strengthen regional collaboration among the news agencies in Caribbean, Africa, and the Middle East to provide relevant news undistorted by the perceptions of Western news capitals in New York, Paris and London. Fourth approach is to develop a “communication policy” that would be necessary to resist the conglomerate incorporation of global culture and would be democratically effective implementation of relevant policy by legitimate national forms. Fifth approach is to create alternative media under local democratic control. Alternative media not only function to provide a complement to the global culture but also provide alternative and exemplary models for the structure of relationship between cultural producers and consumers. (Golding, 1998:82-84)

Other significant issue in the European political economy of communication research is to examine the impacts of internet on the mass media. For instance, in his study titled “The Impact of the Internet on the Existing Media” (2004) Colin Sparks asserts that the internet creates on-line media, changing ways in which all media are produced and distributed. The on-line media is far from that they will be universally and equally diffused. Digital divides will continue for a long time between the poor and rich countries. He argues that Internet’s impact on traditional mass media will be extensive but it is likely to reproduce the disparities in media availability that exist both between countries and within countries. (Sparks,2004:324-325)

Some European political economy of communication scholars have examined the role of corporate mass media in controlling and manipulating the minds of the people. For instance, in “The Non Homogeneity of the National State and International Flow of Communication” (2004) Kaarle Nordenstreng and Tapio Varis argue that mass media based on present day technology are even more effective in manipulating the consciousness of the people. But at the same time, they draw attention that there is also another aspect of this situation; groups outside the sphere of power have begun realizing the importance of communication and demanding the right to determine what media is to communicate. In sum, they have begun resisting the impositions of the corporate media. They assert that, today, the global interests of the US and other capitalist nations stand in oppositions to socialist interest. (Nordenstreng and Varis,2004:399). In this study they also point that national oligarchy of a developing country has ever close interests with those who sell the products of industrial countries whereas material interests of the poor masses are often almost in opposition to those of the ruling class. They argue that in a developing country these differences among social groups have been seldom reflected. However, this is not necessarily an indication of national harmony but often just a demonstration of an underdeveloped or carefully controlled consciousness of the masses. (Nordenstreng and Varis,2004:410)

Some European scholars interested in bourgeois concept of communication. For instance, in his study titled “Mass Media and Socialist Revolution: The Experience of Chile” (2004) Armand Mattelart argues that the bourgeois concept of communication has imposed from the top to the bottom. In this process neither the concerns of majority

nor their own ways of life are reflected. What are reflected are the aspirations, values, and norms serving to bourgeois and imperialist class' interests that the bourgeois class' and imperialists' interests imposed masses as most convenient for the society. In order to breakout of the mercantile system and make mass communication medium he has proposed *a medium of communication of the masses*. This would be interwoven with the mass organization in which one discusses and criticizes and from which raises the cultural creations of the organized masses. It is here that the political economy of communication finds its real objective that of mass mobilization. Mattelart maintains that its success depends on the revolutionary transformation of the communication apparatus. (Mattelart, 2004: 439-440)

There is some interest in exploring the possibilities of using technology to promote democratic interests. For instance, in his book titled *Media and Power* (2002) James Curran examines the British media. He points out that the potential for media corruption was enormously increased by the deregulation policies that were pursued in the 1980s and 1990s. Profitable broadcasting and telecommunication franchises were sold and new arrangements were made for their operation which affected their costs and profitability and the rules governing media acquisitions and cross media ownership were changed. Consequently, media have lost its role as an independent watchdog serving the public interest and have begun satisfying corporate interests. In order to prevent this kind of media formation Curran maintains that a complex set of democratic media system is needed. According to him, this democratic media system should empower people by enabling them to explore where their interest lies. It should support sectional group identities and assist functioning of organizations necessary for the effective representation or group interests. Finally, it should provide a source of protection and improve for weak and unorganized interests. It should create a compromise based on open discussion of differences rather than a consensus based on elite dominance. He argues that this can be best realized through the establishment of a core public broadcasting system encircled by a private, social, market professional and civic media sector. This will strengthen the functioning of public service broadcasting as an open system of dialogue and will accelerate to the collective self-organized traditions of civil

society. (Curran,2004:221). He suggests a media plan seeking to create a media system which is controlled neither by the market nor the state (Curran, 2002:247)

In his text “Developments in Communication and Democracy: the Contribution of Research” (1996) James D. Halloran argues that critical concerns regarding developments in international communication such as the formation and/or intensification of information /knowledge dependency relations have not been adequately addressed. Globalization experienced so far through the operations of the corporations which are so uncritically and enthusiastically accepted by the media. Media seems reluctant to meet Third World’s needs. This is primarily resulted from the prevalence of marketplace criteria and the absence of public concern and accountability. He maintains that globalization process implies continued dependency. He draws attention that today the social, cultural, or moral implications of globalization are barely addressed in media researches. According to him, what really and urgently requires is a globalization of moral responsibility. In the first instance, this might enable researchers to diagnose the problem correctly by carrying out critical research at the appropriate time. This situation demands public concern, public involvement and public accountability for realizing democratic communication. (Halloran,1996:182)

Some European communication researchers such as Susan Christopherson, Michael Storper, Michael Piore, and Charles Sabel have focused on the post-Fordism. Piore and Sabel (1984) in *The Second Industrial Divide* examine the claims of post-Fordist theory and changing role of state in this process. In the book they point a major divide in capitalist development. One side of the divide is Fordism, a system of mass production and mass consumption led by large integrated companies whose market dominance is secured with support from the state in return for maintaining economic and, by extension political stability. On the other side is post-Fordism marked by specialized production of business into the network of flexible producers, suppliers, investors and by state whose role changes from providing and securing a social contact into promoting markets. Christopherson and Storper in *The Effects of Flexible Specialisation on Industrial Politics and the Labour Market: The Motion Picture Industry* (1989) apply this view to the film and video industries. (Mosco, 1996:109)

European political economy of communication research has been especially active in recent years in examining new communication and new computer communication technologies. This is partly resulting of accelerating developments in communication technologies (satellite, fiber-optic cable, digital technologies, microelectronics etc). These technologies have introduced a range of smaller, faster and cheaper devices for the production, distribution and display of communication and information. One of the major contributions of European political economy of communication research has been to incorporate technological transformations within the wider context of changes in power relations of telecommunications and new technologies. Political economy of communication research has addressed the social structure constituents and consequences of these changes.

Cees J. Hamelink in his book titled *Financial Information: A Study of Converging Interests* (1983) has provided one of the early work ground studies that identified the relationship of finance and banking to the new information industries. More recently Jill Hills in her *Deregulating Telecommunications: Competition and Control in the United States, Japan and Britain* (1986) has produced a comparative analysis of political change in telecommunications that connects a changing political environment to changes in the relationship among the state, capital and labor in three leading nations. Jill Hills and Stylianos Papathanassopoulos (1991) *The Democracy Gap: The Politics of Information and Communication Technologies in the United States and Europe* make an analysis that situated telecommunications policy within the context of changes in communications technology policies across Europe and the US. Nicholas Garnham (1990) *Capitalism and Communication: Global Culture and Economics of Information* has examined the threats to public life resulting from re-organizing telecommunications to serve the market demands of large corporate users, rather than the needs of masses. (Mosco, 1996:113)

Thomas McPhail in his book in his book *Theories Stakeholders and Trends* (2002) points out an emerging situation that he named as McPhail's Paradox. He explains it as follows. The US has the greatest vested interest in the global economy. As a nation-state it has the largest number of transnational companies, many in information and communication sector, which dependent on global commerce and transactions as

major source of jobs and income. On the one hand, the US needs global orders and rules to keep its industries functioning and growing. TNCs needed the UN and its special agencies like WTO and ITU to function effectively. But on the other hand, the US is among the harshest critiques of international agencies. The US is one of the most frequent violator of WTO's rules promoting free trade. International initiatives designed to produce an orderly safe and better world such as The Kyoto Environmental Protocol, The Law of Sea and the Landmines Agreement, the Global Convention on Elimination of Discrimination Against Women, The International Criminal Court and other international initiatives are lacking the US signature. Rather than promoting international tolerance, international cooperation and furthering global social justice they promote an "America First" mantra (McPhail, 2006:325)

Having reviewed the contributions of European researchers into the political economy of communication, in the following chapter, Third World scholars and research centers' contributions to the political economy of communication will be examined.

2.1.3 Contributions to Third World Researchers to the Development of Political Economy of Communication

In the late 1950s and the 1960s, newly independent nations in Asia and Africa began joining the international organizations like the UN and UNESCO as a result of decolonization process. These newly independent countries accepting information as the "coin of the information age" had developed a widespread criticism against Western mass media dominance. (Stevenson,1994:44). They argued that cultural imperialism representing Western dominance of information was a result of exploitation of the Third World that gave rise to North-South disparities.

Third World political economy of communication research had been developed in two interrelated directions. First, Third World scholars or political activists developed a strong critique of liberal developmentalist / modernization approaches. Developed countries, particularly the US, used modernization theses as a mean in order to gain success against anti-imperialist struggles emerging in these countries. Second, Third World scholars and political activists produced various dependency theories, another variant of structuralist political economy perspective. What they have common is the

view that global political economy has increased dependency of the less developed countries of the world to the capitalist core of the North. (Veseth and Balaam,1997:73).

Dependency theses points out that there have been centers controlling the flow of goods, services, capital and information. These theses argue that economic development at the periphery has been shaped to strengthen the dominance of the center nations in order to preserve the peripheral nations of dependency on the center. (Alleyne,1995:121). The dependency approach concentrates on how external forces determine the conditions for the form of social and economic developments in the name of their interests, paying less attention by local forces and relations of production, including indigenous class structure. (Mosco, 1997:125)

Main aim of the modernization project was to spread Free Flow of Information (FFI) principle and in this way to convince Third World countries for removing, at least reducing, trade barriers to media organizations of the Western countries' media products and to help media owners in their marketing and advertising operations in Third World markets, and to establish influence over the Third World. Until the beginning of the 1960s, main emphasis in the UN and UNESCO was both on the importance of FFI and the use of mass media for creating modern societies in the Third World (Reeves,1993:101). In the US, an elite corps of academics based in leading universities and research centers began studying to determine "how to integrate the Third world nations into the global capitalist economy. One element of this was nation-building; a process of creating national elites that could effectively substitute nationalism in place of various models of socialism offered by the SU and China. In order to create national identity, these elite class fractions would unite the remaining social forces to struggle the challenge of revolution and socialism. (Mosco,1996:121) ⁽¹³⁾

Modernization theorists used the mass media as a vehicle to realize this goal. Consequently, the media development became one of the main indicators of general societal development. For instance, Daniel Lerner in his book titled *Passing of Traditional Society* (1958) asserts that communication helps to develop the mobile empathetic personality by which a person can accept change. This is the predominant personality in modern life and it is spread by media. (Lerner, 1958:1). He concludes that mass communication is the great multiplier in development. The device can spread new

ideas attitudes and knowledge rapidly. He defends that there is an interaction between the economic development and the communication development. In “Communication and the Prospects of Innovative Development” (1969) Daniel Lerner defends that the major task of the modernization phase is to shape an attractive communication strategy that will be effective for development. That is, a communication strategy which aims at modernization and construction of a market economy as the supreme political objective. (Lerner,1969:314).

In his book titled *Mass Media and National Development: The Role of Information in the Developing Countries* (1964) Wilbur Schram asserts that developing countries must mobilize resources in order to modernize their life patterns and if a developing country can achieve to mobilize its resources, it can quickly and painlessly realize necessary social transformation. He emphasizes the importance of communication for social transformation and he states that to realize a great social change people must be informed, persuaded, and educated. He defends that information must flow not only to them but also from them so that they may participate the acts and decisions of nation-building. Information must also flow vertically so that decisions may be made, work organized and skills learned at all levels of society. At this point, he stresses the significance of mass communication and argues that only by effective use of mass media can provide information for Third World countries’ development demands. (Schram,1964:246-247)

Everett M. Rogers and F. Floyd Shoemaker (1971) in their book titled *Communication of Innovations: A Cross Cultural Approach* see communication as an essential factor for realizing social change (Rogers and Shoemaker,1971: 38). They define social change as a process by which transformation occurs in the structure of a social system. According to the authors, improving the general understanding opening to the idea of modernization through mass media technologies and mass media messages is vital to development based on a market economy.

The communication research program inspired by the modernization thesis helped to shape university communication programs and research centers. Particularly in Latin America, the first generation or two of indigenous communication scholars were trained in the American functionalist tradition from which modernization theory was

created. Many schools, journals and texts were funded and organized with the US government assistance. However, modernization could little to improve the real economic conditions of the Third world people. This led to an increasing number of discontents and a growing number of critics. Especially in Latin America, the most important region of the US-based modernization theses, scholars engaging the political economy of mass media began sharply criticizing the modernization thesis. This was particularly the case in Latin America because this region was the most important target of modernization projects. As a result critical scholarship developed relatively early in Latin America with the contributions of Armand Mattelart in Chile, Paulo Freire, an educator and theorist of education, in Brazil, Antonio Pasquali, communication analyst, in Venezuela, and Eliseo Veron, mass communications scholar, in Argentina. (Mosco, 1996:123) They tried to reveal “how Western media companies were the major beneficiaries of modernization programs”.

Political economy of communication studies has gained a great acceleration with the establishment of the Instituto Latinoamericano de Estudios (ILET) in Mexico City in 1976. Institute has mainly concentrated on studies about transnational business, particularly the impact of media companies. ILET’s impact was strongly felt in international policy debates particularly through the contributions of Juan Somavia, a member of the MacBride Commission. (Mosco,1996:123)

MacBride Commission Report stated that there had been a relatively small number of dominant corporations which had integrated all aspects of production and distribution, which had been based in the leading developed countries and which had become transnational in their operations. Commission’s report emphasized strongly that concentration of resources and infrastructures in the hands of the very few numbers of TNCs had been not only a growing trend but also a fearful phenomenon which might adversely affect the freedom and democratization of communication. The interdependence of various technologies and various media, the high costs of R&D and the capacity of the most powerful firms to penetrate any market in the world have led to concentration and transnationalization of mass media. As a result, TNCs have a special role in today’s world where societies are heavily dependent on them for the provision of information. Report argues that transnational media have a major influence on ideas and

opinion, on values and life-styles. Mac Bride Commission proposed two solutions for communication policies in developed and developing countries to help maintenance of democracy and strengthen national independence. First recommends some restrictions on the process of resource concentration as a public interest policy. Second suggests some norms, guidelines or codes of conduct for TNCs' activities in the field of communication to help ensure their operations without neglecting national objectives and socio-cultural values of host countries. Report recommended that the UN Commission on TNCs should monitor the communication, information and cultural imperialism of the corporations' activities. (Mac Bride Commission Report,1980:111)

Among other centers of communication research, The Institute for Latin America, founded in Lima, Peru in 1983 has been particularly focused on the social relations of new communication and information technologies.

Since the late 1980s, dependency theories in Latin America have shifted their focus from the debate over cultural imperialism thesis to the worldwide operations of TNCs controlling production, distribution and reception structures. In this framework, recent political economy of communication analyses in Latin America have concentrated on the use of new computer communication technologies (telematics) increasing dependency to the core. These studies examine "how new technologies are central to the integration of business activities as well as to the production of commercial culture". Recent, Latin American political economy of communication analyses argue that the development of these technologies have increasingly strengthened Third World countries' media dependency as well. (Mosco, 1996:125-126)

During the 1980s, international financial organizations such as the IMF and the World Bank proposed new initiatives that served the needs of the largest TNCs' and the most developed lending countries' interests. These institutions launched Structural Adjustment Programs (SAPs) forcing economically weak Third World countries to adapt their economies to the conditions of these programs. In accordance with these programs, debtor countries should give the first priority to external debt payments and public sector reductions. Debtor countries that wanted to benefit these programs had to apply strict monetary policies and export oriented growth policies in order to obtain sufficient foreign exchanges for reducing external debt burden and to enter into new

competitive global market place. Privatization policies were strongly recommended to the debtor countries by these international financial organizations in order to alleviate their heavy budget deficit to provide sufficient, stable and healthy economic environment and more importantly to attract foreign direct investment (FDI). In the 1980s, local business interests applying export-led growth development strategies in the developing countries began to pressure for relaxing for governmental control on the economy, including communication sector. Because, they were fearful falling behind in new global trade competition. They claimed that strict governmental control on national telecommunications system would led to inefficient communications systems preventing significantly to enter global markets. They also argued that poor communication systems resulting from heavy governmental control would also hinder development countries' integrations into the global capitalist markets.

In the 1990s, the US has encouraged developing countries' communication improvement policy initiatives. These initiatives have also been encouraged by the World Bank communication development programs that support private sector policies. In the mid-1990s, the World Bank set up Information Development Programs (InfoDev) to coordinate its own lending and grant programs in telecommunications sector. The World Bank has also urged developing countries to agree the WTO rules for opening up trade information technology goods and services. (Dizard, 2001:178)

Latin American Scholars also have carefully examined these developments in the global markets and have concluded that the US and the IMF have always formed major threats for Latin America (Mosco, 1996:126). These programs have sharply limited the communication policies of the Third World countries.

African Communication Scholars and researchers such as S.T. Kwame Boafo, F.O. Ugboajah, and Luke Uke Uche, mass media and communication scholars in UNESCO, have also produced sharp critiques of the consequences of neo-colonial media systems.

The main focus of the political economy of communication researchers in Asia has been the new communication and information technologies. There are two major reason of this focus. One reason has been the great success realized by Japan in the area of new communication and information technologies. The country followed an

aggressive export-oriented trade policy with strict protectionist measures and electronic sector was a special target for this strategy. (Dizard, 2001:143). Second reason has been the important role that several Asian countries, like Hong-Kong, Singapore, South Korea, and Taiwan (Asian Tigers), in using these technologies in order to integrate them into the global market economy. (Mosco, 1996:126)

In Asia, there are also developmentalist communication research centers. One of the most substantial modernization research centers is the East-West Center in Hawaii, established by the U.S. Congress in 1960 to increase relations among the peoples and nations of Asia, the Pacific, and the United States. Center supports communication development projects, promoting linkages between the Asia and the US. In the 1980s, developmentalists strongly emphasized the success of some Asian NICs, led by Singapore, South Korea, Taiwan, and Hong-Kong, realizing high level of economic growth and development of the high technology (mainly in communication and information) sector through the export-led development strategies in order to prove the triumph of modernization programs.

However, Tessa Morris-Suzuki and several Western political economists of communication such as John Lent, Leny Siegal, Michael Traber, and Gerald Sussman have strongly criticized the Asian NICs example of developmentalists. They have maintained that the early success realized by the NICs has been substantially decreased, resulting mainly from two reasons. One reason is the economic stagnation in developed countries. This has significantly reduced demand the Asian high-tech products. Second reason is increasing demands for higher wages and better working conditions in these countries. This has caused TNCs to search for new regions of low cost production. (Mosco, 1996:128-129) (Post-Fordist production structure has facilitated this searching)

Since the early 1990s, defenders of the developmentalist view have revised the perspective, giving primary focus on new technologies. The revisionist developmentalist view argues that development requires the construction of advanced telecommunications and computer communication infrastructure. It defends that business leads the modernization process it is more important to establish advanced telecommunications and computer infrastructure for business than it is to create mass communication systems. This argument suggests the establishment of the state-of-the art digital

communication systems that make it possible for businesses operating in the developing world, exporting Western information and communication technologies. (Mosco, 1996:130-131)

In sum it is possible to claim that the political economy of communication theory presents views of communication scholars from different regions of the world. Political economy of communication scholars could not manage to produce a united perspective about World communication system and its problems. These scholars are linked by various issues, including: the business of communication, the role of the state, the connections between the corporate and state sectors, and the linkages between the political economy of communication and wider global political economies. Recently new themes have emerged in the world communication area. These include linkages among production, discourse and reception; the relationship between world communication system and gender and race; the significance of structural change within and across the communication industries, the impacts of relations among labor class, private, state, and public communication on the world communication and information structure.

In this chapter, global communication system; communication-related debates; major changes in global communication structure; and impacts of these shifts on various actors have been examined. In the third chapter, the impacts of worldwide deregulation and privatization process of telecommunications sector and major players' telecommunications policies will be reviewed.

NOTES

- (1) Scott Burchill, “Liberal Internationalism” in Scott Burchill and Andrew Linklater (New York, St Martin’s Press Inc, 1996) p.31 In the 18th and 19th centuries liberals believed that free trade was an effective and peaceful means of raising national wealth according to the theory of competitive advantage, each economy would realize to be better off before if it could manage to pursue nationalist and autarkist policies. According to liberals, free trade would erode divisions between states and in this way it would unite individuals living in every point in one country. Liberals claimed that artificial barriers to commerce had distorted perceptions and relations between individuals thereby creating international conflict. They saw free trade as a remedy that would expand the range of contacts and levels of communication between the people of the world and encourage international friendship and understanding.

Burchill (ibid, p.56) Adam Smith (1723 -1790) believed in cooperative, constructive side of human nature. He named this human characteristic as “invisible hand”. For Smith, the “invisible hand” of market forces provides every member of a society the most advantageous position in the global economy, claiming that the self-interest of one becomes the general interest of all.

Burchill (ibid, p.31) David Ricardo (1772-1823) believed that free trade binds the universal society of nations throughout the civilized world. (Burchill, 1996:31) David N. Balaam and Michael Veseth, *Introduction to International Political Economy* (New Jersey, Prentice- Hall, 1996) p.45 Ricardo followed Smith in adopting the liberal view of international affairs. He was a particular champion of free trade. He maintained that free international market stimulates industry, encourages innovation, and creates a general benefit by raising production.

Burchill (ibid, p.31) John Stuart Mill (1806-1873) also claimed free trade was the means to bring about the end of war. According to Mill, international free trade would increase mutual dependence which would foster understanding between people and reduce conflict possibilities.

(2) Richard Devetak "Critical Theory" in Scott Burchill and Andrew Linklater (New York, St Martin's Press Inc., 1996) p.159-160 Antonio Gramsci developed notion of hegemony. It is more than just order among states. It also includes order within a world economy. By combining military, political, economic, ideological and cultural forces hegemony permeates the whole order. The concept of hegemonic world order is founded not only upon the regulation of the inter-state conflict but also upon globally conceived civil society. It is a form of social and cultural power which assumes the form of a legitimate inter-subjective consensus. Hegemonic leadership is expressed in terms of universal or general interests.

Gramsci asserts that world orders are grounded in social relations. This means that observable changes in a society and among societies can be traced to fundamental changes in social relations. For Gramsci the state is thought to be absolutely inseparable from civil society as together they constitute and reflect the hegemony of social order.

(3) Hamid Mowlana *Global Communication in Transition The End of Diversity* (USA, Sage Publications,1996) p.35 The International Communication Division of the Association for Education in Journalism (AEJ)-later renamed the Association for Education in Journalism and Mass Communication (AEJMC) - organized the first symposium on the international communication in the Racine, Wisconsin. Symposium focused on the need to internationalize professional journalism and communication schools curricula. One of the major purposes of this conference was to develop standards for teaching research and practice to help guide journalism. Conference participants expressed the view that inter-cultural and comparative communication studies must be incorporated into international communication curricula, defending strongly the approach that "to be a communication scholar of any global location" one should have an awareness of communication in other cultures. The publication in 1970 of the reports and papers from this symposium ed. by James W. Markham was a major document in the growth of international communication as a field of study since the Second World War. The Markham Volume recognized the growth of international

communication and journalism scholars of the 1960s in their important contributions toward defining international communication as a field of study.

- (4) Linklater (ibid. p.132) Habermas aims at reconstructing historical materialism and revising the emancipatory project of Marxism. Habermas' principal claim was that Marx and Marxism had believed that technical-instrumental learning (learning how to master natural forces and increase technological power) was the essential precondition for the establishment of socialism. What is neglected according to Habermas was the independent sphere of moral-practical learning in which human-beings develop ethical skill of creating social order which command the consent of human agent.

Linklater (ibid. p.136) Culture and morality have long been at the center of Habermas' thought. Three points are important for Habermas' efforts to open historical materialism to understand the paradigm of communication. First, the cosmopolitan goal of Marx and Marxism is reaffirmed but within a framework which defends the moral right of every human being to take part in dialogue. Second, the reconstruction of historical materialism does not assert the primacy of class and production but recognizes a plurality of social and political movements (concerned with ecology, national rights and the rights of women) which resist various forms of alienation, exploitation and estrangement. Third, despite these advances, discourse ethics is specifically considered with the philosophy of language and it omits the independent analysis of power and inequality constituting central points of classical Marxism. Habermas' analysis attempts to reestablish historical materialism, focusing on the ideal of communication community through neo-Marxist approaches to analyze it and seeking possibilities to remove obstacles open dialogue.

Linklater (ibid. p.137) Habermas' reconstruction of historical materialism rejects the imposition that any moral code, Western or otherwise, has validity for all.

Linklater (ibid. p.138) Habermas in recent work stresses the goal of understanding between social groups as much as the classical notion of emancipation. The central point of Habermas' reconstruction of historical materialism is the shift

from paradigms of production and consciousness to a paradigm of language or, as Habermas was calls it later, a theory of communicative action.

Devetak (ibid. p.162) Habermas dispenses from Marxist distinction between forces and relations of production and moves to a distinction between cognitive - instrumental and communicative rationality.

- (5) Robert L. Stevenson, *Global Communication in the Twenty-First Century* (New York, Longman Publisher, 1994) p.47. The International Program for the Development of Communication (IPDC) idea had been proposed by the US at the 1978 UNESCO General Conference. With the IPDC proposal the US delegation aimed at reducing the anti-Western feelings by offering the technical assistance that most Third World countries wanted and needed. The Program aimed at increasing competition and assistance for the development of communication infrastructures and reducing the gap between developed and developing countries in the communication field. However, there were a lot of project proposals on the IPDC agenda while there was too small stock of financial resources to realize these projects.
- (6) Burchill (ibid. p.20). In the 1980s, more critically-oriented theorists initiated the debate by challenging the positivist methodology on neo-realism. According to critical theorists influenced by the Frankfurt School and the work of Habermas, methodology should be based upon an emancipatory interest in order to free human beings from unnecessary social constraints. According to them, methodology should not be based upon only a technical interest in social control. Devetak (ibid. p.146) Frankfurt School's critical theory tries to understand the central characteristics of a contemporary society, considering its historical and social development. Main aims are to create possibilities for transcending contemporary society's disorders and to analyze obstructions and existing tendencies towards the rational organization of human society, emphasizing the importance of individual autonomy and the establishment of justice and democracy.

(7) Veseth and Balaam (ibid. p.62-71) In the 19th century, Lenin's analysis of capitalist globalization stressed that the industrialized West would reshape the non-Western world entirely in accordance with its own interests. Lenin's (1870-1924) analysis was based on Marx's class struggle focusing on the mode of production in order to reveal capitalism's international effects transmitted through the production and finance structures of powerful industrialized Western countries to the poorer developing non-Western regions of the world. Lenin added to the Marxist theory what R. Gilpin defined as a "fourth law of capitalism" which might be named as the *law of capitalist imperialism*. In Lenin's viewpoint capitalist imperialism referring to the zenith of capitalism is another aspect of history. Lenin's imperialism approach is based on the Marx's law of concentration which means aggregation of market power in the hands of the very few numbers of cartels, syndicates and trusts. Lenin stated that concentrated capital in the hands of the very few numbers of monopolies could not manage to find sufficient investment opportunities in the industrial regions of the world where markets already saturated. This situation would force monopolists to export capital around the globe in order to acquire sufficient profits. According to Lenin's approach imperialist capitalism diffuses around the globe through production and finance structures designed by monopolists as to create dependency and to facilitate exploitation. The fundamental notion of structuralism is that economic structure heavily influences the distribution of wealth and power. Structuralist approach claims that institutions designed to serve mainly to the interests of global capitalism will inevitably exhibit tendencies in favor of dominant powers, creating a web of dependency relations. Linklater (ibid. p. 129-130) Trotsky developed alternative explanations for imperialism through his law of "combined and uneven development". According to the law new social formations would raise from the struggle between the capitalist and pre-capitalist worlds. More recent theories of imperialism have developed this theme. For instance, Andre Gunder Frank (1929-2005), German economic historian and socialist, in his studies argued that the alliance between the dominant class interests in the core and the periphery hampered the economic

development of peripheral regions. Frank defended the view that peripheral societies would manage industrialization autonomously only provided that realization of the national separation from the world global capitalist economy. Immanuel M. Wallerstein (1930-), economist, who developed World System Theory, refuses the view that spread of capitalism around the world as a whole. His theory focuses on the role of peripheral and semi-peripheral states and movements challenging the political principles of the capitalist world economy and the cultural hegemony of Western scientific culture. These approaches are often described as neo-Marxist because they deny that capitalism has the inevitable developmental impact which Western Marxism once attributed to it. Neo-Marxist approaches also argue that capitalism brings all societies within a single world history since it triggers nationalist revolts against economic exploitation and inequality. Recent neo-Marxist approaches repeat the Marxist perspective, emphasizing that uneven capitalist development will lead nationalist discontents. These approaches see national revolts as more important than the struggle between social classes. Support for nationalist movement has created significant contradiction between neo-Marxist perspective and classical Marxist perspective which fears the abandonment of the international legacy.

- (8) Oliver Boyd-Barret, "International Communication and Globalization: Contradictions and Directions" in Ali Mohammadi (ed) (London, Sage Publications, 1997) p.16 In the earlier years of the Cold War period, American Free Flow of Information (FFI) principle defending mainly the rights of American media owners. This principle has always reflected the US' communications policy targets in international negotiations. FFI principle defends the rights of media owners who were concentrated in northern industrialized countries, particularly in the US. This principle has served both economic and political purposes of the developed countries. Economic purpose is to persuade other countries for reducing trade barriers to media organizations of the Western countries' media products. Western media organizations strongly advocate that FFI principle would contribute to development of democracy and freedom of expression. FFI principle helped media owners in their advertising

and marketing operations in foreign markets through media means which have always reflected the Western way of life based on free market economy, liberal democracy and individualism. Political purpose is to maintain influence of Western media on global environment in order to strengthen the West and to provide channels for transmitting Western governments' views and ideas to international audiences.

- (9) Wilson B. Dizard, *Digital Diplomacy: US Foreign Policy in the Information Age* (USA, Preager Publishers Inc., 2001) p.142 Canadians in the 1970s worried about imbalance information flows between the two countries. Canada's fears based upon both economic and cultural reasons. Economically their concern was focused on cross-border data flows and particularly increasing Canadian dependence on the US data processing resources. On the cultural front, Canadian nationalist groups called for limits on the most visible of the US cross-border information exports, TV, radio and other media products. These groups increased their pressures to limit information trade in order to protect Canadian cultural heritage and to protect country's media industry. In 1979, Clyne report stated that rapid developments in communications technologies, particularly in informatics (computer communication) had possessed possible the most dangerous threat to Canadian sovereignty in both cultural and commercial aspects. The report strongly recommended an immediate action to regulate these imbalanced trans-border data flows. Within a year, Canadian parliament approved a restrictive legislation by taking into consideration the Clyne Report's recommendations.

- (10) Dizard (ibid. p.65) In the 1970s, prevailing international economic order and international information order were challenged by the Third World countries through the movement for a new world economic order (NWEO) and new world information and communication order (NWICO). Developed countries, particularly the US, were perceived the NWICO as a significant problem that could threaten the FFI principle.

In the meantime, advancements in satellite technologies created three debates that could threaten the US' FFI policy. These were electro-magnetic spectrum

allocation debate, geosynchronous orbit allocation debate and remote-sensing debate. These debates were closely related to Third World countries' NWICO demands.

The US strongly advocated a flexible approach to EMS issue in order to provide efficient allocation of limited spectrum, extremely vital for new advanced communications technologies. This American approach reflected the US economic interests as the leading producer and user of high-tech communication and information products. New ITU members demanded NWICO created the biggest threat to the US spectrum flexibility approach. Third World countries feared the northern domination over the spectrum. Cees J. Hamelink, *The Politics of World Communication: A Human Rights Perspective* (Sage Publications, 1997) p.85 The US position in the spectrum also brought about discontent among industrial Western powers. They feared that American spectrum planning strategy aimed at reducing Western developed countries' influence in global communication. By the 1970s, in the framework of the NWICO debate, they began playing more active role in the ITU's decision-making process. Since, for the time being they well understood the political and economic importance of EMS resource. Third World countries perceived ITU spectrum rules as supporting new colonialism policies. They strongly argued that the US and other Western industrial powers desired to dominate global information and communication resources through ITU's EMS regulations. As a result, Third World developing countries began challenging the "first-come first-served" practice by claiming that this norm would eventually lead to overwhelming domination of Western industrialized countries in global communication. Third World nations conducted campaign in order to revise EMS regulations. They demanded radical changes in the spectrum issue.

Geoffrey Reeves, *Communication and Third World* (London, Routledge, 1993) p.21 Allocation of geostationary orbital slots for communication satellite services is closely related to the EMS issue. In case of the satellite communications, the allocation of geosynchronous orbit required using frequency.

Hamelink (ibid. p.86) Allocation in the geosynchronous orbit increasingly became a concern to Third World countries. By the late 1970s, they became worry about that occupation of orbital slots could prejudice their access in time and they began to resist the “first-come, first-served policy” (Hamelink,1997:86) Developed countries having space technology defended a posteriori geosynchronous orbit allocation on the basis of economic and effective use of space resources. They strongly objected planning procedures to slowdown technological development. Third World countries supported the idea of a priori planning of geosynchronous orbit allocation on the basis of equitable space resources. Their claim based on the 1967 Outer Space Treaty stressing equitable access to space resources and the 1979 Moon Treaty recognizing geosynchronous orbit as a common heritage and planning allotment approach.

Dizard (ibid. p.81) The technical possibility to gather information from the Outer Space has generated a series of complex issues for the international community. World community had been divided over the question of whether the sensed states should give prior consent to be sensed or not. In fact it was a debate over the extension of information sovereignty into outer space. Two rival positions relating the remote-sensing issue has emerged; the restrictive position and the permissive position. The restrictive position emphasizes the need for prior consent. It states that if remote-sensing was controlled by the sensing countries, this could pose threat the national sovereignty over the freedom to collect data through remote-sensing satellites. The restrictive position defended the principle of sovereign control over national resources. This position was mainly defended by Third World countries. The Permissive position claims that national sovereignty could not be extended to information about natural resources. It sees remote-sensing as a space event and restrictions resulting from the principle of territorial sovereignty can not be applied. This approach was mainly defended by the industrialized countries.

(11) Nicholas Baran, “Privatization of Telecommunication” in Robert W. McChesney, Ellen Meiksins Wood, and John Bellamy Foster (eds) (New York, Monthly Review Press, 1998) p. 125-126. Previously the internet had been

planned as a Defense Department project in the late 1960s, then it grew primarily out of a network designed to link up the National State Foundations (NSF). Five supercomputer sites at the University of California at San Diego, Cornell University, University of Illinois at Champaign-Urbana, Carnegie Mellon University in Pittsburgh, and the National Center for Atmospheric Research in Boulder, Colorado. Called NSFnet, the network began operation in 1987 and provided high-speed connections between the supercomputer sites so that researchers and scientists could access these sites. Regional networks were connected to the NSF backbone called the National Science Internet. Thus the internet grew into a national and ultimately international system of linked networks, allowing global access to electronic mail and databases, as well as other internet sources such as news groups, and WWW. Previously, internet was largely founded by the NSF, NASA and other government agencies and by academic institutions. Internet service were supplied under contract to the NSF by a company called Advanced Network and Services (ANS) which was a service company established by MCI, IBM and Merit Networks. Contract was ended in 1995 and transition from federal funding to full private commercial operation of the internet.

(12) Dizard (ibid.142-143) The NAFTA (the North American Free Trade Area) which represented a critical turning point for electronic trade negotiations in the early 1990s. NAFTA significantly reduced both trade and non-trade barriers for information technology products among the US, Canada and Mexico. It had an important influence in opening up both the Canadian and Mexican telecommunications markets to a great degree of competition. Its major contribution was to develop a workable model for the parallel negotiations that led the creation of the WTO in 1993.

(13) Mowlana (ibid. p.6) Various American Institutions played a significant role in the formation of contemporary US international communications policy. The Massachusetts Institute of Technology's Center for International Studies was an early center for international communication research in the Cold War era. It was the most important centers of communication research in the US during the

1950s and 1960s. The Institute employed sociological techniques focused on the control of human attitudes and behavior on a mass media on social development in the Third World. According to the center, communication does not mean mechanical electronic and other means of transmitting information across frontiers. It is much broader concept, including interchange of words, expressions, and ideas which affect the attitudes and behavior of peoples towards each other. The definition focused on the human or social dimensions of international communication as a complex process of various interchanges using signs and symbols.

The launching of an international communication and social science research project- Third World Elite Communication- at MIT correlated with the political and economic timelines increasing American involvement activities in the Third World in the 1950s led an international communication research project called Third World Elite Communication. This study focused on the questions such as “who are the opinion leaders?” “What is accepted meaning of leadership in a given culture?” “How can ways of communication be established in different social systems?” Third World publics and counter-elite actors began to claim participation in international communication issues such as information technologies and mass media production and distribution rights. Third World involvement in control over the content of communication was challenging the leadership position of the US. American involvement in the Third World began increasing during the 1950s in order to challenge this threat. To this end MIT Center launched a project called Third World Elite Communication. This project’s main goals were to know Third World elites’ nature of their thinking, and to learn under which social conditions mass or elite opinion affects decisions. MIT Center also studied on the Western European integration efforts and its communication elites. The studies represented an effort to preserve the balance of power and the status of Western civilization in the Cold War years against the Soviet threat. This type of communication studies reflects the paternalistic, orientation Western concepts of international relations existed in the 1850s. (Mowlana, *ibid*, 14)

Opinion Leadership and Long-Range Studies and East-West conflict were other major projects undertaken by the MIT Center. Main target of these studies was to assess the impact of tradition, nationalism, partnership, political organization, fresh events etc. on the formation of opinion. (Mowlana,ibid, p.15). These projects showed the interconnections of politics and communications.

It took no more than a few years for the MIT researchers and their colleagues elsewhere in the US such as at Columbia, Chicago and Harvard began to produce international communication researches that were either designed or inspired by the MIT projects. (Mowlana, ibid. p.19)

CHAPTER 3

DEREGULATION AND PRIVATIZATION OF TELECOMMUNICATIONS AND MAJOR PLAYERS

The US is the pioneer country applying neo-liberal policies-liberalization, deregulation and privatization- into its telecommunications sector. Then, the American movement has spread into other countries. It firstly diffused to the UK and then to Japan and then to the rest of the world. As a consequence, since the early 1980s, governments have increasingly abandoned their control over national telecommunications systems – until the early 1980s, control of telecommunications networks was accepted as an important indicator of national sovereignty- in order to integrate themselves into a highly competitive global communication market conditions.

3.1 Evolution of Telecommunications Sector in the US: From the State- Controlled Telecommunications Sector to the Beginning of the 2000s and the US ICT Policies

In the US, privately-owned telephone companies had been controlled by government regulations between the period of 1910 and 1960. In 1934, the Communication Act was passed and the Federal Communications Commission (FCC) was authorized in order to regulate the US telecommunications and broadcasting networks. AT&T was organized as a regulatory monopoly, eliminating competition from smaller private telecommunications companies.

In telecommunications, a degree of incremental liberalization had occurred in the US since the late 1950s. (Humphreys and Simpson,2005:26). Pro-competitive pressures for the introduction of competition in the US telecommunications system mainly stemmed from innovations of new and sophisticated communications technologies, ranging from coaxial sub-marine cables to communication satellites to microwave systems. These technologies permitted the US-based corporations to use alternative networks (Henderson et.al, 2005:207)

The beginning of the 1960s marked a boom period in the US economy. The US corporations expanded nationally their production and marketing activities, creating the need for extensive communications between corporate headquarters and branch plants and offices scattering throughout the North America. Therefore, large corporate users

began pressing government authorities to reduce their high level long- distance communication costs. These high level communications expenditures resulted mainly from government's cross-subsidization pricing policy practice. During the first stage, public service principle based on discriminatory price applications among different groups of telecommunications services users dominated communication field. It applied such price policies to provide access to the telecommunications services by the largest number of citizens. Public service principle had its own law sometimes accompanied by legal sanctions. (Rapp, 1996:395).

In the 1980s, the US telecommunications structure was changed fundamentally by series of technological innovations in the communications field. In this period, telecommunications technology had merged with that of computer, enhancing vastly the capabilities of both technologies. This merge had transformed the previously stable, non-competitive business of telephone service and equipment sector into dynamic, highly competitive and commercial structure. Resulting merge was labeled as "information revolution". The deregulation of telecommunications was a consequence of the revolution in technology. The advent of digital encoding (a method of reducing information into digital level of zero or one) and the merging of computer with telephone systems had created dissolution of the boundary between the regulated telecommunications industry and the unregulated computer industry (Horwitz, 1996:5-6). This merge together with digital technology had led to increasing pressures for deregulatory reforms, refusing traditional understanding of state regulatory policies which aimed to provide public interest as a mean of economic efficiency. Deregulatory (or more precisely, re-regulatory) reform demands in the US came from the American corporations that needed increasingly to new information and communication technologies (ICTs). American corporations began claiming that monopoly structure was insufficient to serve their commercial communications needs. In the meantime, since the late 1970s US-based firms have begun moving out aggressively into foreign national markets. Their activities signed a significant shift in the US domestic economy, away from industrial activities to the production of ICT goods and services. (Dizard,2001:114)

During the Reagan administration period following strong pro-business policies and intending to introduce competition in domestic telecommunications sector, the pressure for change intensified dramatically. Consequently in the 1980s, the US had begun deregulating its economy in order to adapt into information age conditions. ⁽¹³⁾

In this framework, in January 1982 Justice Department made two significant decisions. Main aim of these decisions was to remove anti-competitive restrictions for the operations of two super companies, IBM and AT&T, permitting to engage in competition with Japan. One decision released IBM from a long-running anti-trust case, allowing the company to penetrate telecommunications market. Other decision removed an anti-trust case against AT&T. (Humphreys and Simpson,2005:26). The 1982 Decree separated AT&T's long-distance market from its local network monopoly, splitting between Regional Bell Operating Companies (RBOCs). With the 1982 Decree, AT&T gave up its 60 percent of its shares to 22 local Bell companies (Baby Bells) (Dizard,2001: 120). AT&T completed its disaggregating in 1984. The decision permitted AT&T to invest internationally. The 1982 Decree also allowed communication firms, both domestic and international, to compete with AT&T in the voice market and converted the market into a more competitive structure. As a result, foreign telecommunications carriers acquired a significant opportunity to sell their products in the US markets. Sony, Mitsubishi, and other Japanese electronic giants, Canadian-based Northern Telecom (NT), German-Based Siemens, Cable and Wireless of the UK entered in the country's telecommunications market and began to marketing operations. Within a few years, NT threatened AT&T's dominant position in advanced equipment market, Siemens opened up 50 factories and other facilities, and Britain's Cable & Wireless became the fifth largest telecommunications company in the US. (Dizard, 2001:121)

In the early 1980s, the Federal Communications Commission (FCC) began shifting its policies and took consider industrial interests. It mainly focused on the task of facilitating the entry of AT&T and other major TNCs into foreign markets, giving up public service principle in favor of unregulated free market conditions due to strong pressures from big corporations (Melody, 1989:664) To facilitate the US industry' operations in global market, the FCC reduced costs of long-distance and specialized services in order to enhance the competitiveness of the US-based TNCs in domestic and

international markets. Universal service principle guaranteeing access to telecommunications systems for everyone with an affordable price has replaced public service principle in North America since the beginning of the 1980s. (Rapp,1996:394) In the 1980s, the US has fundamentally shifted the mentality of telecommunications away from the post-war public utility and security-related monopoly model to a customer driven, commercial and trade-related service industry (Hills,1998:101)

In the meantime, since the early 1980s, globalization has accelerated internationalization of production process, including telecommunications. Large TNCs with global operations have been increasingly integrating plants and offices by using sophisticated international telecommunications networks. The US-based TNCs demanded increase the range of services that they could use under competitive conditions. (Dyson and Humphreys, 1990:9) Internationalization process has increased numbers of mergers and acquisitions in communications area, in this way it has also raised concentration in telecommunications field and has created strong pressures for competition in the domestic telecommunications system to spread into international communications area. In the mid-1980s, the US had begun seeing international telecommunications as a desirable goal for various reasons. First, international competition would strengthen the US' existing dominant position as an international information and communication hub country. Second, international competition would provide dominance of the US information service firms in the global market. Third, introduction of international competition in telecommunications sector would facilitate the expansion of the US telecommunications firms into overseas markets. (Henderson et.al, 2005:207)

Opening up of international communication satellites area into competition was an important matter for the Reagan administration in the early 1980s. Until November 1984, private companies were not allowed to launch international communications satellites in the limited geosynchronous orbit. ⁽¹⁴⁾ Since there was an American commitment to Intelsat that it would not bring anti-competitive rules. However, Reagan administration faced strong pressures to change Intelsat's protective rules against competition. The space and telecommunications equipment industries had successfully lobbied to reduce COMSAT's role in controlling all the US satellite communications. As

a consequence, in November 1984 President Reagan declared that COMSAT's international satellite system was separated from Intelsat and therefore international communication market was opened to competition. (Dizard,2001: 126)

Introduction of competition in international telecommunications issue was also discussed in the 1988 ITU World Administrative Telephone and Telegraph Conference (WATTC) held in Melbourne, Australia. A significant international rule prohibiting other companies' procurements of telecommunications goods and services from international markets to protect national PTTs was reconsidered in this conference. At the 1988 WATTC Conference, conflicting views emerged on "how international communication should be restructured and regulated in the future?" There were three groups of countries; on the one side were those, such as France and Spain, defending the previous system of control through national telecommunications organizations and refusing private networks provided by TNCs. The countries saw international competition as other move to strengthen American domination in global communications market. On the other side were those, such as the US and the UK, who desired competitive and deregulated environment that would provide freedom for their TNCs to invest in infrastructure without obeying to the regulations of the ITU (Hills, 1998:114). Opposition was stronger among Intelsat's Third World countries. They saw introduction of competition in international telecommunications as a threat to expansion of commercial services in their regions. Third World countries desired to apply strict entry conditions to foreign telecommunications carriers. Contrary to the Third World countries' demands, the US championed to fully liberalized entry conditions in foreign markets. (Henderson et.al, 2005:207)

The benefits of opening international communication into competition to the US-based TNCs were; lower communication costs and increased information flows as well as private sector growth through technological dynamism. (Kavanaugh,1986:93). The US government's initiative to open space communication into competition represented a milestone in the development of global communication. The decision has expanded digital based world trade and therefore, gave priority trade considerations as the main focus of international communications policy, paralleling other efforts to reduce international trade barriers to digital commerce. (Dizard,2001:129)

As a consequence of competition in international communication, by the mid-1990s, all of the Bell regional companies (Baby Bells) and many of their local competitors were involved in overseas investments, mergers and marketing agreements. The three big international carriers AT&T, MCI and Sprint, each successfully sought overseas partners to strengthen their global operations. This American entrance to international markets was resulted in counter moves in Western Europe and Japan. Asian Newly Industrialized Countries (NICs) have also tried to make similar investment and marketing arrangements in order to ease their way into foreign markets, including the US. (Dizard,2001:157)

In 1996, the US Congress approved a new Telecommunications Act. This act aimed to inject competition in the local telecommunications sector. However, this effort targeting a widespread competitive environment has remained largely ineffective resulting from mainly two important reasons. First was the resistance of the RBOCs to the law's unbundling (Bundling: to sell company's subsidiaries while maintaining its main operation area in order to make more profits) provisions. Second, contrary to the expectations from liberalization policies a highly concentrated domestic telecommunications market has emerged in the US since the AT&T's completion of disaggregating in 1984. Main reason for concentration is the huge costs of next-generation technologies. (Budde Communication: USA- Telecommunications Regulatory Environment Report September, 2006)

Next- generation information and communication technologies have accelerated merging process among telecommunications corporations (telcos) in the US. In the beginning of the 2000s, The US telecommunications market has consolidated rapidly with mega mergers between major telcos; Verizon, SBC, BellSouth, Sprint and Qwest. (Budde Communications: USA-Telecoms-Trends and Developments Report -2005) In November 2002 Comscat Corporation completed its merger with the AT&T Broadband, making it the largest cable operator in the US. Various anti-trust regulatory decisions serving corporate interests have facilitated this consolidation.

During 2005 and 2006, The US telecommunications sector witnessed further consolidation. First was SBC Communication Corporation's acquisition of AT&T Corporation (ATTC) in November 2005. This acquisition was re-branded as AT&T Inc.,

prior to the acquisition of AT&T, the SBC was already one of the leading telecommunications companies and the largest provider of both local and long-distance telephone services and DSL internet access in the US. (Budde Communication: USA-Company Profiles Report/ AT&T Inc. Report- August 2006) Second was Verizon's acquisition of MCI long-distance service provider MCI in the early 2006. (Budde Communication: USA-Major Telcos-Statistics and Analysis Report- July 2007).

Later in March 2006 AT&T announced its intention to purchase BellSouth Corporation. This acquisition would be another wave of consolidations, reversing the 1984 disaggregating of the original AT&T, creating a highly concentrated oligopoly in telecommunications market in the US. In this oligopoly structure, AT&T Inc. is dominant in the emerging triple actors (Big Three) markets. (Budde Communication: USA Company Profiles Report/ AT&T Inc. Report- August 2006). With AT&T Inc.'s proposed acquisition of SouthBell, this triple player markets may eventually be dominated by the two remaining telcos giants; AT&T Inc. and Verizon with Qwest remaining a potential takeover target. (Budde Communication: USA-Major Telcos-Statistics & Analysis Report- July 2007). Today, the structure of the US telecommunications industry can be defined as "Big Three" (AT&T, Verizon, and Qwest) in which each oligopolist is aware of the actions of others. Market is highly interactive i.e., decision of one telcos influence and affected by decisions of other two firms. Telecom giants develop strategic planning in order to response of the other market participants. This situation causes oligopolistic telecommunications industry to be at the highest risk collusion .Oligopolistic competition in telecommunications market can give rise to a range of different outcomes in some situations the big three collude to raise prices and/or to restrict production, behaving as a monopoly provider. Therefore, price reduction and utilization of costless telecommunications services which are expected benefits from competition in the sector will likely vanish.

The mergers are largely a strategic response to the increased competition from new technologies which are eroding traditional fixed-line telephone revenues. Competition from mobile, voice and data (SMS) providers such as Sprint Nextel, continue to intensify as wireless usage grows. More recently VoIP has become a significant competitor, being offered by the cable multiple systems operators (MSOs) as

well as by pure providers such as Vonage and Skype. In addition, in the beginning of the 2000s, competition in the US telecommunications sector had created disappointment since competition reduced prices such a level that discouraged new investments, while the sector's rapidly changing technology demanded more and more investment.(Schröter, 2005:137) The telcos try to response these challenges not only by merging but also focusing on wireless technologies, offering their fiber-optic networks in order to provide video, broadband and voice services. (These technologies will certainly make money in the very near future)

As for the mobile market, there exists a two-tiered market structure in the US. During 2005 and 2006, the wireless sector witnessed further consolidation, most notably the Sprint and Nextel merge and the Alltel acquisition of Western Wireless. With these acquisition and merge, by the mid-2006 mobile market was dominated by Cingular Wireless, Verizon Wireless and Sprint Nextel, together accounting for 75 percent market share. T-Mobile, Alltel and US Cellular make up the next-tier providing a remaining 25 percent. (Budde Communication: USA-Mobile Market- Major Operators Report- September 2006)

At this point it is possible to claim that, competitive structure encouraged by the 1982 Decree in the US telecommunications market has begun disappearing. As a result, benefits expected by the neo-liberals from competition will possibly vanish. It can be argued that in the US telecommunications market this emerging "Big Three" (in the near future may dualistic) structure will not be controlled by the state and will increasingly concentrate in the hands of very few numbers of corporations. As a result, in the near future natural telecommunications monopoly will likely come back but this time as an uncontrolled monopoly. The new natural monopoly will not aim to provide public service and to develop communication systems for masses. The new type natural monopoly's main aim will likely to serve large businesses' communication needs.

In the meantime, emergence of Information Society and information economy in the 1990s has significantly affected the US' ICT policies. In the following subsection the US' information and communication technology policies and the country's ICT market structure will be examined.

In the meantime, during the 1990s, public awareness about information age was changing rapidly. In the 1992 Presidential election campaign, Clinton's campaign managers championed the need to build a high-tech information highway. After came into power, President Clinton launched information highway proposal under the title of the National Information Infrastructure (NII). The project was led by Vice-president Al Gore, who had promoted high-tech legislation, including expansion of internet resources. Therefore, for the first time information policies and programs had been taken into consideration at the White House level. Al Gore established a team in order to implement the information highway program. The focus of these activities was the domestic economy. Eventually, however, the international information program issue has appeared. Its themes were outlined by Vice president Al Gore, in a speech at the ITU Conference in Buenos Aires in March 1994, called for a creation of a Global Information Infrastructure (GII) with an emphasize on closing the resource gap between industrialized and developing countries. This could be done, he suggested, by removing trade restrictions on information technology goods and services. (Dizard,2001:169) This was a new US imposition. Main aim was to create new markets for the US-based IT companies products.

Within this competitive environment, the US, at the global level, focused heavily on providing WTO's support to reduce barriers to information and communications technologies (ICTs) trade. Since 1993, the US trade negotiations have obtained important success with the 1997 BTS telecom agreement, lowering barriers to telecommunications trade. Since then the US has showed great efforts to convince other WTO members in order to open up of their markets to IT trade. State Department and Commerce Department continuously press countries about involving wide range of tariff and non-tariff barriers agreements. One of these was a 1997 agreement between the US and the EU to negotiate reducing of all tariffs and trade barriers overall IT products and services. A more generalized agreement to open up the removing of the information technology trade barriers was approved at the first ministerial meeting in Singapore in 1997. Both the US and the EU agreed in 1997 that Internet should be a tariff free environment when it is used for trade goods and services.⁽¹⁵⁾

Table 1 indicates the US' ICT sector performance.

Table 1 ICT Sector Performance in the US (2000-2005)

Country	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet (%)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
USA	439	630	570	762	9,5	8,8	-	0,91	273,8	869,2	100
High Income Group		527		579		7,2		0,77		444,4	99

Source: World Bank ICT at a Glance 2005

ICT spending to GDP, size of internet users and number of PCs are important measures of the new information economy. According to the table, USA's ICT sector performance was well above the High Income Group average between the years of 2000 and 2005. Since the Internet was opened to the public in the 1990s, the USA has led the world in Internet development and usage. As the home of Microsoft, Google and AOL, the USA dominates the world in Internet information and applications. Almost 75% of global Internet host computers attached to the World Wide Web are located in the USA⁽¹⁶⁾ (Budde Communication: USA- Broadband Market-Cable Modem &ADSL- Analysis, Statistics & Forecasts Report- April 2007) Internet integrates US markets to competitive global market and links US citizens across all boundaries of the globe. US having necessary infrastructure and skills for internet access is a much better position to benefit from advantages of ICT technologies than rest of the world.

In conclusion, it is possible to claim that the long-term stability of the US economy is increasingly dependent on IT sector, only positive item in its balance of payment. IT sector's future growth relies heavily on expansion of international markets. However, America's market share is continuously declining, notably, EU, Canada and Japan is beginning to catch up the US' firms. There are also new competitive threats from a group of Big Emerging Market countries. This newly emerging competition patterns now define the route for the US electronic trade policy. Main aim is to help the US-based IT firms to maintain their leadership roles in international markets. This involves policies such as aggressive market support, negotiations to reduce regulatory barriers, restricting sales of digital products and services abroad to reduce trade deficits through large surplus obtained from information technology exports.

Britain's telecommunications policies have strongly influenced from the US deregulation and privatization of its national telecommunications sector initiative. In the following subsection, impacts of deregulation and privatization of policies on Britain and on the EU will be examined.

3.2 Deregulation and Privatization of Telecommunications in Britain and in the European Union

Britain was the second country complementing necessary neo-liberal changes in its national telecommunications sector. In the early 1980s, British deregulation and privatization policies had formed a model for the EU-wide telecommunications policies.

3.2.1 Deregulation and Privatization of Telecommunications in Britain

In Britain, Prime Minister Margaret Thatcher having free market ideology was the main supporter of deregulation and privatization policies. Thatcher government came into office in 1979, and she accepted telecommunications deregulation as an opportunity to put into practice neo-liberal policies based on market of freedom and privatization of inefficient and non-profit state enterprises. (Humphreys and Simpson,2005:27). The policy has provided a major advantage to corporate in order to control national communication system, weakening of policies aiming to public interest.(Murdock and Golding,2001:118)

As in the case of the US, the British telecommunications reform was largely started by big corporate telecommunications users. The Telecommunications Mergers Associations (TMA) played a central role in the reform of the British telecommunications sector. (Petrazzini,1990:20) Telecommunications reform in Britain began in 1981 Telecommunications Act with the separation of British Post Office from the national telecommunications company the British Telecom (BT). This separation provided a limited degree of competition into the long-distance telephony market by licensing a second carrier, Mercury Communications owned by Cable and Wireless. Consequently, the British telecommunications market had gained a duopolistic character during the early 1980s. Both operations of Mercury Communications and pressures from financial services sector accelerated privatization movement in telecommunications sector in the UK. (Hills,1998:108). Mercury's network is based on fiber-optic

technology which will allow the company to target the business market where demand for broadband services is high. Therefore, the 1981 Law transformed telecommunications sector into a corporate-user oriented sector serving TNCs interests in communication area.

In 1982, the Value Added Network Services (VANS) Licensing Act, complementary of the 1981 Law, was issued in order to provide necessary conditions for an expansion of value-added network services. In 1984, new Telecommunications Act came into effect. The British government sold 50.2 percent of BT's share to private investors. With the privatization of the BT, value-added services were liberalized and to supervise this new competitive market structure a national regulatory authority, the Office of Telecommunications (OfTel) was established. (Functions of policy-maker, regulator and operator were separated. OfTel undertook a regulatory function). Thus, the traditional PTT model of communications provision (natural monopoly providing public service based on discriminatory price applications among different telecommunications services user groups through cross- subsidization mechanism) was automatically removed. The British government, in the mid-1980s, also reduced tariff rates. All of these policy changes in the British national telecommunications system attracted a number of TNCs operated in continental Europe into Britain, offering the lowest business call charges. (Humphreys and Simpson,2005:27). TNCs chose Britain as their main European location due to the low communication costs and, at the same time, they put considerable pressures on continental European governments in order to deregulate their national telecommunications sectors.

3.2.2 Deregulation and Privatization of Telecommunications in the EU

Industrial European governments noticed from Britain that telecommunications liberalization could contribute to general economic competitiveness, attracting foreign direct investment and stimulating innovation. As a result, continental Europeans began changing their approaches to their national telecommunications sectors and began perceiving that liberalization did not pose a threat; rather it could create a commercialization opportunity to expand their telecommunications market internationally.

By the 1980s general European consensus was that telecommunications was a natural monopoly and state's role was that of monopoly owner and operator of telecommunications networks and services. Despite having contrasting traditions of industrial policy, EEC countries had similarly structured telecommunications sector. Communications industry had been characterized by a large degree of regulation. European PTTs maintained an oligopolistic industry of national equipment manufacturers which were protected from external competition by means of various national protectionist policies such as R&D procurement, network attachment, certification, and standardization and so on. Main reason for these protectionist policies was national security requirements. (Humphreys and Simpson,2005: 22) As a result of these aggressively protectionist policies, there was only limited scope for international trade in telecommunications equipments area. In the EEC, telecommunications market had a fragmented nature consisting member states' own national telecommunications markets. Before 1980s, European PTT administrations combined the functions of the policy-maker, regulator, and operator. Telecommunications policies were guided by public service concerns based on cross-subsidization of residential user tariffs by long-distance and international calls to provide access telecommunications services much larger people at reasonable price. European-based telecommunications corporations were rather unready for the challenges of internationalization of production and liberalization policies, gaining momentum through globalization process, due to traditionally highly protected and fragmented nature of European markets. Telecommunications companies were even greater disadvantages in computer and electronics sector. (Dizard,2001: 145)

Meanwhile, there were also few unsuccessful EEC-level telecommunications reform policies before the 1980s. For instance, throughout the 1970s European Commission had attempted to integrate procurement of telecommunications equipment into more general rules for public sector procurement, but it failed to reach necessary national support (Bauer and Steinfield,1994:53)

However, by the early 1980s, new consensus began emerging in telecommunications sector including, liberalization, establishment of independent regulatory authority agencies, corporatization and privatization. The major factors lying

behind this shift were technological change, global impact of the US' deregulatory policies in telecommunications, increasing international competition including regulatory competition and spread of neo-liberal economic policy applications. (Humphreys and Simpson, 2005:23) In addition, in the early 1980s, Europeans began seeing that telecommunications could play a crucial role in providing productive activity and a competitive power in global market through the robust international communication infrastructure in which European-based firms could conduct their operations more efficiently. They claimed that traditionally uncompetitive and inefficient telecommunication system was insufficient to provide new advanced telecommunications services quickly, flexibility, efficiently, and costless. As a consequence, by the early 1980s, EEC members developed a community-wide telecommunications policy. (Gencel-Bek and Deirdre,2005:44-45) Therefore, EEC initiated a gradual process of Europeanization of telecommunications governance.⁽¹⁷⁾

Moreover, in the 1980s, there was a greater sense of urgency on the part of the EEC members to catch up the US information technology. Europeans weakness in this sector reached its apex in the 1980s. EEC accounted only 15 percent of information trade in this sector. US-based IT firms had a dominant position within the EEC. The US-based corporations had set up facilities in the region in order to benefit from Community's regional free-trade rules. Unlike their European competitors, who were organized primarily to serve their national markets, American-based information technology firms treated all of Western Europe as a single market. They were particularly advantageous and competitive position in information processing sectors. By 1980, the US data processing companies were operating throughout the region. The need to strengthen the region's information technology capability was expressed by French Industry Minister Alain Madelin. He stressed that poor in raw materials, politically divided and technologically dependent Europe would create a structure nothing more than a subcontractor for the US and Japan (Dizard,2001:144) This situation can be accepted as a desire of creation of a single market in electronic communication sector.

In the mid-1980s, economic arguments and the idea of trade in telecommunications were becoming increasingly prevalent. The traditional national

monopoly structure was increasingly disintegrating in a number of countries, starting from the US. This new environment coupled with technological advances and the substantial growth potential of high-tech sectors facilitated the development of a comprehensive pro-competition European telecommunications policy. (Michalis, 1999:151)

However, nevertheless, there were significant differences among the EEC members' approaches to a common European telecommunications policy. In the early 1980s, only member advocating radical telecommunications sector liberalization was the UK. In Britain, unions were divided and weak and they could not manage to exhibit a strong opposition to liberalization effort in the British telecommunications sector. The UK-based corporate users' demands for advanced telecommunications services under competitive conditions outweighed. On the contrary, in other two industrialized member countries, Germany and France, there were robust sectoral vested interests, such as equipment manufacturers, who produced nationally and were strongly protected from external competition, and a strong telecommunications bureaucracy. Moreover, unions in France and Germany exhibited much stronger resistance to liberalization of telecommunications sector than in Britain. (Humphreys and Simpson, 2005:28)

In 1984, the "Television Without Frontiers" Green Paper (EC 1984) first signaled the European Commission's intention to create a strong European-wide market in audio-visual products and services. Paper revealed the tensions between private and public interests, as well as conflicting intergovernmental interests in the sector. To compromise conflicting public-private, social-industrial, and national-supranational interests Commission issued the "Television Without Frontiers" Directive in 1989 (EC1989). (Iosifidis and Leandros, 2003:67) Liberalization of telecommunications efforts in the 1980s had created additional tensions among the members of the EEC. In broadcasting area, the tensions were between economic and industrial policy considerations and cultural and social concerns arguing that liberalization would lead to "American Coca-Cola civilization" and the collapse of "European cultural identity". (Dyson and Humphreys, 1990:3) In other words, The European Commission's policy towards broadcasting reveals the tension between the economic logic towards global and competitive industrial policy concerns and social concerns of maintaining pluralistic and

diversified national markets. (Iosifidis and Leandros, 2003:67) In telecommunications area, tensions occurred between the proponents of liberalized telecommunications markets and the opponents fearing that liberalization might eventually lead to American domination, particularly in advanced telecommunications applications. (Dyson and Humphreys, 1990:3) Despite all of these tensions and national policy differences in communication field in the EC, member states managed to launch a united European response to developments in telecommunications area.

European Commission enjoyed (and is still enjoying) a central position in the telecommunications policy field. In time, it has undertaken a role of corporate actor with its own capacity for action and self-institutional interests in order to develop a European-wide competitive telecommunications policy. (Michalis, 1999:150) In this framework, Commission emphasized the increasing strategic industrial and economic significance of the telecommunications sector. It stated that new telecommunications technologies contributing to economic development and welfare could be best realized through the development of a European sectoral context and policy framework. To this end, Commission defended the replacement of traditionally fragmented market structure. European Commission also pointed out the global competitive threat to the EU from its main trading counterparts, the US and Japan, whose companies were developing new technologies and international corporate strategies. In order to response this challenge coming from two major competitors and to constitute a common European Telecommunications Policy European Commission encouraged its members to make necessary regulatory arrangements in their telecommunications sectors in the framework of the Single European Market (SEM) program with a completion target date of 1992. (Gencel-Bek and Deirdre, 2005:46)

In the late 1980s, the EC developed a concrete telecommunications policy framework. The 1987 Green Paper on the Development of the Communication Market for Telecommunications Services and Equipment was the first document dealing with regulatory issues. Paper imposed a pro-liberalization philosophy to member states in order to realize the “1992” initiative for the creation of the internal market. (Michalis,1999:151). The 1987 Green Paper defended that telecommunications sector should be liberalized and Europeanized and advocated that member states could allow

their PTTs to maintain the exclusive control over the national telecommunications infrastructure and they should be free to introduce competition in their telecommunications market. (On the one hand, the paper encouraged liberalization of telecommunications market. On the other hand, it permitted its members to control their national telecommunications into competition.) The 1987 Paper stated that member states had the right to maintain the monopoly PTT-based provision of a range of what became known as reserved services, most notably, voice telephony. In the framework of the 1987 Green Paper, Commission issued two key liberalizing directives on Terminal Equipment (1988) and on Value-Added Services (1989). Commission reissued Services Directives in 1990 in accordance with the framework of Directive issued by European Council of Ministers (1990) of EU-wide harmonization of Open Network Provision. (Gencel-Bek and Deirdre, 2005:47-48). These directives represented a significant milestone in the liberalization of European telecommunications.

In the meantime, trade liberalization on global level since the signing of the 1993 WTO agreement has created increased economic interactions and interdependence between networks. The increasing interdependence has resulted mainly from corporate demands for networks providing interconnectivity, interoperability, flexibility and faster access. In the framework of these demands, during the 1990s, Commission and Council initiated measures to support the development of Trans-European Networks (TENS) in infrastructure areas, including telecommunications. The development of TENS was seen as integral to establishment of information society and to promote the desired economic regeneration and technologic information. (Turner,1997:140) After disintegration of the SU, Central and Eastern Europe and the Balkans markets have gained significance in the eyes of the European investors. Therefore one of the major aims of TENs was to establish advanced telecommunications networks in these countries. European-based corporations would conduct their operations more efficiently in these markets through advanced telecommunications networks.

In the late 1990s, liberalization and Europeanization of telecommunications gained a further momentum. A major review of telecommunications services across the EU was launched by the Commission in 1992.

In 1992, Commission launched a series of proposals for the future of European telecommunications. The most radical of which was for member states to press for the liberalization of all voice telephony services EU-wide. This proposal was agreed upon by member states in July 1993. It set a deadline by no later than 1998 (or 2003 additional time for less developed regions of the Union). According to this proposal, voice telephony infrastructures and markets would be opened up into competition. In December 1994, the European Council of Ministers agreed a Resolution committing member states to full liberalization of all telecommunications infrastructures across the EU with a deadline of 1998. (Since the EU signed 1997 BTS Agreement and committed to fully open up EU telecommunications market into foreign competition) As a consequence, a commitment had been made by member states to liberalization the whole of their telecommunications sectors within the context of a new regulatory framework. (Gencel-Bek & Deirdre, 2005:51)

The opening up of market and infrastructures, Commission asked member states to impose on their national telecommunications operators to ensure provision of a wide range services. Commission's 1996 Universal Service Directive stipulated that this service should provide affordable access to everyone to a network of voice telephony service. (European Commission, 1996:3)

These directives and international telecommunications regime imposition of the 1997 BTS agreement accelerated the preparation of 1998 European Telecommunications Framework.

Commission issued a series of liberalizing directives concerning the extension of competition to voice telephony and creation of competition in alternative telecommunications infrastructures in respect of mobile, satellite and cable networks. These directives were; Harmonizing Member State Approaches to Licensing Authorization (1997), Open Network Provision (1997), Interconnection, Data Protection (1997) and Universal Service (1998). The construction of a new regulatory framework at the EU level marked the beginning of a new phase in the development of the EU telecommunications policy framework. (Gencel-Bek & Deirdre, 2005:52-53)

A series of proposals were put forward by the Commission agreed at the end of 2001 by the Council of Ministers and European Parliament. The new framework aims to

set out to minimize market entry barriers presented by licensing and authorization requirements, reducing the number of legal measures. (Gencel-Bek & Deirdre, 2005:62)

As a consequence of these regulations, a new consensus began to emerge for the need for full liberalization of national telecommunications sector and a harmonized pro-competitive regulatory regime implemented by the EU member states but coordinated and supervised by the European Commission. (Humphreys and Simpson, 2005:21). At this point it is possible to claim that the European Commission showed a great effort in order to constitute a regional EU-wide telecommunications regime. Commission imposed their members that the only way to remain competitive and advantageous position in global market was full liberalization of national telecommunications sectors through pro-competitive and harmonized regulations. A fully competitive and deregulated -or more precisely, re-regulated- telecommunications sector would certainly contribute to economic growth and welfare level in the member states. Under the impact of the marketization policies within both the EU and its major member states, all those telecommunications policies, in fact, were prepared to serve the interests of private corporations and to institute corporate goals and organizational procedures. (Murdock and Golding, 2001:118)

Consequently, in the 1990s continental European countries began to corporatize and then privatize their national telecommunications institutions, ending their monopolies and establishing independent regulatory authorities in order to promote competition in telecommunications market. As a result, state gave up the functions of owner/ operator and the supplier of services to commercial players.

Today, these policies have led to emergence of a strong oligopolistic telecommunications industry in which very few telecommunications operators have dominant position in the internal EU market. These firms are; Cable & Wireless Plc, Deutsche Telekom AG, France Telecom, and Koninklijke PTT Nederland (KPN).

In the meantime, an important transformation has occurred in determination of ICT policies resulting from the worldwide neo-liberal policy applications. The role of state in determination of ICT policies has reduced, while private sector has become a more powerful player in shaping Information Society policies. Zealous defenders of the market-driven ICT development argue that ICTs provide enhanced opportunities for

social development, creating a “user-friendly” information society in order to overcome isolation and less-developed economic structure and to contribute to cohesion in the EU (Murdock and Golding, 2001:129) In the 1990s, the enormous growth of new multimedia communications possibilities through the Internet led the EU to consider the creation of a common regulatory framework.

3.2.3 European ICT Market Framework

The need for a European level ICT regulatory framework was firstly expressed in the 1993 White Paper titled *Growth, Competitiveness, Employment: The Challenge and Ways Forwards in the 21st Century* emphasizing the importance of the information sector. Subsequent Bangemann Report exhibits the importance of the usage of information technologies and strongly recommends the liberalization of national telecommunications systems in order to attain Information Society. The Bangemann Report (EC 1994) was important for shaping early European Commission policy-making. Report emphasized emergency to take action in order to enable EU to compete in global telecommunications market. The document mainly focused on industrial policy, the injection of private capital, and the adoption of a flexible regulatory framework in order to make the EU telecommunications market more competitive and enable the EU to enter the Information Society. Bangemann Report stressed the potential economic benefits of privatization, commercialization and liberalization. It ignored social issues such as access to the new services and new inequalities that could emerge in the new era. (Iosifidis and Leandros, 2003:68) In July 1994, Commission launched the Action Plan “Europe towards Information Society” in accordance with the recommendations of these reports. A Green Paper was issued by Commission in 1997 was the first draft, advocating strongly the creation of a radical new harmonized regulatory structure at the EU level in order to organize all ICT networks and services. (Gencel-Bek and Deirdre, 2005:60) The 1997 Green Paper (EC 1997) opened a discussion at a European level over the need for imposing new rules in order to maximize the benefits of digital convergence in terms of job creation, growth of industry, consumer choice, cultural diversity, and political pluralism. The Commission’s objectives, as expressed in the 1997 Green Paper, were twofold: to create an economically viable EU media industry capable of competing globally and to promote

public interest (i.e. job creation, enhanced service quality, consumer choice, access to new technologies, plurality etc.) The document drew attention to the economic rather than social implications of new information economy. (Iosifidis and Leandros, 2003:69) In November 1999, the Commission introduced its e-Europe initiative in order to manage this transition both within the EU and in the candidate countries of Central and Eastern Europe. E-Europe aims to guarantee everyone in the EU-every citizen, every school and every administration has entered into the new ICTs and to maximum use of these technologies. This initiative states that e-Europe is not only transforming European industry a more competitive structure but also guaranteeing all EU citizens to access into modern communications technologies serving their quality of life. (www.europa. eu. int, European Commission 2002, Towards a Knowledge Based Europe, the EU and the Information Society). The process of developing policy of the internet began in the EU in the 2000s. Main factor lying behind the policy was to create a European challenge to the US' superior position in the internet technology and internet usage. (Başaran, 2005:98). At the Lisbon summit on March 23-24, 2000, European Heads of State and Government stressed that businesses and citizens should benefit and access to communication infrastructure and a wide range of services and every EU citizens must be endowed the required skills to adapt in this new information society. They expressed their wishes that Europe must be transformed a more digital economy. They set a new goal for the EU to turn into most competitive knowledge-based society in the world by 2010. (European Commission 2002, Towards a Knowledge Based Europe, the EU and the Information Society) The problem of the distribution and communication technologies and internet was taken up in a report of the European Commission in 2001, concerning e-inclusion. Report includes a series of proposals to overcome digital exclusion as; lack of awareness about the benefits of ICT, particularly the internet, the cost of access to networks (Başaran, 2005:98). After the Lisbon summit, the European Council approved the e-Europe 2005: Information Society for Everyone Action Plan” during the Seville Summit on June 21-22,2002. Plan pursued the aim of creating information society, an effective access usage and the ready availability of internet. (www.europa.eu.int, European Commission 2002, Towards a Knowledge Based Europe, the EU and the Information Society)

Table 2: indicates ICT sector performance in the EU-27.

Table 2 ICT Sector Performance in the EU-27 (2000-2005)

Country	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet (%)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Austria	337	486	362	607	5,9	5,5	-	0,76	83,2	285,3	94
Belgium	293	458	224	348	6,0	5,8		0,74	33,2	146,4	93
Bulgaria	53	206	45	59	3,9	3,8	-	0,56	2,3	11,2	60
Czech Republic	97	269	122	240	7,4	7,1	-	0,64	16,9	13,1	95
Denmark	392	527	506	656	6,1	6,0	-	0,91	73,9	614,5	100
Estonia	286	513	161	483	-	-	-	0,73	58,6	163,3	75
Finland	372	534	396	481	7,4	6,9	-	0,82	96,0	380,8	99
France	144	430	304	575	6,4	6,3	-	0,69	27,7	96,5	89
Germany	302	455	336	545	6,1	6,1	-	0,81	62,6	348,6	99
Greece	92	180	69	89	4,4	4,1	-	0,59	10,6	40,0	59
Hungary	70	297	85	146	7,3	5,8	-	0,65	12,5	35,9	85
Ireland	178	276	357	494	5,6	4,4	-	0,73	90,5	420,5	99
Italy	232	478	181	367	4,7	4,3	-	0,68	18,3	53,3	88
Latvia	63	448	143	217	-	-	-	0,61	18,2	45,9	97
Lithuania	64	358	69	155	-	-	-	0,58	12,4	26,2	56
Luxembourg	228	690	457	635	-	-	-	0,65	120,6	582,2	67
Malta	131	315	205	165	-	-	-	0,70	58,5	486,4	89
Netherlands	440	739	396	682	6,6	6,3	-	0,80	49,7	411,9	92
Poland	73	262	69	193	4,1	4,2	-	0,59	8,5	38,1	90
Portugal	164	279	103	133	4,2	4,4	-	0,61	13,4	65,3	92
Romania	36	208	32	113	3,1	3,6	-	0,57	2,4	7,0	57
Slovak Republic	94	464	137	358	5,9	5,6	-	0,59	14,7	28	65
Slovenia	151	545	276	404	2,6	3,1	-	0,68	51,2	95,6	96
Southern Cyprus	173	430	216	337	-	-	-	0,59	42,8	267,8	90
Spain	136	348	174	277	4,0	3,7	-	0,58	23,0	101,5	94
Sweden	456	764	507	763	7,4	7,4	-	0,90	116,1	406,4	99
United Kingdom	264	473	338	600	8,1	7,3	-	0,88	108,7	561,5	99
High Income Group		527		579		7,2		0,77		444,4	99
Upper-Middle Income Group		196		113		5,2		0,54		16,9	
Lower-Middle Income Group		95		45		5,5		0,38		2,3	

“Table 2 (continued)

Europe and Central Asia Region		190		98		5,1		0,51		13,1	
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Source: World Bank ICT at a Glance 2005

One measure of the New Economy is the allocation of ICT expenditure from GDP. According to the table, there were two groups in the EU-27 between 2000 and 2005 period. ICT spending performances of the countries such as Bulgaria, Greece, Ireland, Italy, Poland, Portugal, Slovenia, and Spain were well below the average rate of 5 percent. Sweden had the best ICT expenditure performance with 7.4 percent among the EU-27. ICT spending is strongly correlated with the high level of income. However, significant disparities existed between countries at similar income group between the years of 2000 and 2005 period. For instance Greece’s (4.1 percent) Ireland’s (4.4 percent) and Italy’s (4.3 percent) performances were well below the High Income Group’s average (7.2 percent). Other significant ICT indicators are the numbers of internet users and personal computers. These are the important signs of the digital divide⁽¹⁸⁾. According to the table Sweden (763), Denmark (656), Luxembourg (635), Netherlands (682) and Austria (607) were the leaders of the PC density among the EU-27. In the number of internet user area, Sweden (764), Netherlands (739) and Luxembourg (690) showed the highest performance. Greece registered the worst performance in both numbers of internet user (180) and PC (189) areas between 2000 and 2005). As for the schools connected to internet, approximately all high income group countries approached the High Income Group’s average (99 percent). Lithuania registered the worst performance with the 56 percent rate. Greece followed it with 59 percent, the second worst average among the EU-27.

According to the table it is possible to claim that disparities in ICT diffusion were quite large and there was a significant digital divide among the members of the Union. The reality has extended economic inequality and digital divide in less developed regions of the EU. Global competitiveness is hampered by regional disparities that exist within the EU.

The Commission's review of ICT in Europe in the beginning of the 2000s reveals that the business to business (B₂B) world has benefited mostly from opportunities of the new economy based on digital technology. The business to consumer (B₂C) side has lagged behind. Commission's survey of 180 European countries found that ICT played a major role in their business processes ranging from logistics to customer service. Companies pointed to significant benefits of the implementation of digital management procedures such as lower stocks, faster delivery times, changing job profiles and a shift from business competition to cooperation (Economist Intelligence Unit, February 2002)

Japan was the third industrial nation that carried out considerable reform in its telecommunications sector. In the following subsection changes occurring as a result of neo-liberal deregulation and privatization policies in the Japanese telecommunications market will be reviewed.

3.3 Deregulation and Privatization of Telecommunications in Japan and Japan ICT Market Structure

The initial pressure for reform in the telecommunications sector also came from the US-based telecommunications and IT firms. These corporations with the strong support of American government applied considerable pressures on Japanese government in order to liberalize and then privatize the national telecommunications organization.⁽¹⁹⁾

Since 1952 telecommunications services in Japan were provided by the Nippon Telegraph and Telephone Public Corporation (NTTPC). With the 1985 Telecommunications Law, NTTPC was incorporated and renamed as NTT. Government floated up to 49 percent of the firm's shares in the stock market. Government would progressively reduce its participation but its share would retain one-third of the NTT's shares. (Petrazzini,1990:21) Concurrent with the privatization of the NTT, necessary legislation was passed in order to introduce overall reforms of the Japanese telecommunications market. The Telecommunications Business Law established regulatory framework to introduce widespread competition in the segments of the telecommunications market.

Today, Japan's telecommunications sector is one of the most active markets in the world. Although NTT dominates Japanese telecommunications infrastructure, KDDI and Softbank are showing great efforts to remove NTT's domination. (Budde Communication: Japan- Key Statistics, Telecom Market Overview Report- June2007)

NTT Corporation completed its liberalization, regulation, corporatization, and internationalization stages. Today, the NTT Group operates through five principle subsidiaries and a large number of secondary subsidiaries and affiliates in Japan and in international markets.

Table 3: shows NTT's subsidiaries.

Table 3 NTT's Subsidiaries

Operator	Subsidiaries	Services
NTT Corporation	NTT East	Fixed-line local long-distance telephony and internet and broadband services
	NTT West	Fixed-line local long-distance telephony and internet and broadband services
	NTT Com	Long-distance and international telecom services, as well as ISP and global Corporate services
	NTT Do Co Mo	Mobile telephony services
	NTT Data	Information systems and computer networking

Source: Budde Communication: NTT Corporation Subsidiaries Report-June 2007

As of mid-2005, NTT Communications (NTT Com) holds interests in over 60 subsidiaries and 34 affiliate companies throughout Asia, America, Europe and Australia. Thus NTT Corporation has become international. It provides network management, security and solution services on a global basis, with a special focus on the Asia-Pacific region. Its backbone network, combined with the networks of partner companies around the world, offers access to more than 200 countries. (Budde Communication: NTT Com-Subsidiaries and International Operations Report – August 2005) NTT Com also offers ISP dial-up and broadband services in Japan, as well as global IP services under the NTT/Verio brand. Under the Arcstar brand name, NTT Com provides solutions to corporate users in Japan and globally. NTT Com provides network management,

security and solution services on a global basis, with a special focus on the Asia-Pacific region. (Budde Communication: NTT Communications Corporation Report- August 2005) NTT Communications Corporation provides mainly corporate-users oriented services. NTT DoCoMo is controlled by NTT Corporation and is the mobile arm of the NTT group. DoCoMo is one of the largest mobile carriers in the world.

KDDI is a Japan's second largest telecommunications carrier after NTT Corporation. The company provides local, domestic long-distance and international fixed-line as well as mobile telecom services nationwide. Mobile services are offered under the au and TU-KA brand names. KDDI also offers Internet and IP services, dial-up access, and broadband. (Budde Communication: KDDI Corporation Report- August 2005)

Softbank Corporation is the largest ISP in Japan. The company is led by Japanese Internet tycoon, Masayoshi Son, who plans to turn his flagship company into a comprehensive communications carrier. Softbank acquired the fixed-line operation of Japan Telecom in July 2004 and Cable & Wireless IDC in October 2004; the two acquired companies were merged in early 2005 under the name Japan Telecom IDC. (Budde Communication: Softbank Corporation Report- October 2005)

In conclusion, it is possible to claim that Japan telecommunications market has transformed into a triple player oligopolistic industry, which can be described as the "Big Three". Saturation of internal market has forced these corporations to invest mainly in Asia-Pacific region's markets through joint-ventures, mergers and acquisitions. This increasing Japanese-based TNCs investments may create highly concentrated Asian-Pacific market in the hands of the Japanese-based telcos.

Japan, after the US and China, is the third largest country whose economy based intensively on internet transactions. China has surpassed Japan since the March 2004.

Table 4 indicates ICT sector performance in Japan.

Table 4 ICT Sector Performance in Japan (2000-2005)

Country	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Japan	300	668	315	542	8,6	7,5	-	0,78	40,5	331,9	99

“Table 4 (continued)

High Income Group		527		579		7,2		0,77		444,4	99
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Source: World Bank ICT at a Glance 2005

According to the table, all important ICT performance indicators were well above the High Income Group’s average between the years of 2000 and 2005.

Japan has been one of the leading country using internet and ICTs. Internet integrates Japan markets to competitive global market operating under highly competitive conditions. Japan has sufficient infrastructure and skills necessary for ICT usages. This situation has provided a quite superior and advantageous position for benefiting from opportunities of the ICT technologies than most countries of the world.

Having investigated the major players’ telecommunications markets, in the next chapter internationalization of communication process in the GEMED will be examined. Rich energy resources of Greater Eastern Mediterranean Region (GEMED) have begun attracting investors, whose operations depend heavily on fast and secure telecommunications systems, because of the rich energy resources of the region. Therefore telecommunications corporations have begun increasing their activities in the region.

NOTES

- ⁽¹³⁾ Wilson B. Dizard, *Digital Diplomacy: US Foreign Policy in the Information Age* (USA, Praeger Publishers Inc., 2001) p.125. In addition to the 1982 Justice Decree regulations, in March 1983 Commerce Department prepared a report on the US communications goals. The report strongly recommended reduction of the State Department's role in communication field. In order to coordinate American communication and information policy a new office was established in April 1983. The US Secretary of State George Schultz charged the task to this new office to coordinate international conferences dealing with radio spectrum, information flow barriers and other significant communication issues and to prepare plans for a new global trade agreement.
- ⁽¹⁴⁾ Jill Hills, "The U.S. Rules OK? Telecommunications Since the 1940s" in Robert W. McChesney, Ellen Meiksins Wood, and John Bellamy Foster (eds) (New York, Monthly Review Press, 1998) p.105 Private satellites could not be used internationally without making necessary changes in the Intelsat constitution to allow such competition. Drawn up originally to protect the technological leadership of the US, the Intelsat treaty could not be altered by a two-thirds majority of its members. As Intelsat consortium's orders for satellites began eroding by the early 1990s, the US government and private investors noticed that nationally-owned satellites could provide a useful market for the US industry. Consequently, the US FCC attempted to unilaterally open the international telecommunications market.
- ⁽¹⁵⁾ Dizard (ibid. 146) Internet has raised other policy issues, including data privacy. Although the US obtained a great success for its trade interests, providing liberalization of Western European telecommunications market through WTO agreements, one important obstacle remained; EU laws restricting data flows. These laws aimed at protecting citizen privacy and preventing increasing criticism and discontent against American dominated storage and distribution of electronic data in the EU. This issue was first expressed in an influential French government

report titled “The Computerization of Society” in the late 1970s. The Report described what it called “the IBM Challenge” to French political, economic and cultural values comparing the giant computer firm to the Vatican in its worldwide reach and influence. Sweden was the first European country to determine rules regulating cross-border data transfers, issuing a law in May 1973. The law established a commission to monitor all requests for exporting personal data information about Swedish citizens over data network. Subsequently, by the late 1970s, a dozen of other European countries had taken similar step to restrict both incoming and outgoing data in the name of protecting citizen privacy. Consequently, in 1980 the Council of Europe adopted a binding convention containing strict privacy provisions that would be applied uniformly to data traffic throughout the Western Europe. The US firms saw this movement as a threat for their European operations. The US government proposed OECD-wide voluntary guidelines which affirmed the importance of information access and the need for personal privacy protection along with the avoidance of unjust barriers to data flows. The US welcomed the guidelines as a major step towards assuring reasonable control over global information flows. OECD guidelines set only general principles; many issues remained unresolved, such as citizens’ information existing in the electronic environment. After years of contestable negotiations, the EC finally approved a directive mandating strict privacy control over electronic data included a provision that foreign governments would provide similar strict data protection or they would face break off data traffic from Europe. This led sharp round of negotiations between the US and the EU. In 1998, EU approved a Directive that guaranteed its citizens strict control over distribution of electronic data on their private lives. Directive included a provision that foreign governments provide data protections under a similar regulatory structure or face cut off data traffic from Europe. This situation led to lengthy and heated negotiations between the EU and the US where data privacy dealt with largely through voluntarily industry standards. An agreement which set up compatible standards on both sides of the Atlantic was finally reached in June 2000. Meanwhile the WTO and its member governments have only begun regulating the

internet's impact on conventional voice, data and video networks covered under WTO rules.

- (16) Budde Communication: USA-Broadband Market-Cable Modem & ADSL-Analysis, Statistics & Forecasts Report- April 2007. However, since 2001 it has been sliding in global Internet rankings. Hence, although it has the highest number of Internet users, it ranks only fifth in Internet penetration and 12th in OECD broadband penetration.
- (17) Dizard (ibid, 144) In the early 1980s, the conjunction of several factors accelerated the launching of European Telecommunications Policy initiative. First was a report presented to the French government in 1980. The report increased the awareness of policy makers of the economic importance of telecommunications and unsatisfactory support of European electronics industry for both the telecommunications supplier industry and telecommunications users. The fragmented structure of telecommunications market in the EU had begun weakening existing national coalition between the PTTs and domestic suppliers and users. Second, as a consequence of the breakdown of the Keynesian consensus of macroeconomic demand management, deregulation was accepted as a remedy to revive economic growth and competitiveness. Third, with the emergence of a neo-liberal political economy together with these factors led to a convergence of national preferences. All of these factors facilitated the creation of a European telecommunications policy. European Commission attempted to manage a united European response to the challenge American superiority in telecommunications area by simultaneously reducing barriers to competition and a developing strategy to strengthen the EC's telecommunications industry.
- (18) The term digital divide refers to the gap between individuals, households, businesses, and geographic areas at different socio-economic levels with regard both to their opportunities access ICTs and to use internet for a wide variety of activities.

Petros Iosifidis and Nikos Leandros "Information Society Strategies in the European Context: The Case of Greece" in Journal of Southeast European and Blacksea Studies 2003, 3 (2) p.72 The digital divide thus reflects various

differences among and within countries both in terms of access to information through the internet and other ICTs and skills, knowledge and ability to use those technologies.

- (19) Ben Petrazzini *The Political Economy of Telecommunications Reform In Developing Countries: Privatization and Liberalization In Comparative Perspective*. (USA, Preager Publishers, 1995) p.21. The pressure of the American government and the US-based firms began in the early 1970s. This situation created an increasing domestic tension in favor of neo-liberal changes. Large Japanese corporate users in conjunction with the Ministry of Technology (MITI) and other local agencies were interested in liberalizing domestic market.

Dizard (ibid, 143) The country followed an aggressive export-oriented trade policy with strict protectionist measures and electronic sector was a special target for this strategy. By the 1980s, Japan had become fully competitive in challenging the US in most information technology areas. Protectionist strategy led to a major dispute in the early 1980s, creating a huge imbalance in semi-conductor chip trade with the US. The US corporations complained that Japans were dumping chips on the American market while limiting chip imports into Japan. In 1986, a bilateral semi-conductor trade agreement was signed. This agreement has forced Japanese government to relax their protectionist policies in electronic trade, allowing American firms to compete in Japanese electronic-based services market. This agreement created competitive conditions strengthened Japan's domestic market as well as Japanese electronic products have become more competitive in global markets. By the early 2000s, major Japanese corporations had shifted their production strategies allocating more of their resources to software products. Today, there is a greater Japanese presence in global electronic sector, transforming Japanese-based corporations into direct competitors with the American-based-TNCs.

CHAPTER 4
DEREGULATION AND PRIVATIZATION OF
TELECOMMUNICATIONS IN THE GREATER MIDDLE
EASTERN MEDITERRANEAN REGION

Dissolution of Soviet Union and ongoing process of globalization have led end of Cold War and a new era called post-Cold War period signing a new world order has begun. Since the beginning of this new period, significant changes in region's political, economic and social structures have occurred. One of the most important changes in the region is the widening notion of *Mediterranean*. During the Cold War, this concept was generally accepted as *Eastern Mediterranean*, including Middle East, Cyprus and the Balkans. The Middle East had a particular strategic importance in the eyes of the Western world because of its oil resources. In today's world order, Black Sea, Caucasus, and Caspian Sea and to some extent Central Asian Turkic Republics have been added to this concept. In the post- Cold War era, these areas have become to be named as "Greater Eastern Mediterranean Region" (GEMED). (Tayfur, 2003:113)

Rich energy resources and the transportation of the Caspian, Middle Eastern and Central Asian oil, gas and hydrocarbon resources to the Western markets via the Balkans have created profound investment opportunities for both domestic, regional (Turkey, Russia, Iran, and China) and global investors (the US and the EU), including telecommunications equipment manufacturing and telecommunications-related services firms. New energy related investment possibilities have begun attracting TNCs engaging services activities, such as banking, insurance and information etc., into the region. Western states, particularly the US and the EU, have begun imposing the idea into the region's countries that having efficient telecommunications systems is necessary conditions in order to realize these possibilities. Since, development requires advanced telecommunications networks and state of the art computer and communication infrastructure serving the needs of corporations which will play an engine role in the region countries' economies. Efficiency of TNCs' operations is increasingly dependent on fast and secure communications systems using

sophisticated telecommunications systems such as cable and satellites and computer systems.

Western-based TNCs will intensively struggle for obtaining long-run position in GEMED countries' national communication markets. Two major actors, the US and Western industrialized powers such as the EU, Canada and Japan, are in intensive struggle for obtaining long-run dominant position in GEMED countries. The US' information technology sector's growth, the only positive item in American balance of payments, depends heavily on expansion of international markets. That's why the US has increased its pressures over the GEMED countries through international financial organizations' programs such as the InfoDev in order to open their communications market to competition. The US aims to reinforce its dominant position in information and communication sectors in the region and also desires to maintain the US-based information technology firms' leadership roles in GEMED market. Western industrialized power, the EU, Canada and Japan, are beginning to catch up the US' firms. Therefore, GEMED countries' communications markets are also very important for Western countries.

According to the some experts having strong neo-liberal tendencies in the World Bank, notwithstanding recent progress GEMED telecommunications markets remain less competitive than elsewhere in the developing world; competition is hindered, private participation is scarce and foreign ownership is most severely constrained while regulatory regimes do not support fair competition. As a result, they inject other view into the region's countries that telecommunications sector liberalization is conducive to higher efficiency, contributing to ICT growth. This depends on interrelated three key factors; (i) competition in fixed and mobile services, (ii) openness to foreign ownership in national markets, (iii) pro-competitive legal framework. Only under these circumstances telecommunications sector provides access and backbone services which affect efficiency and growth across a wide range of industries. In addition, ICT growth would have positive spill over effect on other sectors of the economy as well. Falling costs of the key networking technologies would benefit communication intensive industries that provide key backbone services to the economy such as transport, distribution, and finance and would improve competitiveness of exporting industries,

reducing the cost of doing business, and improving the investment environment. (Varoudakis and Rossotto, 2004:59) As a result of these impositions from the Western world, countries in the GEMED have begun exhibiting great performance in order to upgrade their telecommunications systems. Main purpose of the GEMED countries is to attract foreign direct investments (FDI) into the region. In the following subsection Arab Middle Eastern telecommunications Market Development will be examined.

4.1 Major Developments in the Arab Middle Eastern Countries Telecommunications Market

Most countries in the Arab Middle East emerged as independent states in the late 1950s and 1960s, as a result of decolonization process. After obtaining their independence, they faced into the realities of modern technology era. They realized that prevailing world economic structure and world communication structure were dominantly shaped by the Western industrialized countries' TNCs interests. Consequently, most of the Arab Middle Eastern countries challenged, together with other non-aligned countries, international economic and information order that prevailed in the 1970s and supported NWEO and NWICO demands. During the 1960s and 1970s, telecommunications systems were strictly controlled by state in the Arab Middle Eastern countries.

Worldwide tendency of deregulation policies in the 1980s and 1990s and still ongoing process of globalization process have considerably affected Arab Middle Eastern countries' communications policies.

1993 WTO agreements, GATS and TRIPS, and the follow up 1997 BTS agreement are of increasing importance for the Arab Middle Eastern countries. Since, the new world information and communication order trade order has begun imposing the idea to these countries that acceptance of the WTO rules is a precondition to integrate into the global economy. In order to realize this target, Arab Middle Eastern countries should obey the requirements of the GATS, TRIPS and BTS agreements forcing them to open up their services, including telecommunications into foreign competition. They should harmonize their regulations with that of the WTO rules, restructuring their countries legal, commercial and trade systems. This process is a necessary step that will integrate them into the global international community and the international trade system.

As a result of these changes taking place at the end of the 1990s, traditional structures of telecommunications systems have begun changing in the Arab Middle East. During that period many Arab Middle Eastern countries have tried to open their telecommunications markets. Arab telecommunications authorities have sought to joint-venture possibilities from other countries. These new types of formations have challenged traditional monopolistic telecommunications rules. Transnational telecommunications firms, such as Cable & Wireless, Alcatel, Siemens, NEC, NETAŞ and TELETAS, Ericsson, and AT&T etc have begun operating in the Arab Middle East as a consequence of deals, alliances, joint-ventures and new entries into the newly emerging competitive telecommunications market. Therefore, Arab Middle Eastern countries' telecommunications sectors have gradually become international. Big transnational telecommunications carriers have increased their pressures to Arab Middle Eastern countries in order to liberalize deregulate (re-regulate) and then privatize their national telecommunications operators. As a result, a de-nationalization process has started in the region.

4.1.1 Telecommunications Market Overview in the Arab Middle Eastern Countries

There is a considerable gross national income (GNI) per capita disparity among the Arab Middle Eastern countries. This is also reflected in telecommunications development since per capita income is main driver of demand for telecommunications services. (Varoudakis and Rossotto, 2004:64). In addition to wide disparity in income levels, there is also a wide disparity in size of population, land mass and urban concentration in the region. The smaller Gulf countries; Bahrain, Kuwait, Qatar, and the United Arab Emirates (UAE) are members of the “high income” group countries. Lebanon, Oman and Saudi Arabia are rated as “upper-middle income” countries. Iran, Iraq, Jordan, and Syria are members of the “lower-middle income” countries. Only Yemen is among the “low income” countries. (World Bank ICT at a Glance, 2005 Report)

In the Arab Middle East, since the mid-1990s, Telecommunications Administrations have made significant investments in telecommunications field. They have allocated important parts of their GNIs for telecommunications infrastructure

improvements and upgrading projects. All of the Arab Middle Eastern countries have begun seeking Western capital and technology in order to expand and improve their telecommunications systems. Even the most fundamentalist countries have easily pushed Islamic life-style and Islamic values that have been still valid in most part of the Muslim Middle Eastern world into subordinated position for the sake of the telecom infrastructure development. For instance, despite its life-style and value system that extremely contrasts with those of the West, Iran has always sought Western capital and technology and has tried to develop joint-ventures possibilities with foreign telecommunications companies in order to upgrade its telecommunications infrastructure. (Mowlana.1997: 192).

Despite all efforts to improve and upgrade telecommunications systems in the Arab Middle Eastern countries, today there are some serious financial problems hindering telecommunications infrastructure development in the region. While oil-rich countries of the Arab Middle East can allocate funds for necessary investments in telecommunications infrastructure the less-developed countries, such as Yemen, Syria, Jordan and Lebanon, in the region rely heavily on foreign aids and grants in order to improve their telecommunications systems. They also face heavy financial problems slowing down the development of telecommunications infrastructure. There is still a lack of investment in many telecommunications systems field in the less developed countries of the Arab Middle East. But nevertheless the upgrading telecommunications infrastructure attempts have created significant changes in the quality of telephone and computer services in rich countries of the region, particularly in the Gulf States. In the Gulf region both public and private sectors have used World Bank and IMF funds. In the frame work of infoDev Program, these institutions have been allocated to development of computer-based systems. (Noam;1997:xi). For instance, Bahrain has realized an extra-ordinary development for acquiring and using advanced telecommunications systems. Bahrain officials have designated a new goal; creating an advanced telecommunications sector in order to guarantee that Bahrain would be the hub of the Gulf's high information technology center. (Winterford and Looney.1997:223)

Since the mid-1990s, preparations of necessary legal framework efforts have gained significant acceleration in some Arab Middle Eastern countries. Main purpose of the legal framework is to pledge more competitive telecommunications market, making

possible overseas investments, mergers and marketing arrangements for strengthening some Arab Middle Eastern countries' international operations. The new legal framework will likely serve to the interests of corporations and institutionalize corporate goals and organizational procedures. As a result of the attempts for preparing flexible telecommunication regulatory frameworks, today Arab Middle Eastern countries have begun transforming their telecommunications markets into a more competitive structure, diminishing heavy state interventions over the sector.

Despite all of the attempts for preparing flexible telecommunications regulatory frameworks, it is possible to say that today the Arab Middle Eastern countries are mostly in just beginning stage to transform their telecommunications market into a competitive structure. Therefore, Arab Middle Eastern telecommunications markets can be defined as towards less state intervention and more competition in their telecommunications markets. Table 5 indicates the Arab Middle Eastern countries' telecommunications sector structures since the beginning of the 2000s.

**Table 5 Telecommunications Structure in the Arab Middle East
(2000-2005)**

Arab Middle Eastern Countries	Separate Telecom Regulator		Status of Main Fixed-line Operator		Level of Competition International, Long-distance		Level of Competition Mobile		Level of Competition Internet Service Provider		Government Prioritization of ICT (scale 1-7)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Bahrain	No	Yes	Mixed	Mixed	M	C	M	P	M	C	4.6
Iran Islamic Republic	-	Yes	Public	Public	M	M	M	P	-	P	-
Iraq	-	No	-	Public	M	M	-	-	-	-	-
Jordan	Yes	Yes	Mixed	Mixed	M	P	P	P	C	C	5.5
Kuwait	-	No	Public	Public	M	M	P	P	P	P	4.8
Lebanon	-	No	Mixed	Public	-	M	C	-	-	-	-
Oman	No	Yes	Public	Public	M	M	M	P	-	M	-
Qatar	-	Yes	Mixed	Mixed	M	M	M	M	M	M	5.0
Saudi Arabia	No	Yes	Public	Mixed	M	P	M	P	-	C	-
Syrian Arab Republic	-	No	Public	Public	M	M	-	P	-	P	-
UAE	-	Yes	Mixed	Mixed	M	P	M	P	M	P	5.6
Yemen Republic		No	Public	Public	M	M	C	C	M	C	-
Lower Middle-Income Group											4.0
Low Income Group											

“Table 5 (continued)”

Upper Middle Income Group											4.1
High Income Group											4.8
MENA Region											-

Source: World Bank ICT at a Glance 2005

(C: Competition, M: Monopoly, P: Partial Competition)

According to table, Jordan and Bahrain are the most deregulated markets of the Arab Middle Eastern countries. Bahrain established an independent regulator in 2002. Market deregulation has been operated in line with the timetable. It established to guide market liberalization, resulting in the opening of all sectors of the market in July 2004. (Budde Communication: Bahrain- Telecommunications Market Overview & Statistics Report-May 2007) In the early 2005, Jordan government issued an Access Regulation. The regulation has provided a more competitive atmosphere, making a number of regulatory changes in telecommunications sector. These regulatory changes resulted in full liberalization of the fixed-line market in April 2005. (Budde Communication: Jordan- Telecommunications Market Overview & Statistics Report-May 2007) With the establishment of independent regulatory authority in Bahrain and Jordan state gave up the functions of telecommunications operator and the supplier of services to commercial players. Saudi Arabia’s Supreme Economic Council also plans to liberalize its market. To this end Council issued a second fixed-line license in 2006. This license indicates Saudi Arabia’s commitment to maintain the current pace of reform momentum in the telecommunications sector. (Budde Communication: Saudi Arabia- Telecommunications Market Overview & Statistics Report-May 2007) The least deregulated market is Qatar where there is no competition in any telecommunication market segment. Qatar’s national telecommunications organization Q-Tel was also the industry regulator until 2004 (i.e. there was no separation among the tasks of decision-making, regulation and operation until 2004). A Decree was issued in the late 2004 in order to establish a separate regulator. (Budde Communication: Qatar- Telecommunications Market Overview & Statistics Report-May 2007) UAE has managed to establish a well developed telecommunications without using deregulatory measures. However, in April

2004, government released a directive in order to end monopolistic structure of its national telecommunications organization, Etisalat, and to establish an independent regulator. (Budde Communication: UAE- Telecommunications Market Overview & Statistics Report-May 2007)The regulatory environment in Iran has become fluid since a conservative government came to power and began controlling all aspects of the telecommunications sector. Lebanon and Syria both have little competition in their voice markets. Lebanon has shown significant efforts in order to liberalize its telecommunications sector, issuing necessary legislations in late 2004 to establish a separate regulator. Syria has shown little effort in liberalizing its markets although the recent signing of a European Partnership agreement requires that Syria will liberalize its markets by 2010. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-2005 Report) EU has forced Syria to open up its national telecommunications market into competition through this agreement, imposing pro-liberalization telecommunications policies.

In the Arab Middle East, there is also a great pressure for privatization of state-owned telecommunications systems. However, in the 1990s Arab Middle Eastern countries' privatization policies have faced obstacles. Efforts for realizing privatization have remained very limited. Since, most of the Arab Middle Eastern states did not willing to give up their significant roles over the economy. In contrast to the industrialized Western world, privatization policies had been still pursued reluctantly by the state and there has been a lack of dynamism provided by the private sector. (Talib, 1996:18) In other words, still there was (and also is) no effective demand for privatization coming from the private sector. At this point, it is possible to say that in the Arab Middle Eastern countries deregulation and privatization policies have been undertaken, unwillingness, by state due to pressures coming from Western industrialized countries and international financial organizations. In this respect, Arab Middle Eastern countries are similar to other developing countries where these kinds of policies have also been undertaken by the state and there is no powerful private sector pressure for deregulation and privatization of telecommunications systems.

Throughout the 1980s and the 1990s, state-controlled telecommunications systems was still valid in the region since the Arab Middle Eastern countries had

benefited telecommunications in order to maintain and legitimize the state authority especially in such areas as security, trade expansion, and international finance. For instance, telecommunications system in Saudi Arabia had always been controlled by the state. Saudi state officials strongly advocated that all of public telecommunications services should be under government responsibility in order to preserve and maintain values of Islam and to spread its “Shariah” laws. (Kayal,1997:165). Other example for the state-controlled telecommunications system is Iran. Since the construction of the first telegraph lines in 1864, Iran’s telecommunications policies had always been shaped by the state monopoly. The Ministry of Islamic Culture and Guidance, the Ministries of Commerce, Defense and Information had played an important role in the country’s telecommunication policy-making process. (Mowlana,1997:190). Third example is Jordan, Telecommunications Corporation (TCC) was the monopoly provider of the voice services until 2002. (Vivekannand and Kollar, 1997:158) Table 6 indicates privatization of telecommunications sector in the Arab Middle Eastern countries in 2000s.

Table 6 Ownership of National Telecom Operators in the Arab Middle East

Middle Eastern Countries	Operator	State Share (%)	Major Investors
Bahrain	Batelco	36.6	Cable&Wireless-20%
Iran Islamic Republic	TCI	100	n/a
Iraq	Iraqi Telecommunications and Postal Company (ITPC)	100	n/a
Jordan	Jordan Telecom	41.5	France Telecom Consortium- 35%
Kuwait	Ministry of Communication	100	n/a
Lebanon			
Oman	Oman Tel	100	n/a
Qatar	Q-Tel	55	n/a
Saudi Arabia	Saudi Telecommunications Company (STC)	70	n/a
Syrian Arab Republic	Syrian Telecommunications Establishment (STE)	100	n/a
UAE	Etisalat	60	n/a
Yemen Republic	PTC/Tele Yemen	100	France Telecom has a five year management agreement from January 2004 to operate Tele Yemen

Source: Paul Budde Communication: Middle East-Telecoms, Mobile &

Broadband Overview & Analysis-March 2005

Most national telecommunications operators in the region remain 100 percent of state-owned but both Batelco of Bahrain and Jordan Telecom have been majority privately-owned for some years. In 2005, they were also the only two national telecommunications operators in the region having major strategic investors from outside the region (France Telecom in Jordan, Cable & Wireless in Bahrain). In May 2004, Bahrain government appointed consultants to realize full privatization of its national telecommunications operator, Batelco, proposing sales of remaining 36.6 percent share in the hands of government. Therefore, Batelco will have been the first fully privatized telecommunications company in the region. (Budde Communication: Bahrain- Telecommunications Market Overview & Statistics Report-May 2007)

Rapid changes arising in communications field have increased telecommunications infrastructure investments, both national and international, in the region. Fixed-line teledensity (number of telephone lines per some unit of population often per 100 people) rates are low in the Arab Middle Eastern region. Fixed-line teledensity is either falling or steady in most of the region as mobile services take market share. Only the less developed markets of Syria and Iran have experiences recent fixed-line growth. Both Yemen and Iraq showed poor performances. Their fixed-line teledensity averages were well below Asia average. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-2005)

Table 7 indicates fixed-line teledensities in the Arab Middle East.

Table 7 Fixed-Line Teledensities in the Arab Middle East (2000-2005)

Arab Middle Eastern Countries	Teledensity (Per 100 Inhabitants %) 2000	Teledensity (Per 100 Inhabitants %) 2005
Bahrain	25.44	26,63
Iran Islamic Republic	14.90	27,31
Iraq	2,94	4,0
Jordan	12,30	11,01
Kuwait	21,33	18,99
Lebanon	17,53	27,68
Oman	9,08	10,33
Qatar	26,38	26,41
Saudi Arabia	13,80	15,64
Syrian Arab Republic	10,35	15,24
UAE	31,42	27,51
Yemen Republic	1,89	3,84
Asia Average	9,40	15,53

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Two major international submarine cable systems- SEA-ME-WE4 and FLAG Falcon- with landing stations in the Arab Middle East have connected the region into the rest of the world since 2005. Table 8 indicates international telecommunications infrastructure in the Arab Middle Eastern region.

Table 8 International Infrastructure in the Arab Middle Eastern Region

Network System	Linkages	Ownership	Contracts
Submarine Cable Networks			
SEA-ME-WE3	starts from Western Europe (Germany, the UK) and runs through the Gibraltar Strait to the Mediterranean Sea (Italy, Greece, Cyprus Island), it continues from the Suez Canal to Asia (India and Singapore) and then it splits in two parts: with one end landing in Japan and the other reaching Australia		
SEA-ME-WE4	14 countries from France to Singapore with 16 landing points	UAE and Saudi Arabia (members of high income countries) are partners in the consortium	The US\$ 500m contract for the SEA-ME-WE4 project was signed in March 2004 with Alcatel and Fujitsu.
FALCON Network	Middle East-India	Reliance Group of India	
Satellite Networks			
Arabsat		Based in Saudi Arabia	
Saudi Comsat-1 (Since June 2004)		Saudi Arabia	
Saudi Comsat-2 (Since June 2004)		Saudi Arabia	
Saudi Comsat-3 (Since June 2004)		Saudi Arabia	
Low Earth Orbit (LEO) micro-communication satellites (total of 24)		Saudi Arabia	

“Table 8 (continued)

Zohre		Iran	Iran signed a contract with Russia in January 2005. The Russian Avia Export Company and Alcatel Space undertook to build Zohre
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Source: Budde Communication: Middle East-Telecoms, Mobile & Broadband

Overview & Analysis-March 2005

India plays an important role in telecommunications infrastructure development in the region. India’s IT sector development and the trend towards outsourcing call centers and back office operations of European and the US companies to India have led new cable investments across the Arabian Sea in order to provide new broadband opportunities. To this end, two new cable projects- SEA-ME-WE4 and Falcon- was started in order to supplement existing FLAG and SEA-ME-WE3 sub-marine cables. With the construction of SEA-ME-WE4 transnational companies acquired a significant advanced communication possibility to conduct efficiently their operations in the region. Secondly, FLAG Telecom owned by the Reliance Group of India constructed Falcon network project to link the Middle East and India. Arab Middle Eastern countries, such as Oman, Bahrain, Kuwait, Iran, Iraq, and Qatar, having rich energy resources and relatively high income per capita levels are all involved into the Falcon network.

Satellite communication is also important in the Arab Middle East. Arabsat based in Saudi Arabia is the major satellite operator providing TV broadcasting services and broadband applications serving the largest TNCs telecom-users needs. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-March 2005) Aside from the Arabsats, Saudi Arabia has three other satellites; Saudi Comsat-1, Saudi Comsat-2, Saudi Comsat-3 which were launched in June 2004. It is planned to launch a total of 24 of the Low Earth Orbit (LEO) micro-communication satellites into different orbits to cover large parts of the globe. Iran has announced its intention to build Iran’s first communication satellite, Zohre. To this end, Iran signed a

contract with Russia in January 2005. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-March 2005)

Mobile penetration rate in the region varies from country to country. Main reason for this variation is difference in wealth and economic development levels. Government policy is another major factor affecting mobile penetration rate in the region. For instance, in Lebanon and Iran government interventions have restricted mobile penetration growth. In Lebanon government specifically limited the maximum number of subscribers. Government has not significantly upgraded mobile telecommunications networks. (Budde Communication: Lebanon- Telecommunications Market Overview & Statistics Report- May 2007) Iran’s mobile growth has also been artificially limited by technical network constraints. The only major operator operates a network due to bottlenecks. Service quality is poor and calls are dropped frequently. The launch of the country’s second network has been prevented by legal delays and Conservative government’s fears about security concerns emphasizing danger of possible links to enemy states. As a result, telecommunications market structure in Iran has become unclear. This situation in Iran will likely affect future investment possibilities. But despite all negative conditions Iran has a large unsaturated mobile market increasing appetites of foreign mobile communication firms. (Budde Communication: Iran- Telecommunications Market Overview & Statistics Report- May 2007)

Table 9 shows numbers of mobile subscribers in the Arab Middle Eastern countries.

Table 9 Cellular Mobile Subscribers in the Arab Middle Eastern Countries (2000-2005)

Arab Middle Eastern Countries	Mobile Subscribers (Per 1000 People) 2000	Mobile Subscribers (Per 1000 People) 2005
Bahrain	306	1,030
Iran Islamic Republic	15	106
Iraq	0	20
Jordan	80	304
Kuwait	217	939
Lebanon	219	277
Oman	66	519
Qatar	199	882

“Table 9 (continued)”

Saudi Arabia	67	575
Syrian Arab Republic	2	155
UAE	440	1,00
Yemen		95
Lower Middle-Income Group		306
Low Income Group		77
Upper Middle Income Group		671
High Income Group		835
MENA Region		229

Source: World Bank ICT at a Glance 2005

Most Arab Middle Eastern countries have competitive mobile markets. Two players- MTC Vodafone and Etisalat- have made significant investments both in and outside of the Arab Middle Eastern region as home markets reach saturation point and opportunities in the local region become scarce. Table 10 shows mobile ship ownership in the region.

**Table 10 Mobile Competition and Ownership in the Arab Middle East-
2005**

Arab Middle Eastern Countries	Mobile Operator	Major Outside Investors
Bahrain	Batelco MTC-Vodafone Bahrain	Cable & Wireless (20%) MTC-Vodafone Kuwait (60 %)
Iran Islamic Republic		
Iraq	Asia-Cell Orascom Telecom Iraq Atheer Telecom Iraq	Wataniya Telecom Kuwait (40%) Orascom Telecom Holding of Egypt (63%) MTC-Vodafone Kuwait (30 %)
Jordan	Fastlink MobileCom Umniah	MTC-Vodafone Kuwait (96,5 %) France Telecom (35,2%) Alghanim Industries
Kuwait		
Lebanon		
Oman	Nawras Telecom	TDC (16%)
Qatar		
Saudi Arabia	Mobily	Etisalat (35%)
Syrian Arab Republic	Syriatel	Investcom of Lebanon
UAE		
Yemen	Spacetel Yemen	Investcom of Lebanon

Source: Paul Budde Communication: Middle East-Telecoms, Mobile &

Broadband Overview & Analysis-April 2005

Kuwait’s MTC-Vodafone agreed to acquire 100 percent of pan-African mobile operator Celtel in March 2005. Celtel provides services to 6 million subscribers in 13

countries. The acquisition provides MTC-Vodafone with new markets as many of the countries that Celtel operates in currently have mobile penetration rates of less than 5 percent. (Budde Communication: Kuwait- Telecommunications Market Overview & Statistics Report- May 2007) UAE's Etisalat entered into a strategic partnership with West African mobile operator Atlantique Telecom and acquired 50 percent stake in the group in April 2005. Etisalat will manage the operations of Atlantique Telecom in six countries it operates over a ten year period. (Budde Communication: UAE- Key Statistics, Telecommunications Market & Regulatory Overviews Report-May 2007)

These two companies have made significant investment in third generation network (3G) area. The next generation technologies will be the most significant revenue-generating fields in the next future and having the next generation technologies will facilitate these countries integrations into the world markets. Etisalat of UAE launched 3G services in December 2003, the first Middle East operator to do so, branded Mubashir. (Budde Communication: UAE- Key Statistics, Telecommunications Market & Regulatory Overviews Report-May 2007) MTC Vodafone Bahrain also launched 3G services in early 2005. (Budde Communication: Bahrain- Telecommunications Market Overview & Statistics Report- May 2007)

The Middle East is a major market for satellite mobile services, particularly through UAE-based Thuraya Satellite Telecommunications Co. Ltd., US-based Iridium and Global Star companies. Oil companies and other personnel working in remote areas make up many of the subscriber numbers but in the aftermath of the 2003 war Iraq has been the major markets for satellite mobile. (Budde Communication: Middle East- Telecoms, Mobile & Broadband Overview & Analysis-March 2005)

Rapid developments in the ICT sector and increasing worldwide broadband and internet usage and efforts to reach Information Society target have begun strongly affected Arab Middle Eastern countries', particularly the oil-rich Gulf countries', internet, broadband and convergence markets.

Internet connections were established in the 1970s in some small numbers of research institutions, mainly in labs and universities in the Arab Middle East. These were points of contacts of those institutions of their international counterparts. These connections were limited to tele-medical and research networks and not intended to reach

masses within their home countries. (Anderson,2000:423) However, this situation has changed as a consequence of the Gulf States' increasing investments in telecommunications field and some Arab Middle Eastern states' raising awareness of the advantages of having advanced communications and information technologies.

Arab Diaspora, mostly living in Europe and the US were the first pioneers to bring their cultural, political and Islamic interests online. Most importantly, the internet is now being rapidly spread among the Arab entrepreneurs. Numbers of Internet Service Providers (ISPs) in the Middle East are increasing. ISPs, such as Arabia On-line and Arab Net, have a dominant position in the emerging Middle East internet. They focus mainly on the commercial sides of the internet. Main functions of the ISPs are to provide directories to business and business associations, to give trade creation and information and to advertise related or co-owned services from web design to site hosting. (Ghareb, 2000:415) In some Arab countries, like Jordan, high rank officials have increasingly cooperated with technology suppliers bringing internet technology to their countries is accepted as vital for economic growth. (Vivekannand and Kollar,1997:162)

Global market-oriented entrepreneurs, Internet suppliers and site-hosting firms, infrastructure planners and grassroots developers are the most important technology actors in the Middle East. In the region, global market-oriented entrepreneurs accept advanced information and communication technologies as a great opportunity to attain post-industrial Western standards. However, they have often been hindered by the conservative financial institutions and low level of public sector investments in telecommunications infrastructure. At the same time, public sector's finance has not been harmonized with global market-oriented entrepreneurs' demands and has always been controlled by conservative government officials. Conservative administrators, who have not yet been sufficiently aware of the implications and requirements of emerging post-industrial age, have preferred to give priority over other sectors of the economy. Technology actors in the region have faced strong pressures coming from major international organizations such as the World Bank, the WTO, ISO as well as Western Corporations in order to adopt international standards. They have also been under pressure from domestic players wishing to strengthen their competitive powers and to become significant technology players. (Anderson,2000:27).

Table 11 indicates ICT sector performance in the Arab Middle East.

Table 11 ICT Sector Performance in the Arab Middle East (2000-2005)

Arab Middle Eastern Countries	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet (%)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Bahrain	60	213	141	169	-	-	-	0,53	16,1	55,4	-
Iran Islamic Republic	10	103	63	109	1,5	2,5	-	0,38	0	0,4	-
Iraq	0	20	-	8	-	-	-	0,38	-	0,0	-
Jordan	26	118	31	56	8,8	8,4	-	0,46	-	4,1	-
Kuwait	68	276	114	237	1,7	1,4	-	0,44	1,8	34,6	-
Lebanon	88	196	52	114	-	-	-	0,46	5,5	11,1	20
Oman	37	111	33	47	-	-	-	0,34	0,8	3,4	-
Qatar	49	269	148	171	-	-	-	0,49	4,7	27,8	-
Saudi Arabia	22	70	63	376	2,4	2,3	-	0,41	0,5	4,6	-
Syrian Arab Republic	2	58	15	42	-	-	-	0,29	0,1	0,2	-
UAE	236	308	123	197	3,4	3,6	-	0,57	8,9	54,4	-
Yemen Republic	1	9	2	15	-	-	-	0,21	-	0,0	-
Lower Middle-Income Group		95		45		5,5		0,38		2,3	-
Low Income Group		44		11		5,9		0,24		0,5	
Upper Middle Income Group		196		113		5,2		0,54		16,9	60
High Income Group		527		579		7,2		0,77		44,4	99
MENA Region		89		48		3,1		0,33		0,7	-

Source: World Bank ICT at a Glance 2005

According to the table, all countries', except Syria and Jordan, ICT spending performances were well below the MENA region average of 3.1percent between the years of 2000 and 2005. Despite having the highest GDP per capita Kuwait had the lowest ICT spending ratio in this period. Some Gulf countries Bahrain, Kuwait, Qatar, and UAE registered better performances in the numbers of internet user and PC density areas than rest of the Arab Middle Eastern countries. According to Table11, it is possible to claim that disparities in ICT diffusion were quite large and there was a sign of strong digital disparities between the Gulf countries and the rest of the Arab Middle

Eastern countries. Yemen registered the worst performance in the five-year period from 2000 to 2005. Restrictive market access and sensitivity to the regulatory framework for internet service provision may be factor as internet penetration. (Varoudakis & Rosotto,2004: 64). Major technical infrastructure problems such as inadequate number of telephone lines restricting internet postings and insufficient level of fiber-optic networks mostly allocated for military communications needs limit significantly the capacity of Internet to reach the Arab masses. (Ghareb,2000:416). A marketing survey over the Middle Eastern nations with predominantly Muslim populations stated that a healthy industry-internet survey was not possible for the Arab Middle East due to small number of consumers with limited telephone and home internet services. (Jervis,2002:37)

Internet usage has developed the internet banking sector in the Middle East. Internet banking has gained momentum in the Middle East particularly in the Gulf for some time. Increasing numbers of Arab banks have been aware that they have to adopt conditions and rules of internet if they want to compete with major global payers having and using superior technological capacity. National Banks in the Middle East have increasingly believed that the internet would provide them a useful tool for attaining their goals. They state that a significant change has occurred in the region, particularly in Bahrain which operated in the offshore banking area and has also been the main offshore banking sector in the Gulf. (Dudley.2001:52). National Bank of Kuwait won the Euromoney awards for Excellence 2000 for the best domestic bank in the Middle East. The bank has used the most advanced technology and offered a range of electronic banking services, including e-card (Cockreil, 2000:75). The UAE has also aimed at realizing transformation of deserted Persian Gulf island of Saadiyat into global financial trading center containing a complex of stock, commodities and future exchanges plus a settlement system. All of them will operate 24 hours a day and these systems will be connected by the last generation of fiber-optic cable, satellite and broadband infrastructure. (Barrachloud, 2000:26). The project is currently under construction on the Saadiyat Island, expected to be completed in 2018. (Therefore, TNCs operating in the region will obtain very significant possibilities for their financial transactions, eroding rapidly economic sovereignty of the Gulf (and also whole Arab Middle Eastern) countries).

Today, Internet use in the Arab Middle Eastern countries is low. It is perhaps particularly low for the relatively rich countries of Kuwait and Qatar but nearly all countries are below average for their GDP per capita. Rural areas are particularly underdeveloped due to low incomes, poor education, and poor infrastructure. UAE is exception. A number of Arab Middle Eastern countries made progress in 2004 in terms of broadband offerings mainly for corporate users. Many countries have shown high rates in annual broadband growth although the figures are based on an extremely low user base for each case. Penetration is extremely low in most countries and unavailable in some. Reasons include, below average GDP per capita, illiteracy, low PC penetration and exorbitant prices for access. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-March 2005)

Western countries and Western financial institutions have imposed the idea to the Arab Middle East that liberalization of broadband market would significantly reduce access costs through offering various communication services such as satellite-based broadband services under competitive conditions. In this framework, ShowNet, a Kuwait-based Hughes Network Systems Europe (HNSE) reseller of Direcway broadband services; Falconstream owned subsidiary of Kuwait's Kuwait Messaging Services (KMS) provide broadband access; and Thuraya provide satellite-based broadband services. (Budde Communication: Middle East-Telecoms, Mobile & Broadband Overview & Analysis-March 2005)

In conclusion, it is possible to argue that Arab Middle Eastern countries, today, are beginning towards less government involvement and grater competition in their telecommunications markets, often encouraged by WTO membership and its requirements. However, despite all these policies defending pro-liberal policy applications into the telecommunications sector, most public operators in the Arab Middle East remain 100 percent of state-owned. Only two incumbent operators: Bahrain's Batelco and Jordan's France Telecom Consortium, have major strategic investors from outside the region. Both in Jordan and Bahrain denationalization process has begun.

Mobile penetration in the Arab Middle East varies enormously from country to country, resulting mainly from differences in wealth, economic development and market

competition level. Government policy is other significant factor determining mobile penetration level and number of mobile subscribers. Only two players in the Arab Middle East- Kuwait's MTC-Vodafone and UAE's Etisalat- have invested significantly in other countries outside the region as home markets in these countries approach saturation and opportunities in the Arab Middle East become scarce. Therefore, telecommunications markets have become international.

Internet usage in the Arab Middle East is extremely low, stemming mainly from low GDP per capita, high illiteracy rate, low PC density, and high access costs.

Worldwide tendency of deregulation of telecommunications and changes in the EU communication market policies have triggered liberalization movements, including telecommunications sector in the Balkans.

4.2 Major Developments in the Balkan Countries Telecommunications Market

In the mid-1990s, insufficient level of legal and regulatory framework, absence of clearly defined rights and obligations of Telecommunications Organizations, delays in vital decision-making processes, lack of transparency for granting licenses and absence of effective dispute resolution procedures were the major impediments for development of former Eastern Bloc members of the Balkan countries' telecommunications structures. (Davies et al.,1996:104). The 1990s was a period of economic decline for the Balkan states. Their economies lagged behind their counterparts in Central Europe and the Baltic region. The poor economic performance was strongly related to the unstable macro economic structures of the Balkan countries. Balkan economies in that period faced high inflation and high unemployment, and chronic current account deficit problems. Military conflicts and political unrest in the region has also contributed to weak economic performance. Wars and ethnic conflicts has not been the only reason preventing the quality and reliability of the Balkans' infrastructure systems but existing network system has been ignored for a long time because of economic collapse emerging after the collapse of the previous Soviet order. In addition, Balkan governments have generally exhibited a reluctant attitude toward liberalization and privatization of infrastructure systems.

Since the late 1990s, Balkan countries (Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia, and Montenegro) have showed a significant effort in order to

complete transition of their political, economic and social structures and to establish a Western-style liberal democratic system and free market economy. In the field of telecommunications necessary policies have been implemented in order to strengthen this sectors operations and to create a fully liberalized market with the establishment of an adequate legal and regulator, framework in the region. The 1999 Kosovo war has increased inflow of Western financial institutions' capital into the Balkan Peninsula in order to upgrade and renovate of infrastructure systems. (Welfens,2001:6)

Today, under the guidelines of the European Telecommunications Directives, majority of the Balkan governments have focused on the creation of an adequate legal framework required for creating the development of a reliable and transparent regulatory structures in order to promote level of telecommunications investments in the sector by attracting new sources of finances, to provide modern information and communication technologies and to improve Telecommunications Organizations' performances.

The Balkan countries will likely constitute an important market for European countries' telecommunications companies provided that instability in the Balkans can be eliminated. However, instability in the Balkans severely impedes Western countries' telecommunications investments. Today, only Greece made significant telecommunications investments in the Balkan Peninsula.

4.2.1 Telecommunications Market Overview in the Balkan Countries

EU has showed great efforts in order to establish a regional telecommunications regime in the Balkan Peninsula, encouraging liberalization, deregulation and privatization policies. In this framework, Balkan countries have realized a wide range of economic and telecommunications development. Region is most harmonizing its legal structure with that of the EU, establishing independent regulators; setting dates for market liberalization; and privatizing national telecommunications operators.

The regulatory environment is undergoing a great change in all countries in the region with all establishing, or planning to establish, independent regulators and most of them liberalizing their markets and privatizing their fixed-line telecommunications organizations.

Table 12 shows telecommunications market structure in the Balkans in the 2000s.

Table 12: Telecommunications Structure in the Balkans (2000-2005)

Balkans Countries	Separate Telecom Regulator		Status of Main Fixed-line Operator		Level of Competition International, Long-distance		Level of Competition Mobile		Level of Competition Internet Service Provider		Government Prioritization of ICT (scale 1-7)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Albania	Yes	Yes	Public	Public	M	P	C	P	C	C	4.0
Bosnia and Herzegovina	Yes	Yes	Public	Public	-	M	-	P	-	C	3.9
Bulgaria	Yes	Yes	Public	Mixed	M	P	-	-	-	-	-
Croatia	Yes	Yes	Mixed	Mixed	M	C	C	C	C	C	4.2
Macedonia	-	Yes	Public	Public	M	M	M	C	C	C	3.4
Romania	No	No	Mixed	Mixed	M	C	C	C	C	C	4.3
Serbia and Montenegro	-	-	-	Mixed	-	-	-	C	-	-	4.0
Lower Middle-Income Group											4.0
Upper Middle Income Group											4.1
Europe and Central Asia Region											4.2

Source: World Bank ICT at a Glance 2005

(C: Competition, M: Monopoly, P: Partial Competition)

The first countries establishing an independent regulator in the region were Albania and Bulgaria. Bulgaria established Committee on Posts and Telecommunications in 1991 and successive reforms established the State Telecommunications Commission and finally more independent Communication Regulation Commission Albania established its Telecommunications Regulatory Entity in 1998. (Budde Communications: Europe-Balkan and South East Europe Market Overview & Analysis Report-2003)

Much of the Bulgaria's telecom policy is directed towards fulfilling the requirements for the EU membership. Regulatory structure in Bulgaria is based on the Telecommunications Act which has been effective since 15 August 1998. In 2002, Bulgaria amended the 1998 Law, introducing liberalization in all areas except fixed-line monopoly and leased lines. In December 2001 the Communication Regulation

Commission (CRC) was established. Today, Bulgarian monopoly fixed-line operator is being privatization process. (Budde Communication: Bulgaria - Key Statistics, Regulatory & Fixed Line Telecoms Overviews Report -June 2007) In Croatia, a change of government at the beginning of the 2000 pledged to open the economy and consequently Croatia became member of the WTO. Since then substantial progress has been made towards liberalizing the telecommunications sector, not only in connection with WTO requirements but also because Croatia aspires to join the EU. A new Telecommunications Act was passed in 1999 set an expiry date for the monopoly of state-owned fixed-line operator Hrvatski Telekom (HT). The act laid the base for an independent regulator. It was established in 2000. In October 2001, a further 16 percent stake in HT was sold to Deutsche Telekom AG (DT), giving DT control. This was after amendments to the Telecommunications Act which restricted competition after the expiry of HT's monopoly. (Budde Communications: Europe-Balkan and South East Europe Market Overview & Analysis Report-2003) Croatia also made changes in July 2001 to its law, before selling 16 percent share of its incumbent operator Hrvatski Telekom (HT) which again removed HT's obligation to unbundle its local loop. (Budde Communication: Croatia - Key Statistics, Regulatory & Fixed Line Telecoms Overviews Report-June 2007) Bosnia presents a special case, being divided into three ethnic areas by the 1995 Dayton Peace Agreement after the war, each with its own mobile and fixed-line telecommunications operator. (Dayton Peace Agreement, ending the war in Bosnia in the late 1995, created two level government consisting of a country-wide "State-level" with a three member presidency, a Council of Ministers and a Parliamentary Assembly and two administrative divisions of Entities; Federacija Bosne i Hercegovine (Federation of Bosnia and Herzegovina or FBiH) and Republica Srpska (RS), each with a president and government with a high level autonomy. The FBiH is also divided into two territories under Bosnian control and under Croatian control. Peace agreement also established the Office of High Representative (OHR) Final authority regarding the interpretation of the Agreement and is authorized to impose legislation. The process of introducing competition is just beginning. Telecommunications sector is divided along ethnic lines with three fixed-line telecommunications operators, all of the state-owned servicing particular geopolitical areas. The largest operator in FBiH is public enterprise

PTT Bosnia and Herzegovina (PTTBiH). It services Muslim areas of the Federation. The other operator in FBiH is HPT Mostar servicing Croat areas Croatian Posts and Telekom (HPT) hold a 10 percent share of Republica Srpska is served by Telecom Srpske. The three operators do not compete with each other and they each have a monopoly of local, long-distance and international voice and data communication services in their respective areas. (Budde Communications: Europe-Balkan and South East Europe Market Overview & Analysis Report-2003)

Macedonia's Makedonski Telekomunikacii (MT) has a monopoly of fixed-line voice services until end-2004. (Budde Communication: Macedonia- Telecoms Market Overview & Statistics Report –June 2007) Serbian Telekom Srbija had its monopoly confirmed until 2005, as part of the contract for the sale of share to a consortium of OTE of Greece and Telecom Italia (Budde Communication: Serbia- Telecoms Market Overview & Statistics Report –June 2007)

None of the incumbents have been completely privatized although majority shares have been sold in Croatia's HT and Macedonia's MT. Minority shares have been sold in Romania's Rom Telecom and Serbia's PTT Holdings.

Table13 indicates ownership of telecommunications operators in the Balkan Peninsula.

Table 13 Ownership of Telecom Operators in the Balkans – 2003

Balkans Countries	Operator	State Share (%)	Major Investors
Albania	Alb Telecom	100	n/a
Bosnia and Herzegovina		100	n/a
Bulgaria	BTC		n/a
Croatia	HT	49	Deutsche Telekom AG (51%)
Macedonia	MT	49	Hungarian Matáv (51%) Deutsche Telekom AG is major shareholder of Matáv)
Romania	Rom Telecom		OTE (54.01%)
Serbia and Montenegro	Serbia's PTT Holding		OTE (20% in Serbia)

Source: Budde Communication: Europe-Balkan and South East Europe Market Overview & Analysis Report-2003; Budde Communication: Greece-Key Statistics Regulatory & Fixed Line Telecoms Overviews Report-May 2007.

The dominant fixed-line operator in the region is OTE. It has been major investor in the region, owning shares in fixed-line operators in Romania and Serbia and

Montenegro. Deutsche Telekom AG has also made move into the region with 51 percent share of Croatia's HT, and a major share of Hungarian Matáv, the purchaser of 51 percent of Macedonia's MT.

New communication technologies have developed communications possibilities in the Balkans. Rapid changes arising in communication field, especially after 1990s, have increased telecommunications infrastructure investments in the Balkans.

Fixed-line penetration rates are low in the region. With no significant alternative operators, fixed-line infrastructure in all cases is owned and operated by public telecommunications operators. Fixed-line penetration rates well below those of Western Europe. Table 14 shows fixed-line teledensity rates in the Balkans between the years of 2000 and 2005.

Table 14 Fixed-Line Teledensities in the Balkans (2000-2005)

Balkans Countries	Teledensity (Per 100 Inhabitants %) 2000	Teledensity (Per 100 Inhabitants %) 2005
Albania	4,93	11,30
Bosnia and Herzegovina	20,63	24,80
Bulgaria	35,36	32,23
Croatia	34,48	41,36
Macedonia	25,25	26,21
Romania	17,38	20,30
Serbia and Montenegro	22,61	37,94
Europe Average	37,94	40,53

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Whilst infrastructure has now been repaired, Croatia, Bosnia, Macedonia and Serbia and Montenegro have suffered war damage. But despite the problems in these former Yugoslav countries, Albania's penetration rates are far lower than any, due to its very difficult economic structure after years of isolation. Fixed-line penetration rate is higher than in most Eastern European countries in Croatia.

Most countries in the region have competition in their mobile markets; generally as part of policies of alignment with the EU regulations. OTE has investments in mobile operators in Albania and Bulgaria. Other Western European mobile operator investors are Vodafone Group Plc, with investments in Albania and Romania, Telenor ASA of Norway, with investments in Albania and Montenegro, Mobilkom Austria in Croatia, Cable & Wireless Plc in Bulgaria, Orange SA in Romania. (Budde Communication: Europe-Balkan and South East Europe Market Overview & Analysis Report-2003)

Table 15 indicates cellular mobile subscribers in the Balkan Peninsula.

**Table 15 Cellular Mobile Subscribers in the Balkan Countries
(2000-2005)**

Balkans Countries	Mobile Subscribers (Per 1000 People) 2000	Mobile Subscribers (Per 1000 People) 2005
Albania	10	405
Bosnia and Herzegovina	24	408
Bulgaria	92	807
Croatia	229	672
Macedonia	38	620
Romania	111	617
Serbia and Montenegro	160	585
Lower Middle-Income Group		306
Upper Middle Income Group		671
Europe and Central Asia Region		624

Source: World Bank ICT at a Glance 2005

Mobile telephone subscriber numbers is lower than in Western Europe but is showing a very strong growth.

Table 16 indicates structure of mobile communication market in the Balkans in the early 2000s.

Table 16 Mobile Competition and Ownership in the Balkans

Balkan Countries	Mobile Operator
Albania	Albanian Mobile Communications (AMC) Vodafone
Bosnia and Herzegovina	GSMBiH Mobilna Srpske HT Mobile
Bulgaria	RTC Mobikom/ Vivatel MobileTel/ M-Tel Cosmo Bulgaria Mobile / Globul
Croatia	T-Mobile Hrvatska VIPnet Tele 2
Macedonia	Mobimak Cosmofon
Romania	Telemobile Vodafone MobilRom/ Orange Romania Cosmote Romania/ Cosmorom

“Table 16 (continued)”

Serbia and Montenegro	Mobi 63 Mobilna Telefoija Srbija Kosovo
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Source: Budde Communication: Albania-Telecommunications Market Overview & Statistics Report-June2007; Bulgaria-Mobile Market Overview & Statistics Report-June 2007;Bosnia-Herzegovina- Telecommunications Market Overview & Statistics Report-June2007; Craoatia-Mobile, Mobile Content & applications Overview & Statistics Report-June 2007; Macedonia- Telecommunications Market Overview & Statistics Report-June 2007; Romania- Telecommunications Market Overview & Statistics Report-June2007; Serbia- Telecommunications Market Overview & Statistics Report-June2007.

In the region, internet penetration levels are below those of Western Europe. Internet users average less than 5 percent of the population. The chief hindrance to greater internet use is that individuals, educational establishments and small business can not afford personal computers. Broadband internet access, internet services are in their infancy in the area. Table 17 indicates ICT sector performance in the Balkans Peninsula.

Table 17 ICT Sector Performance in the Balkans (2000-2005)

Balkans Countries	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Albania	1	60	8	12	-	-	-	0.37	0.3	1.6	-
Bosnia and Herzegovina	10	206	-	-	-	-	-	0.40	-	4.3	-
Bulgaria	53	206	45	59	3.9	3.8	-	0.56	2.3	11.2	60
Croatia	66	327	111	190	-	-	-	0.55	13.7	48.4	100
Macedonia	25	79	36	222	-	-	-	0.46	-	2.0	100
Romania	36	208	32	113	3.1	3.6	-	0.57	2.4	7.0	57
Serbia and Montenegro	49	148	29	48	-	-	-	0.20	0.9	2.4	70
Lower Middle-Income Group		95		45		5.5		0.38		2.3	-
Upper Middle Income Group		196		113		5.2		0.54		16.9	60
Europe and Central Asia Region		190		98		5.1		0.51		13.1	-

Source: World Bank ICT at a Glance 2005

According to the table, all countries' ICT expenditures rates were well below the average rate of 5 percent. Bulgaria had the best ICT expenditure performance with 3.8 percent among the Balkan countries. Other significant ICT indicators are the numbers of internet user and PC. These represent the important indicators of the digital divide. According to the table, in the number of internet users area Croatia registered the best performance. Bulgaria was the leader of PC density. As for the schools connected to internet, Croatia and Macedonia showed the best performances among the Balkan countries with 100 percent rate. Romania registered the worst performance with 57 percent rate. Bulgaria followed it with 60 percent, the second worst average in the Balkan Peninsula. According to the table it is possible to claim that there were disparities in ICT diffusion and a digital divide among the Balkan countries.

In conclusion, Balkan countries show a wide range of telecommunications market development ranging from EU members of Bulgaria and Romania to lower-middle income group member Albania. Whilst most of the countries aim at joining the EU eventually, only Bulgaria and Romania realized this target. The political fragility of Bosnia-Herzegovina, Macedonia, Serbia, and Montenegro prevent them to become members of the EU in the near future. The regulatory environment in the region is undergoing great change in all countries. Most of them have liberalized their markets and begun privatizing their national telecommunications operators. Today, no telecommunications operators have been completely privatized. With no significant alternative operators in the region, fixed-line telecommunications infrastructure is owned and operated by public operators, majority-owned by state. Fixed-line penetration rates are poor in the region. All Balkan countries' fixed-line teledensity averages are well below those of Western Europe. Mobile penetration rate is also lower than Western Europe but it continuous to grow rapidly. Balkan countries exhibit poor ICT performance.

Worldwide tendency of deregulation policies in the 1980s and 1990s and still ongoing process of globalization process have considerably affected Central Asian countries' communications policies.

4.3 Major Developments in the Central Asian Countries Telecommunications Market

Telecommunications infrastructures in the Caucasus (Armenia, Azerbaijan and Georgia) and in the Central Asia (Turkmenistan, Uzbekistan, Kazakhstan, Kyrgyzstan, and Tajikistan) have inherited from the former communist FSU. These characteristics have created weak and uncompetitive telecommunication networks having old, obsolete and outmoded systems and electromechanical equipment. Today this outmoded telecommunications infrastructure system impedes, to a significant degree, goals to create a reliable communications system. Numbers of local investors are very few in the region and they have been slow to invest because of insufficient capital and lack of experience. Inefficient telecommunication structure has been deteriorated by the illegal elements of societies such as powerful individuals, companies and Mafioso groups. Central Asia and the Caucasus have obtained enormous economic opportunities in the post-Cold War period because of their rich oil and natural gas resources. They have turned into the most attractive areas in the eyes of foreign investors. However, actual and possible conflict risks hinder significantly inflow of foreign investments into both Central Asia and the Caucasus. There are various factors that have led to confrontation and violence. First factor is ethnic diversity which is the main characteristic of the region. Second, since the early 1990s, multiple territorial conflicts, in Chechnya, Nagorno-Karabakh, Nakhichevan, South Ossetia and Abkhazia, have created between two or three million refugees and displaced persons representing approximately 10 percent of the population of the Central Asia and the Caucasus.(Glinkono and Rosenberg,2003:513). Third factor is economic inequality, poverty and corruption. Lack of transparency in the formal institutions of the state, inadequate legal framework and enforcement mechanism for the protection of individual and property rights and for control over corruption in economic and political life are the main problems in the Caucasus and Central Asia.

In the 1990s, within this chaotic atmosphere, there were many problems for foreign telecommunication infrastructure companies. First problem was to find a right local partner because in the region success of investments rely heavily on good personal relationships. Second matter was huge, complex and bulky bureaucratic structure in which telecommunications investors had to work with local advisors, attorneys and accountants in order to cope with bureaucratic problems stemming from corruption and

lack of authority. Third, there existed convertibility and repatriation problems. Sometimes barter method could be valid in the region between telecommunications system investors and oil companies needed advanced telecommunications systems for maintaining their operations. Fourth, Caucasian and Central Asian Republics failed to implement efficient business, banking and accounting laws were necessary to provide a transparent and secure environment for private sector investments and for mobilization of capital, to develop and modernize market economies and to allocate scarce resources efficiently. Finally, high tariff problems, organized crime, political and technical factors had discouraged foreign telecommunications firms. Region's chaotic structure also hampered privatization movements. Necessary funds for upgrading telecommunications infrastructure could not be transferred to the region because of the IMF restrictions forcing Caucasian and Central Asian Republics to meet certain economic and policy targets. (Gannon,1997: 130-131). Today all of these conditions still continue their existences dominantly in the region.

The 1993 WTO and its follow up agreements have begun imposing the idea that the acceptance of the WTO rules is a pre-condition for joining the global community. According to this injection, Central Asian countries will have to harmonize their obligations and commitments and to restructure their legal, commercial and trade systems. This new structure will also force region's countries to apply effective legal systems in order to create necessary changes and to protect investors' rights. This process is a necessary step that will integrate them into the global international community and the international trade system. To this end Central Asian countries have been pressured by the core Western countries and international organizations serving the interests of Western developed states since the early 1990s in order to apply liberalization, deregulation, and privatization policies into their telecommunications markets.

Since the mid-1990s, Telecommunications Organizations of the region have begun issuing strong and efficient telecommunications law and related laws in order to provide necessary conditions for economic growth. Non-competitive, non-transparent licensing regulations, lack of clear obligations in license agreements, interconnection and revenue-sharing issues among telecommunications operators, lack of capacity to

manage efficiently scarce resources constitute main constraints in the telecommunications sector.

4.3.1 Telecommunications Market Overview in the Central Asian Countries

Central Asia remains a key target for foreign investment, with the region's telecommunications market providing to be particularly attractive to Russia's larger mobile operators. Investment opportunities in the region's fixed-line sectors are limited, despite the tremendous scope that exists for expanding the quality, range and availability of fixed line, data and internet services. (Budde Communication: Asia-Brief Overview of 35 Countries Report-2003) Meanwhile efforts to liberalize region's telecommunications market continue, although progress is often slow and, at times, hindered by intervention from state-owned regulators. WTO membership possibilities which are currently being negotiated for Kazakhstan, Uzbekistan and Tajikistan will force these countries to introduce further competition in their telecommunications markets. As the region's fixed-line sector enter the next phase of liberalization through opening domestic long-distance and international voice telephony into competition, more opportunities for strategic investors will likely emerge. Compared with the slow pace of change in the Central Asian countries' fixed-line markets, the region's mobile markets has been fast pace and dramatic.

Central Asian markets have benefited to varying degrees from foreign direct investments (FDI), mainly from Russian operators, such as MTS, Vimpel Communication and Mega Fon, acquiring and re-branding operators across the region. (Budde Communication: Asia-Brief Overview of 35 Countries Report-2003)

In the Central Asian region, there is heavy state intervention and less competitive structure in telecommunications market.

Table 18 shows telecommunications market structure in the Central Asian region.

Table 18 Telecommunications Structure in Central Asia (2000-2005)

Central Asian Countries	Separate Telecom Regulator		Status of Main Fixed-line Operator		Level of Competition International, Long-distance		Level of Competition Mobile		Level of Competition Internet Service Provider		Government Prioritization of ICT (scale 1-7)
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Armenia	-	No	Mixed	Mixed	M	M	M	P	C	C	4.3
Azerbaijan	-	No	Public	Public	M	P	C	P	-	C	4.9
Georgia	Yes	Yes	Mixed	Public	P	C	C	C	-	C	3.4
Kazakhstan	-	No	Mixed	Mixed	C	C	P	P	-	-	4.7
Kyrgyz Republic	Yes	Yes	Public	Mixed	M	C	P	C	P	C	4.7
Tajikistan	-	No	Mixed	Mixed	M	M	-	-	-	-	4.8
Turkmenistan	-	No	Public	Public	-	-	C	C	-	-	-
Uzbekistan	-	No	Public	Public							-
Low Income Group											-
Lower-Middle Income Group											4.0
Europe and Central Asia Region											4.2

Source: World Bank ICT at a Glance 2005

(C: Competition, M: Monopoly, P: Partial Competition)

According to the table Georgia and Kyrgyz Republic are the most deregulated markets of the Central Asian region.

There are major structural issues to be addressed in Armenia. The country's national telecommunications provider has a monopoly on all telecommunications services in Armenia until 2013. (Budde Communication: Asia-Brief Overview of 35 Countries- Report 2003) In November 2004, government reached a compromise agreement with Armentel, country's national telecommunications provider; to end its exclusive right in order to provide GSM, satellite and mobile radio communications services in exchange for various other concessions, including the stipulation that only one alternative mobile operator would be allowed to operate in Armenia until 2009. Armentel also retain sole rights to internet telephony (Budde Communication: Armenia-Telecoms Market Overview & Statistics Report June-2007)

In the beginning of the 2000s, Azerbaijan has begun making steady progress in the development of its telecommunications sector. However, it still faces numerous problems. Telecommunications monopoly is held by the MoC. The Ministry is also the

policy-making and regulatory agency for Azerbaijan. The country's dependence on international funding also makes it difficult for any long-range planning in the sector. (Budde Communication: Azerbaijan- Telecoms Market Overview & Statistics Report June-2007)

In Kazakhstan, new legislation was adopted in 2001. It started the liberalization of the telecommunications sector, ending Kazakhtelecom's monopoly. By April 2005, four companies had been licensed to provide long-distance and international services in competition with Kazakhtelecom and by the end of the year over 1,000 licenses had been issued for the provision of a long-range of telecommunications services. (Budde Communication: Kazakhstan- Telecoms Market Overview, Statistics & Forecasts Report- June 2007)

A new economic reform program and a steady movement towards a market economy attracted strong foreign investment and various types of international assistance and funds into Kyrgyz Republic during the President Kurmanbek Bakiev period. The funds and investments have canalized into the telecommunications sector which was restructured in the final phase of an extensive privatization program. As a result, market was opened to both foreign and domestic investors and an independent regulator has been established to monitor the sector. Full liberalization of the market was set to be achieved by the end 2006. In January 2006 government approved a decision to put 77.8 percent of Kyrgyztelecom up for sale (Budde Communication: Kyrgyzstan- Telecoms Market Overview & Statistics Report – June 2007)

In Tajikistan, a gradual process of liberalization is underway. In the past decade a number of private operators have been allowed to enter the telecommunications market, notably in the mobile and internet sectors. Privatization of state owned fixed-line operator Tajiktelecom is expected to be achieved by end 2007. (Budde Communication: Tajikistan- Telecoms Market Overview & Statistics Report – June 2007)

In 1996, government started inviting foreign telecommunications companies to invest in Uzbekistan. In 2000, the country created a national telecommunications holding company Uzbektelekom, a holding company responsible for operating the national telecommunications network. The next step in the government's strategic program is to privatize the Uzbektelekom and to open the market to competition,

consistent with the country's aim to join the WTO. (Budde Communication: Uzbekistan-Telecoms Market Overview, Statistics & Forecasts Report – June 2007)Table 19 indicates ownership of telecommunications in Central Asian region.

Table 19 Ownership National Telecommunications Operators in Central Asia

Central Asian Countries	Operator	Major Investors
Armenia	Armentel	OTE-90% until 2006. In November 2006, Armentel was sold to Russian operator Vimpelcom)
Azerbaijan	Aztelecom AzEuroTel	
Georgia	Akhali Kselebi Ltd. (NewNetTelecommunications) Egrisi Sakartvelos Elektrokavshiri (United Telecom of Georgia) Sakartvelos Telekom (Telecom Georgia)	
Kazakhstan	Astel Ducat (formerly Kazintel) Kazakhtelecom KazInformTelecom (KIT)	
Kyrgyz Republic	Kyrgyztelecom	In January 2006 government approved a decision to put 77.8 percent of Kyrgyztelecom up for sale
Tajikistan	Tajiktelecom	-
Turkmenistan	Turkmentelekom	-
Uzbekistan	Uzbektelekom Buzton, East Telecom	Strategic program to privatize the Uzbektelecom and to open market to competition

Source: Budde Communication: Armenia-Telecoms Market Overview & Statistics Report-June 2007; Azerbaijan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Georgia- Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Kazakhstan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Kyrgyzstan Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Tajikistan- Telecoms Market Overview & Statistics Report-June 2007; Turkmenistan-Telecoms Market Overview & Statistics Report-June 2007; Uzbekistan-Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Hellenic Telecommunications Organization and Greece- Key Statistics, Regulatory & Fixed-line Telecoms Overviews- May 2007

New communication technologies have contributed to the development of communications possibilities in the Central Asian region.

Fixed-line density rates are low in Central Asian region. However, they are increasing steadily in all countries of the region.

Table 20 shows fixed-line teledensity rates in Central Asian region.

Table 20 Fixed-Line Teledensities in Central Asia (2000-2005)

Central Asian Countries	Teledensity (Per 100 Inhabitants %) 2000	Teledensity (Per 100 Inhabitants %) 2005
Armenia	17,31	20,36
Azerbaijan	9,84	13,01
Georgia	10,78	12,74
Kazakhstan	12,20	16,85
Kyrgyz Republic	7,71	8,37
Tajikistan	3,57	4,31
Turkmenistan	8,17	8,24
Uzbekistan	6,71	6,74
Asia Average	9,40	15,53

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Most countries in the region have competition in their mobile markets. Numbers of mobile subscribers increased gradually between 2000 and 2005 period.

Table 21 shows cellular mobile subscribers in the Central Asian region.

Table 21 Cellular Mobile Subscribers in the Central Asian Countries (2000-2005)

Central Asian Countries	Mobile Subscribers (Per 1000 People) 2000	Mobile Subscribers (Per 1000 People) 2005
Armenia	6	106
Azerbaijan	52	267
Georgia	41	326
Kazakhstan	13	327
Kyrgyz Republic	2	105
Tajikistan	0	41
Turkmenistan	2	11
Uzbekistan	2	28
Low Income Group		37
Lower-Middle Income Group		306
Europe and Central Asia Region		624

Source: World Bank ICT at a Glance 2005

According to the table, mobile subscribers were well below both the Lower-Middle Income group and Europe and Central Asia region averages. Only Georgia's mobile subscribers' numbers were slightly above the Lower-Middle Income group average.

Table22 indicates mobile market structure in the Central Asian Region.

Table 22 Mobile Competition and Ownership in Central Asia

Central Asian Countries	Major Mobile Operators
Armenia	Armentel (ArmGSM), K-Telecom (VivaCell)
Azerbaijan	Azercell, Bakcell
Georgia	Geocell, Magticom, Megacom
Kazakhstan	Altel, GSM-Kazakhstan (K'Cell), Kar-Tel (K-Mobile), Neo Telecom
Kyrgyz Republic	BiMoCom Ltd. (Mega Com), Bitel, Katel
Tajikistan	Babilon-Mobile, Indigo Tajikistan, Somon Com, Tacom, TK Mobile, TT Mobile
Uzbekistan	Uzdunrobita, Unitel, Coscom

Source: Budde Communication: Armenia-Telecoms Market Overview &

Statistics Report-June 2007; Azerbaijan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007; Georgia- Telecoms Market Overview, Statistics & Forecasts Report-June 2007;Kazakhstan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007;Kyrgyzstan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007;Tajikistan- Telecoms Market Overview & Statistics Report-June 2007;Turkmenistan- Telecoms Market Overview & Statistics Report-June 2007;Uzbekistan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007

Armentel has exclusive rights to provide GSM and mobile radio communication service in exchange for various other concessions including the stipulation that only one mobile operator would be allowed to operate in Armenia until 2009. (Budde Communication: Armenia-Telecommunications Market Overview & Statistics Report-June 2007)

The two cellular service providers in Azerbaijan now have to compete with two new mobile licenses that were issued in December 2005. (Budde Communication: Azerbaijan-Telecommunications Market Overview, Statistics & Forecasts Report- June 2007)

In Georgia, mobile communications systems have become increasingly important because the fixed-line facilities provided in many places (particularly in rural and remote areas) are outdated and a mobile phone represents the only effective means of communication. There is an interesting move in April 2006, the country's

telecommunications regulator, the Georgian National Communications Commission, awarded a 3G mobile license to textile company, Argotex. (Conglomeration process has begun gaining acceleration). (Budde Communication: Georgia-Telecommunications Market Overview, Statistics & Forecasts Report- June 2007)

In Kazakhstan mobile market exploded when Altel, the country's original mobile operators was joined by two other operators offering GSM services. (Budde Communication: Kazakhstan-Telecommunications Market Overview, Statistics & Forecasts Report- June 2007)

While much has been done to modernize Kyrgyzstan's telecommunications network, geographical conditions, a high poverty rate and a still developing legal and regulatory framework are key obstacles to the expansion of telecommunications operations. Mobile services have been provided by two operators; Katel and Bitel. A second GSM network was also launched in April 2006. The mobile market is still in the early stages of development. (Budde Communication: Kyrgyzstan-Telecoms Market Overview, Statistics & Forecasts Report-June 2007)

Tajikistan has five operators providing mobile service, a number of additional licenses having been granted recently. Turkmenistan's mobile market served by one private and one state-owned operator. Market has been slow to grow. There are no global entrepreneurs in Turkmenistan and consequently there is no significant demand for advanced telecommunications systems. Private entrepreneurs' activities are impeded to a large extent by intensive bureaucratic rules. In Uzbekistan, six operators provide mobile services. The largest of them are Uzdunrobita JV and Daewoo Unitel. (Budde Communication: 2006 Central Asian Mobile Communications and Mobile Data Markets Report)

All Central Asian countries' ICT performances in both numbers of internet user and PC were well below Europe and Central Asia Region's average. Internet usages remain low in the region.

Table 23 indicates ICT sector performances of Central Asian countries between 2000 and 2005.

Table 23: ICT Sector Performance in Central Asia (2000-2005)

Central Countries	Internet Users (Per 1000 People)		Personal Computers (Per 1000 People)		ICT Expenditure (% of GDP)		E-government Readiness Index (Scale 0-1)		Secure Internet Servers (Per 1m People)		Schools connected to the Internet
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2005
Armenia	13	53	8	66	-	-	-	0,36	0,3	2,7	-
Azerbaijan	1	81	-	23	-	-	-	0,38	0,1	0,5	-
Georgia	5	39	24	42	-	-	-	0,40	2,1	4,7	-
Kazakhstan	7	27	-	-	-	-	-	0,48	0,5	1,2	-
Kyrgyz Republic	10	54	5	19	-	-	-	0,44	0,4	1,0	-
Tajikistan	0	1	-	-	-	-	-	0,33	-	-	-
Turkmenistan	1	8	-	-	-	-	-	-	-	-	-
Uzbekistan	5	34	-	-	-	-	-	0,41	-	-	-
Lower Middle-Income Group		95		45		5,5		0,38		2,3	-
Low Income Group		44		11		5,9		0,24		0,5	-
Europe and Central Asia Region		190		98		5,1		0,51		13,1	-

Source: World Bank ICT at a Glance 2005

In Armenia internet market exempts from the ArmenTel monopoly. Country's internet market is relatively small but has been developing steadily. However, there is still several major obstacles in the way of internet connectivity; poor telecommunications infrastructure, the high cost of computer equipment relative to an average worker's salary. Political unrest in some regions of the country, which impedes infrastructure reform and dissuades potential sponsors and donors, and heavy dependence on international funding, makes long-range planning difficult. (Budde Communication: Armenia- Telecommunications Market Overview, Statistics & Forecasts- June 2007)

A permanent internet link to the international internet backbone was established in 1995 in Azerbaijan through the country's Academy of Science. The country has had a dial up internet access since 1991. Internet use remains low (about 7 percent of total population). (Budde Communication: Azerbaijan- Telecommunications Market Overview, Statistics & Forecasts-June 2007)

Georgia established a permanent link to the international internet backbone in 1995, after having had non-permanent dial-up internet access since 1991. Internet usage remains low but the market has shown growth and strong competition between ISPs.

There are only a handful of broadband services in operation. (Budde Communication: Georgia- Telecommunications Market Overview, Statistics & Forecasts- June2007)

Commercial internet services first became available in Kazakhstan in April 1996. Internet user penetration is less than 5 percent. (Budde Communication: Kazakhstan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007)

Kyrgyzstan has an internet user penetration estimated at around 6 percent having apparently grown sharply in 2005. The sector of the market has been helped to some extent by an Asian Development Bank (ADB) loan for education and computers. Access to internet, as with other telecommunications services, slides towards the urban customer. (This situation signs a strong digital divide between rural and urban populations of the country) (Budde Communication: Kyrgyzstan- Telecoms Market Overview, Statistics & Forecasts Report-June2007)

In Tajikistan, Internet services began in 1998 with TajikTel serving as the national ISP. A number of other ISPs have since started offering access to internet. Internet usage is low (approximately 0.1 percent of total population). Usage growth has been hindered by a number of factors including inadequate telecommunications infrastructure, absence of appropriate regulation, no high-speed international communication channels and the very limited availability of personal computers. (Budde Communication: Tajikistan- Telecommunications Market Overview & Statistics Report-June 2007)

The internet arrived in Turkmenistan in 1998, it was provided through an agreement between the government and international US-based carrier MCI. Internet access has expanded only moderately since then, a lowly 1 percent user penetration. With the internet tightly controlled by the government, access remains severely restricted and there has been no real opportunity to develop. (Budde Communication: Turkmenistan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007)

Growth of Uzbekistan's internet services market has been increasing. Local ISPs continue to adjust pricing and service plans to make internet service attractive and affordable for domestic users, thereby ensuring 50percent plus growth in the market (Budde Communication: Uzbekistan- Telecoms Market Overview, Statistics & Forecasts Report-June 2007)

In summary it is possible to argue that in the Central Asian region there are intensive state interventions and less competitive market structure in telecommunications sector. State's regulatory role hinders to a large extent to apply liberalization, deregulation and privatization policies into Central Asian telecommunications market. As a result, investment opportunities in the region's fixed-line telecommunications services remain limited. Central Asian countries have competitive mobile markets. Internet usage in Central Asia is extremely low, stemming mainly from low GDP per capita, high illiteracy rate, low PC penetration, and high access costs and as well as restrictive government policies.

In this region, Turkey, Greece and Israel following pro-Western policies in GEMED are the three important countries. They join the establishment of global information infrastructure. They have connections with the US and EU and other Western based transnational telecommunications corporations having high technology in both telecommunications equipment manufacturing and telecommunications related services areas. At the same time, Turkey and Greece have also traditional cultural and historical ties with the countries located in GEMED. Deregulation policies beginning in the early 1980s and continuing process of information revolution have affected considerably these countries' communications policies. In the following chapter internationalization of communication in Turkey will be examined.

CHAPTER 5

INTERNATIONALIZATION OF COMMUNICATION IN TURKEY

5.1 Telecommunications Sector Liberalization in Turkey

During the Ottoman period, postal services started with the establishment of Ministry of Posts in 1840. In 1871 Ministries of Posts and Telegraph were merged under the name of Ministry of Post and Telegraph. In 1882, the first telephone exchange line connecting various post offices, government buildings, and affiliated branches in Istanbul was established and basic voice services was provided. In the late 19th century, telegraph, telephony and postal services were vital for Western imperialist states, particularly for Britain and France, in order to control their colonies in Asia and Africa. (Dizard, 2001:19). İstanbul was a strategic crossing road between Asia and Europe and thus it was very important to establish postal, telegraphic and voice services for European imperialists. During that period, the US played a relatively minor role in world telecommunications policies. In 1913, state-owned and one foreign privately-owned exchange lines began operating in İstanbul. First international service providing connections with the Prussian Empire were established⁽²⁰⁾ (Bayazit, 1997: 196) On March 16 1920 Istanbul was invaded and Ankara government undertook communication services. Telegraph and postal services were maintained by an office established in Ankara until signing of the Lausanne Treaty. With the Treaty, International Telegraph Agreement, and various agreements belonging to the World Postal Union were accepted (Başaran & Özdemir, 1998:74)

Modern Turkish state was established in 1923 and Turkey's telecommunications sector began evolving. In the following subsection evolution of the Turkish telecommunications sector from the establishment period to the early 2000s will be examined.

5.1.1 Evolution of the Turkish Telecommunications Sector From the Establishment of the Turkish Republic to the Early 2000s

Development of telecommunications sector of the Turkish Republic can be reviewed within the three periods. The first phase covers from the establishment of the Turkish Republic to the early 1960s period.

In the establishment period, the first priority of the young Turkish Republic was to restructure its economy taken over from the Ottoman Empire. Economy was completely destroyed due to the destructive effects of the First World War and Independence War and economic policies followed during the Ottoman Empire period. These policies aimed at creating an open market economy and in this way integrating into the world economy whose rules were determined by imperialist industrial nations. In order to overcome these negative economic conditions and to create a stable and healthy economy Turkey began following inward looking development strategies. In telecommunications area, Parliament issued the Telegraph and Telephone Law of 1924/406. The law aimed at regulating telegraph and telecommunications services. The 1924 Law perceived telecommunications services as public services. (Başaran, 2005:103). During the étatist period beginning in 1930 and lasting until 1939, state showed significant efforts in order to realize industrialization of Turkey through the establishment of the State Owned Enterprises (SOEs) as well as through joint-ventures with foreign capital. During the étatist period state entered into economic areas where private sector was not powerful enough such as infrastructure, telecommunications, transportation, industrial facilities, cement, paper, mining etc. In that period state prepared five-year development plans to play a guiding role in the economy and to establish main infrastructure and transportation networks through internal borrowing. State used very little level external resources. (Aydın, 2005: 26)

During the étatist period, import substitution policies were accepted as crucial for realization of industrial development and these policies were seen as a necessary component of nationalization strategy. These policies were also applied to the telecommunications sector. Protective government policies in the economy led to state acquisition of private telephone exchanges owned by foreign firms in Ankara, İstanbul and İzmir. In that period, a publicly-owned 2000-line telephone exchange began to operation in Ankara.(Bayazit, 1997:196) This was the first automatic telephone facility in the Republic of Turkey and the Balkan region. In 1939, parliament issued Law of 1939/ 3613. According to the Law Ministry of Transport (MoT) undertook the responsibility of PTT administration. (Başaran and Özdemir, 1998:74)

After the Second World War period, government left étatist policies based mainly on import-substitution development strategies and began following liberalization policies in order to strengthen the Turkish state's economic and political positions, increasing efforts to integrate into the world economy through trade liberalization policies. Consequently, liberalization movement had facilitated entrance of foreign telecommunications companies such as LMT Company, Ericsson etc, into Turkish telecommunication market during the 1940s. After 1945, government attempted to put into practice the first plan aiming at expanding the telecommunications network infrastructure. However, this upgrading attempt was unsuccessful due to financial difficulties. (Bayazit,1997:196).

Turkey increased its efforts for integration into the world market throughout the 1950s, joining Western institutions such as the IMF, the World Bank, the IDA (International Development Association), ILO, GATT, OEEC then OECD. In this period, the US and the Western financial organizations strongly recommended that the role of state in the Turkish economy should be reduced and necessary measures should be taken to attract foreign capital. These organizations together with the Western industrial states, particularly the US, mercantile class wishing to integrate Turkey into world economy forced the Democratic Party (DP) government to restructure the Turkish economy in accordance with the new international economic conditions. As a result, DP government left the industrialization policies envisaged by the five year development plans and launched a series of policies allowing liberalization of the Turkish economy. (Aydın, 2005:28) In the 1950s providing effective telecommunications infrastructure and telecommunications related services were not among the main targets of the DP government Menderes government gave low priority to telecommunications infrastructure development and upgrading investments. During that period, telephony, telex and telegraphy and special telecommunications services could not register a progress. During the DP government period, Turkish PTT continued to maintain its monopoly status over basic telecommunications services. In that period advanced telecommunications services were not available and universal service target was not put into the government's agenda. Investments in telecommunications infrastructure were limited due to insufficient capital resources. Capital required for infrastructure

development and network expansion was scarce because telecommunications development and upgrading projects had to compete with other sectoral development projects for allocation of necessary capital. (Bayazıt;1997:197) In that period, PTT provided low cost telecommunications services through cross-subsidization mechanism to some preferred groups such as government agencies, the military, the police organization, banks, foreign firms and SOEs. Telecommunications pricing policies were designed to subsidize these preferred groups. In that period, public service concept dominated communications field. In the 1950s, public service concept was based on the understanding that the services of PTT had been public services like defense, security, public order, and the distribution of justice. (Başaran, 2005:102). In 1953, PTT was reorganized as a State-Owned Enterprise. Operations of PTT were maintained in accordance with the rules of the Post Law of 5584 and Telegraph and Telephone Law of 406/ 1924. (Başaran and Özdemir, 1998:74) The liberal economic policies of the 1950s restructured PTT as financial state enterprise and aimed to protect the public service target at an optimal level. (Başaran, 2005:103)

In the meantime, after Korean War, the US National Security Council benefited intensively from American bases established in Turkey in order to monitor the SU's space and defense projects. To this end, long-range radar systems were established in Karamürsel, Trabzon, Çarşamba, and Diyarbakır-Piriçlik bases in the mid-1950s and the 1960s. (Geray, 1994: 191) In this period, the Americans accepted Turkey as an important ally to resist SU's ideological influence in the region.

DP government was not able to provide macroeconomic stability. The unsuccessful economic policies of the 1950s accelerated collapse of the DP period with a military coup. With the May 1960 military coup direction of economic policies was shifted from relatively market-oriented policies to a planning development strategies aiming to provide efficient allocation of scarce resources mechanism.

Second phase includes from the 1960 military coup until the early 1980s period. Following the military coup in May 1960, a new constitution was prepared and was promulgated. The public service concept was extended to some degree by the 1961 constitution. One of the most significant targets of the constitution was to realize a new social and economic order based on the principle of social justice providing social and

economic opportunities to all citizens. Constitution charged responsibility to state in order to realize this target. The 1961 Constitution emphasized that freedom of communication had been a democratic individual right and everyone should benefit equally from communication systems. (Başaran,2005:103)

In the planned economy period, government began applying telecommunications network modernization policies, implementing telecommunications equipment standardization policies, and setting up a strong national telecommunications industry. Main aims of the establishment of indigenous telecommunications industry were to take necessary measures against possible external threats mainly coming from the SU and its Eastern bloc allies and, more importantly, to reduce technological dependence on Western industrialized countries particularly on the US, as well as to prevent eavesdropping activities directing towards Turkish strategic communication. (Geray, 1999:499) Lack of national electronic industry was first taken into consideration in the mid 1960s and on May 18 1964, National Security Council decided to establish national electronic industry. (Geray, 1994:170)

To realize these aims, in 1967 Northern Electric and Telekomünikasyon AŞ (NETAŞ) was established in order to domestically produce mechanical crossbar central office exchanges. It was a joint-venture company of the PTT and military and Canadian-based Northern Telecom Company (NT). With the joint-venture agreement, in the late 1960s, PTT's R&D laboratory ARLA began serving. Major shareholders of NETAŞ, were established in 1967, were Canadian-based NT (50.9 percent), PTT (48.9 percent) and six persons, two of them were foreigners. (Geray, 1994:180) PTT's strategy with this agreement was to merge its ARLA research laboratories with the Belgian ITT's subsidiary BTM to design and manufacture transmission equipment. (Bayazıt,1997:197) With this strategy PTT hoped to benefit from the technology-push effects of new communications technologies via TNCs. Main aim of the new joint-venture was to enhance local production and technology capacity progressively and thus raise the local value-added. This aim was suitable for the military's desire for realizing a strong domestic telecommunications structure. Meanwhile TÜBİTAK (Scientific and Technical Research Council of Turkey) and the PTT began R&D on digital communications systems to replace old analog systems. (Geray, 1999: 501)

In the 1970s, Turkish PTT showed great efforts in order to upgrade telecommunications systems and to expand telecommunications networks. To this end, Turkey became a member of Intelsat, the European Telecommunications Satellite Organization (EUTELSAT), and International Maritime Organization (Inmarsat). In the 1970s, Turkey expected that these memberships would provide an important opportunity to attract TNCs investments in Turkey. Telecommunications network expansion and increasing number of users demanded advanced telecommunications services in the 1970s led to change Ministry of Transport and Communications' (MT&C) telecommunications policy. MT&C began applying cost-sharing models increasing its telecommunications prices. However, this policy shift could not provide significant resources to the Turkish PTT. In that period the PTT was not allowed to retain and invest its revenues in order to upgrade its telecommunications infrastructure network. Treasury partially transferred some of PTT's profits and funds to other politically favored development programs. (Bayazit, 1997:212) Consequently, from the mid-1960s to the early 1980s PTT had only moderate significance in government central planning and policy-making process.

Economically, at the end of the 1970s a debt crisis emerged. Between 1977 and 1979, comprehensive stabilization packages were introduced in accordance with the standby agreements with the IMF. However, despite these stabilization measures, Turkish economy could not manage to reach a stable and healthy structure; inflation rate increased, and debt crisis and import-substitution policies reduced industry's capacity usage by the end of the 1970s. In order to overcome economic difficulties, Demirel government declared a major stabilization and economic liberalization program on 24 January 1980 to initiate free market economy conditions; to reduce state's role in the economy by privatizing the SOEs and by decreasing state expenditures; and to provide integration of the Turkish economy into the world economy. (Aydın, 2005:40) This program reflecting recommendations of Structural Adjustment Programs (SAPs) prepared in the 1980s under the directives of the IMF and World Bank. Privatization policies were strongly recommended to Turkey in order to alleviate its heavy budget deficit, to provide sufficient, stable and healthy economic environment and, more importantly, to attract foreign direct investment (FDI).

The economic crisis in the late 1970s triggered social and political clashes in most cities of Turkey. This chaotic situation was ended by a military coup in September 1980. With the military coup, third phase covering from the early 1980s and to the early 2000s period of the Turkish telecommunications sector started.

Soon after military coup Ulusu government signed a three-year standby agreement with the IMF. During military period, a Five Year Development Plan (1980-84) was prepared in cooperation with the World Bank. Bank strongly recommended that the plan should introduce a framework facilitating to establish a free market economy. Since the beginning of the 1980s, Turkey began integrating into global markets through neo-liberal policies. Telecommunication was an important component of these decisions and following liberalization policies. Turkey. Turkey showed great efforts to establish rapid and reliable telecommunications systems in order to provide more efficient trade operations, both domestic and international, operations and more importantly to serve TNCs' needs. (Mutlu and Tuncel, 1995: 713)

Under the imposition of SAPs, privatization policies began applying into telecommunications sector. In this framework, on September 8, 1983 R&D section of the Turkish PTT was privatized. PTT's ARLA Laboratory was transformed into a Joint Stock Company named TELETAS in order to produce digital exchanges and to prevent NETAS's blocking attempts. ⁽²¹⁾ (Geray, 1999:501). Major shareholders of TELETAS were: PTT (49 percent); PTT Savings and Solidarity Fund (26 percent); Temel Enerji (Sezai Türkes Grubu) (13 percent); Vakıflar Bankası (10 percent); Ray Sigorta (2 percent). (Geray, 1994:182)

In 1984 government prepared a national telecommunications plan in order to upgrade national telecommunications systems. At this point it is possible to argue that the plan inspired suggestions of the 1984 Maitland Report.

The 1984 Plan perceived telecommunications industry as an important tool for promoting economic development and modernization. Policy-makers decided to use PTT as an important tool to achieve goals of social, political and economic integration. Therefore, telecommunications capital projects became the first priority of the government. In the mid-1980s, government canalized funds into these projects from both domestic resources and international financial organizations. Under the guidelines of the

1984 Plan, PTT was responsible for setting of more realistic tariffs; (based on cost-related price mechanism); providing funds for investment; and implementing and operating of domestic and international transmission systems. The PTT was given a monopoly on the purchase of telecommunications equipment to rationalize the supply of equipment and to create economies of scale. PTT was assigned the task of developing communications R&D strategy in its laboratories. The 1984 Plan included privatization of telecommunications equipment sector. (Bayazıt, 1997:199)

The 1984 Plan initiated commercialization of the Turkish telecommunications sector. MT&C began preparing necessary legal framework in order to determine corporate targets and organizational procedures and to serve the needs of private corporations.

On June 8 1984, Özal government issued a governmental decree of 233. This decree constituted legal framework of privatization. On May 28 1986, general regulations regarding privatization were formed by the Law of Privatization of State Owned Enterprises of 3291. Morgan Guaranty Trust Company prepared plans for privatization of telecommunications sector. (Başaran and Özdemir, 1998:75) Privatization of telecommunications equipment sector promoted development of domestic firms such as NETAS, TELETAS, SIMKO and TürkKablo. (Bayazıt, 1997:200) In October 1986, 49% of PTT's share in NETAŞ was taken over to Housing and Public Participation Administration (HPPA). During privatization two groups, A and B, of shares were released. 31 percent of A Group shares were given to NT; 20 percent to Turkish Army Force Foundation, PTT Saving Fund (PTT Biriktirme Sandığı), INFO Yatırım Holding AŞ, and two private investors with symbolic shares. (Başaran and Özdemir, 1998:85) During the privatization of telecommunications equipment industry in 1987 PTT sold its shares in NETAS (51 percent), TELETAS (40 percent), TurkKablo (38 percent) and other smaller firms to the HPPA. As a result, the equipment market was characterized by the merging of foreign firms with Turkish industrial groups, e.g., Siemens merged with KOC under the name of SIMKO, Iskra Telecommunications, Group, a subsidiary of the former Yugoslavian conglomerate Iskra-SOZD Inc., with Turk Telefon AS, Ericsson with Cukurova Group, NT with NETAS. (Bayazıt,1997: 202)

Poor economic conditions in the 1980s were major obstacle to the achievement of the telecommunications infrastructure upgrading goals. As a result, in 1988 the MT&C and the PTT authorities had to re-examine their financing strategies for a network development program. They considered three strategies. First strategy was multilateral funding. With this strategy PTT was forced by the MT&C to accept funds from international financial organizations such as the World Bank, the EBRD. Second strategy was to allow private investment in the installation of equipment for certain segments of the telecommunications market on a revenue-sharing agreement basis. According to the strategy the private investors were required to share a certain percentage of revenue with the PTT. Paging and extension of analog cellular network, GSM network and the VSAT services were financed in this manner. Third strategy was privatization of the PTT services. Privatization program was designed to take place in three stages: Separating postal services from telecommunications services, Corporatization of telecommunications services by establishing the firm Turk Telefon AŞ, and in the final stage sale of stocks to private investors (Bayazıt, 1997:201-202)

During DYP-SHP coalition period, PTT's privatization was put into the government's agenda. Government evaluated privatization studies and decided to separate PTT into two departments as Postal Services and Telephony Services. To this end government issued governmental decree of 406. (Geray,2003:199) In the framework of the privatization efforts, in March 1993, 20percent share of NETAŞ in the hands of HPPA was sold to Canadian-based NT. With this share NT acquired 51 percent of NETAŞ and became a major shareholder. After sale, NETAŞ left its production policies based on R&D for national requirements and transformed into a firm producing equipments under the license of foreign firm NT. (Başaran and Özdemir, 1998:85)

In March 1993, Çiller government initiated regulatory reforms in telecommunications sector with the intention of separating postal services from telecommunications services. However, Çiller's administration's telecommunications reform plans were nullified by the Constitutional Court. Court alleged government's ill-prepared privatization program having no time table, clear objectives and certain regulatory framework. (Bayazıt, 1997: 203) Meanwhile, government attempted to issue international bonds which could be converted into shares in order to overcome economic

difficulties resulting from the 1994 economic crisis. However, was not realized due to low credibility, domestic political instabilities, and oppositions from some governmental institutions. (Geray, 2003:200)

In 1994, government issued Telegraph and Telephone Law of 4000 in order to privatize PTT. Law allowed splitting the PTT into two divisions; one for posts (Post Administration) and the other for telecommunications (Türk Telekom A.Ş). The Law granted Türk Telekom the right to build and operate telecommunications system; to establish joint-ventures with national or international private companies on a revenue sharing basis; and to authorize private companies to establish fixed-line, GSM, satellite, and other communications operations. (Budde Communications-Turkey-Key Statistics, Regulatory& Fixed Line Telecoms Overviews Report-June 2007) In 1995, government issued Law of 1995/4017. The 1995 Law permitted Türk Telekom to operate telecommunications services provided by the Turkish Armed Forces with its own financial resources for only military purposes. The Law of 4017 also defined major shareholders of Türk Telekom. Law allocated 10 percent shares to Post General Directorate; 5 percent to Türk Telekom personnel, and small entrepreneurs. 35 percent of Türk Telekom shares would be sold to a strategic investor in accordance with the law. Constitutional Court nullified the Law of 4017/1995. (Geray, 2003:200)

Türk Telekom became operational in 1995 as the sole telecommunications operator, owning the entire telecommunications infrastructure including conventional telephone lines, satellite communications, cable TV lines, submarine lines and the internet backbone.

Turkey signed the WTO agreement on BTS in 1997 and committed to full liberalization of the BTS market by 2006. In order to provide the necessary framework for further liberalization government issued a new Telecommunications Law (Law of 4502/ 2000) in January 2000. Law allowed that up to 100 percent of Türk Telekom can be privatized with the government retaining a 1 percent stake in the form of a “golden share” which has special privileges associated with it. (Budde Communications:Turkey-Key Statistics, Regulatory& Fixed Line Telecoms Overviews Report-June 2007)

In August 2000 Telekomünikasyon Kurumu was established as an independent regulatory body. Therefore, all regulatory issues were previously the responsibilities of

the Ministry of Transport (MoT) were transformed to Telekomünikasyon Kurumu. The MoT retains responsibility for providing universal service and setting telecommunications sector policy. Telekomünikasyon Kurumu is responsible for: monitoring the activities of entities involved in communications; imposing penalties and terminating license agreements; offering concessions or permissions in case of failure to follow regulation; reviewing, evaluating, and approving tariffs and inspect their implementation; monitoring activities violating fair competition and notifying these activities to the Competition Board; drafting legislation; and licensing of undertakings which require a license.

Türk Telekom's monopoly was lifted at the end of 2003 and the Turkish fixed-line telecommunications market was liberalized, awarding a number of authorizations to offer telecommunications services. In March 2006, Türk Telekom divided licenses into three categories; Type A, Type B, and Type C licenses. Table 24 indicates these licenses.

Table 24 Awarded Telecommunications Services Licenses

License Type	Major License Holders	Content of License
Type A	Borusan Telekom, Doğan İletişim, Koçnet, Sabancı Telekom, Superonline	All types of telecommunications services License holders are obliged to provide national and international services to all cities in Turkey
Type B	21 operators that included AKCell, Atlas Online, Deltakom, GİSAD, İNKO İletişim, KAYA Telekom, LTDS, MEGA, Mor-Tel, Net İletişim, SGS Telekom, Türkonet, VIANET	Long-distance services
Type C	12 operators that included İkon, İnterkom, İşnet, Televersal, Telnet, TSM, UTH	Calling card type services

fSource: (Budde Communications-Turkey-Key Statistics, Regulatory & Fixed Line Telecoms Overviews Report-June 2007)

With the 4502/ 2000 Law the telecommunications sector was reorganized. The new law identifies the concept of universal service as “minimum service”, accessible by

every citizen without considering geographical distances with certain quality level at a reasonable price. (Başaran, 2005:110)

Having reviewed evolution of the Turkish telecommunications sector, in the following subsection privatization of Türk Telekom and internationalization of the Turkish telecommunications will be studied.

5.1.2 Privatization of the Türk Telekom: Internationalization of Telecommunications in Turkey

Privatization of Türk Telekom commenced with the enactment of Law of 1994/4046. Privatization of Türk Telekom process was considered within two phases. First phase was initiated in March 1997. The first phase required making necessary neo-liberal changes of the sector and the valuation of Türk Telekom. To this end a Value Assessment Committee (VAC) was formed. The VAC, with the assistance of Goldman Sachs, determined general guidelines for the telecommunications sector and developed a sale strategy and valuation for Türk Telekom's shares. (Budde Communications-Turkey-Key Statistics, Regulatory& Fixed Line Telecoms Overviews Report-June 2007) During the first phase, Goldman Sachs pointed out the danger of Türk Telekom's sale to a strategic investor, and stated that Turkish state would loose its control over Türk Telekom and control power would be transferred by strategic investor, mainly from core countries' telecommunications carriers. Strategic investors would certainly demand and absolute authority over all decisions. (Geray, 2003:201)

The privatization of Türk Telekom process started with the creation of the Tender Committee whose responsibility was to implement the sale strategy. In the letter of intention given to the IMF on December 9, 1999, Turkey expressed its intentions to permit international arbitration mechanism on investment issues, including telecommunications investments, signing the OECD-based Multilateral Agreement on Investment-MAI. Therefore Turkey promised not to apply its national laws to TNCs activities and to realize corporatization of Türk Telekom. To this end Turkey committed to establish a regulatory body and create necessary legal environment for telecommunications sector. (Geray,2003:202)

In June 2000, a tender was first issued in June 2000 for the bloc sale of 20 percent of Türk Telekom shares to a strategic investor consortium, which would include

at least one international fixed-line telecommunications operator holding the majority of the bidding consortium. Government would give management rights to investor in accordance with the tender. However, the first tender failed since the interested parties, SBC Communications, Telefonica and Telecom Italia, refrained to enter the bid process until the establishment of an independent regulatory body. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007). Neo-liberal changes the telecommunications market has also taken place following the implementation of the Telecommunications Law of 2000. The Law has established an independent regulator, the Telekomünikasyon Kurumu. Therefore, the MoT transferred its functions of owner, operator and supplier of telecommunications services to private commercial groups into an independent regulatory body. In the Letter of Intention given to the IMF on December 18, 2000, Turkey committed to accelerate privatization process and sale of Türk Telekom's 35% shares to strategic investors. (Geray, 2003:202).

In December 2000, a second tender was opened for the bloc sale of 33.5 percent shares of Türk Telekom. This tender intended to grant the strategic investor remarkable management rights. However, this tender process was stopped due to challenges from several legal grounds and a new privatization plan began. In order to realize privatization of Türk Telekom, Parliament issued a new Telecommunications Law in May 2001. The Law permitted sale for 100 percent of the capital of Türk Telekom, with the exception of a nominal 1 percent "golden share" to be retained by the state. According to the framework of the 2001 economic program, 55 percent share of Türk Telekom was to be privatized as a crucial part of an economic reform program backed by the IMF and World Bank. The arrangement allowed the government to veto key strategic decisions and was designed to eliminate the fears of Turkish Military, which relied heavily on Türk Telekom for its strategic communications. Military officials warned the government not to allow foreign investors to take full control of Türk Telekom. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007). in the Letter of Intention given to the IMF on June 19, 2002, Turkey pledged to approve a detailed corporatization plan prepared by international advisors. (Geray, 2003:204)

In this framework, a new Auction Commission was formed in early 2002 to prepare a plan which was to include Türk Telekom's incorporation and restructure; estimate of its value and a consulting study on the privatization process. Deadline of the plan was November 2002 but it was not completed due to the election of a new government. In March 2003, the Justice and Development Party (AKP) government signed a standby agreement with the IMF, pledging that it would sell a 51 percent share of Türk Telekom within the years of 2003. The IMF stipulated that privatization of Türk Telekom was a key condition for benefiting of funds in IMF. In April 2003, a number of plans to privatize the Türk Telekom were launched, including an initial public offering, a convertible bond issue, and a block sale to an investor. The bloc sale method providing a more rapid sale was accepted. According to the privatization program which was drafted after 2003, a controlling 51 percent share would be sold to a strategic investor, 5 percent the company's shares would be reserved for employees and a golden share giving veto power over strategic decisions would retain in the hands of government in order to eliminate security fears. The Minister of Transport stated that a tender process would begin in July 2004, despite the declaration of the head of Privatization Administration who said it had not been possible to determine a specific date for the start of the tender process. Consequently, privatization plans were delayed (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007)

In November 2004 the Turkish Privatization Administration initiated proceedings for the sale of a 55 percent share of the company and therefore privatization of Türk Telekom commenced. Thirteen companies registered by to be involved by the final registration date of January 11, 2005.

Table 25 indicates tender consortia and Joint-ventures for the sale of national operator Türk Telekom.

Table 25 Tender Consortia and Joint-Ventures for Türk Telekom

Privatization Manager	Consortia and Joint-Ventures
Turkish Privatization Administration	Belgacom SA Doğan Yayın Holding AŞ Mapa İnşaat ve Ticaret Multi Global Link Sdn Bhd OYAK Group SK Telecom Co. Telecom Italia Int. N.V. Telefonica SA Turkish Privatization Investors Etisalat-Cetel Çalık Energy- Dubai Islamic Bank Telecom Italia- BT Group's international consulting arm BT Teleconsult- Saudi Oger Ltd Koç Holding-Sabancı Holding Fourteen different companies led by Türktell Bilişim Servisleri, a unit of Turkcell.

Source: Budde Communication: Turkey-Key Statistics, Regulatory & Fixed-Line Telecommunications Overviews –June 2007

Four groups later proceeded to the bidding stage in June 2005: Koç Holding Consortium; Oger Telecom; the Etisalat Consortium; the Türktell Bilişim Servisleri-led consortium. Bids from the Koç Holding Consortium and Turkcell were later dropped by the Turkish Privatization Administration. Final bidding round was taken place between the Etisalat and Oger Telecom. In July 2005, the Oger Telecom Consortium won the tender giving the highest a \$6.55 b bid. Privatization details were completed in November 2005. The Turkish Treasury received \$1.31 b as part of the first installment by Oger, which plans to pay the remainder in five equal installments over the next five-years.

After privatization, AKP government promulgated the law of 5369. The 2005 Law determines the procedures and principles for providing universal services. In July 2004, the Electronic Signature Act entered into force in July 2004. The 2004 Law charges the Telekomünikasyon Kurumu the task of preparing and publishing secondary

legislation and electronic certificate service providers. In consultation with a number of stakeholders, the Telekomünikasyon Kurumu published a variety of secondary legislation included: Ordinance on Certificate Financial Liability Insurance in August 2004; Ordinance on the Procedures and Principles Pertaining to the Implementation of Electronic Signature Law in January 2005; and Communiqué on Process and Technological Criteria Regarding Electronic Signature in January 2005. The secondary legislation came into effect upon being published and comprises the legal basis of electronic signatures in Turkey. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007)

Therefore, Turkey completed changes consisting up of four stages in its telecommunications sector. In the first stage, Turkey liberalized its telecommunications sector, removing state monopoly and relaxing entry conditions into its national communication market. In the second stage, it established an independent regulatory body in order to promote competition. In the third stage, Turkey determined its corporatization strategy and restructured its independent regulatory agency. In the final stage, Turkey privatized its national telecommunications operator. Therefore, Turkish telecommunication became international. Foreign investors, telecommunications and media companies have included into this process. Internationalization process has increased numbers of mergers and acquisitions and accelerated concentration process in telecommunications sector. Table 26 indicates the situation of telecommunications sector in Turkey.

Table 26 Telecommunications Sector Structure in Turkey

TURKEY	2000	2005	Upper-Middle Income (2005)	Europe & Central Asia Region (2005)
Separate Telecommunications Regulator	Yes	Yes		
Status of Main Fixed-Line Operator (Türk Telekom)	Public	Public		
Level of Competition: International Long Distance	M	C		
Level of Competition: Mobile	C	P		
Level of Competition: Internet Service Provider	C	C		

“Table 26 (continued)”

Government Prioritization of ICT (Scale1-7)		4.1	4.1	4.2
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Source: World Bank ICT at a Glance 2005 (P: Partial Competition; C: Competition; M: Monopoly)

Turkey’s communications laws are being harmonized with those of the EU, opening the market to competition and enacting legislation to nurture and encourage competition. In this framework the concept of significant market power (SMP) has been defined by the Telekomünikasyon Kurumu as the power to influence economic parameters such as the purchase or sale price of services provided to other operators and users; supply and demand of services; market conditions; components of fundamental telecommunications networks utilized for telecommunications services; access to users in relevant telecommunications market. The Telekomünikasyon Kurumu will take into consideration the following conditions in order to determine SMP: the power to influence market conditions; the relationship between quantity of sales and size of the relevant market; the power to control access to the end user; power to access final resources; experience regarding production and introduction of services in the market. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007)

After liberalization of the Turkish telecommunications market, a number of licenses were awarded to the alternative operators focusing mainly on the .business voice and data markets in order to provide competitive conditions in the fixed line market. In the following subsection, structure of the Turkish fixed-line communications and infrastructure market after liberalization t will be examined.

5.1.3 Fixed-Line Communications and Infrastructure Market in Turkey

Fixed-line telecommunications services are dominantly provided by Türk Telekomünikasyon A.Ş. (Türk Telekom) established in 1994 and became operational in 1995. In January 1995, it became a joint-stock company and held a monopoly on fixed-line voice services. Türk Telekom also offers data transmission and internet services and mobile services through its 81 percent owned mobile arm Avea.

Table 27 Ownership National Telecom Operator in Turkey

Operator	Major Shareholder
Türk Telekom	Oger Telecom (55 percent)

Source: Budde Communication: Turkey-Key Statistics, Regulatory& Fixed-Line Telecommunications Overviews –June 2007

Türk Telekom undertook a number of telecommunications infrastructure upgrades prior to privatization with much of it involves network digitalization and modernization. After privatization this trend is expected to continue as Oger Telecom pledged \$3.5b of investments over a seven-year period. Future upgrades which will likely focus on increasing bandwidth and the implementation of next generation networks (NGN) will be major revenue-generating technologies in the very near future. To this end, Türk Telekom has contracted British fixed-line operator BT to provide advice and upgrading its network infrastructure to offer NGN capability. Owner OGER Telecom having SMP status has plans to invest \$911m during 2007, with \$179 m of the amount allocated ADSL infrastructure. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed- Line Telecommunications Overviews –June 2007)

Rapid changes arising in communications field have increased telecommunications infrastructure investments, both national and international, in Turkey. Turkey has showed great efforts to upgrade its telecommunications infrastructure.

Fixed-line market liberalization has resulted in a number of infrastructure expansions. One important result in the national infrastructure development has been a gradual decline in the teledensity levels in the country. Teledensity level grew until peaking in 2001 (28.52 percent) and have since been in decline due to fixed-line to mobile substitution, 0.8 percent year-on-year. (ITU Statistics: Main Telephone Line-2005)

Table 28 Teledensity Networks in Turkey

Country	Main Telephone Lines (Per 100 Inhabitants)	
	2000 (%)	2005 (%)
Turkey	26.96	25.93
Europe	39.74	40.66

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Second important result has been the increasing power of alternative operators in the fixed-line infrastructure market. For instance, Voice and Video over Internet Protocol (VoIP) services are predominantly targeted to the long-distance voice market. VoIP market has gained significant importance since the late 1990s. Domestic long-distance telecom service providers and VoIP providers are increasingly contracting with foreign firms. For instance, Gisad Telecom, an alternative Turkish long-distance service provider contracted Canadian-based Nortel in May 2007 to capture new customers and increase traffic for existing national and international long-distance VoIP services, while improving network quality and reducing operating costs. As for the satellite-based infrastructure, major internet service providers (ISPs); Bnet, DoganOnline, Kocnet, Sabancı Telecom, SBS and Superonline formed a partnership, TR-1, to reduce dependency on TTNNet for domestic internet traffic. Therefore, private sector has begun competing with the Türk Telekom network, 45 percent owned by the public. In the Multi-Protocol Label Switching (MPLS) network market Alcatel was chosen to provide network design and planning, deployment, integration, service rollout, training and maintenance. In broadband market Türk Telekom contracted Redback Networks, an Ericsson Company, in August 2004 to provide NGN equipment for Türk Telekom's broadband infrastructure. Türk Telekom awarded a contract to US-based Telenity to supply short messaging solution for fixed-line and wireless network in February 2005. Alcatel was also chosen to assist Türk Telekom's broadband access network developments in June 2006. Oger Telecom has pledged \$3.5b in network investments over a seven-year period, with much of the work expected to focus on increasing bandwidth and extending the reach of its NGN to serve for growing broadband needs and broadband services. BT has been contracted by the operator to assist in creating its NGN strategy. (Budde Communication: Turkey-Key Statistics, Regulatory& Fixed-Line Telecommunications Overviews –June 2007) With this strategy, Oger Telecom aims at establishing advanced digital communication systems in order to meet fast, secure, and cost efficient communications requirements of corporations operating globally.

Table 29 indicates Turkey's National telecommunications infrastructure.

Table 29 National Telecommunications Infrastructure in Turkey

Operator	National Telecommunications Infrastructure
Türk Telekom	<p>Intercity trunk lines</p> <p>Using both fiber-optic cable and digital microwave radio relay services were extended to all of Turkey's villages by end 1998</p> <p>Frame relay Services since 1996</p> <p>Asynchronous Transfer Mode (ATM) services since 2004</p> <p>140 Points of Presence (PoP)</p> <p>Links between Ankara, İstanbul, İzmir, Adana, Antalya, Samsun, Kayseri and Bursa and other cities and the Turkish Republic of Northern Cyprus (KKTC)</p> <p>TURPAK since 1989</p> <p>IP/ Multi Protocol Label switching (MPLS)-based NGN Broadband access network</p> <p>Wireless Local Loops</p> <p>TURMEOS-1(submarine cable system connecting Marmaris, İstanbul and Izmir which is the regional hub for the domestic traffic of Aegean and Mediterranean parts of the country.)</p>

Source: Budde Communication: Turkey-Key Statistics, Regulatory & Fixed-

Line Telecommunications Overviews –June 2007

Turkey has links to many of international cable networks and satellite networks connecting it to the various points of the world. Recently, increasing data usage has led Türk Telekom to increase capacity, signing an agreement with Greece's OTEGlobe in July 2005 to acquire additional international bandwidth to the Western Europe and the US. Main aim of this agreement is to provide advanced telecommunications services for business sector having significant commercial linkages with Europe, the US and the rest of the world. Table 30 shows international telecommunications infrastructure in Turkey.

Table 30 International Telecommunications Infrastructure in Turkey

Operator	Networks	Connecting Points
Türk Telekom	<p>Submarine Cable Networks</p> <p>EMOS-1 (since December 1990)</p> <p>SEA-ME-WE-2 (since August 1994)</p> <p>SEA-ME-WE-3 (since September 1999)</p> <p>TURCYOS-1 (Turkey- Turkish Republic of Northern Cyprus fiber-optic system) (since February 1994)</p> <p>ITUR (since August 1996)</p> <p>KAFOS</p> <p>MEDTÜRK (since May 2004)</p>	<p>Turkey (Marmaris), Greece (Lechaine), Israel (Tel Aviv), and Italy (Palermo)</p> <p>13 countries from France to Singapore through Algeria, Tunisia, Italy, Turkey (Marmaris), Southern Cyprus, Egypt, Saudi Arabia, Djibouti, India, Sri Lanka, and Indonesia.</p> <p>41 landing points at 35 countries and in four continents</p> <p>Turkey (Mersin-Bozyazi) and TRNC (Girne)</p> <p>Turkey (İstanbul), Russia (Novorossiysk), Ukraine (Odessa), and Italy (Palermo)</p> <p>Turkey-Romania-Bulgaria, and links along the coasts of the Black Sea.</p> <p>Turkey-Italy</p>
	<p>Terrestrial Cable Networks</p> <p>The Trans Asia-Europe Fiber-Optic Link (TAE) (since August 1998)</p> <p>Trans-Balkan Link (TBL) (Since March 1997)</p> <p>STM-4 (Since August 1999)</p>	<p>China, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Turkmenistan, Iran, Turkey, Ukraine, Poland, Germany, Azerbaijan, Georgia, Armenia, Romania, Hungary, Austria, Belarus, Pakistan, Afghanistan, with end points in Shanghai and Frankfurt.</p> <p>Turkey, Bulgaria, Macedonia, Albania, and Italy.</p> <p>Turkey (Keşan)-Greece (Dedağaç/Alexandroupolis) (financed by NATO)</p>

“Table 30 (continued)”

Satellite Networks	
EUTELSAT	
INTELSAT	
INMARSAT	
AKA-6 (since 1979)	Intelsat and Eutelsat communication over Atlantic Ocean Region
AKA-3	Intelsat and Eutelsat communication over Indian Ocean Region
ATA-1	Inmarsat services over Atlantic Ocean Region
ATA-2	Inmarsat services over Indian Ocean Region
Türksat (1B and 1C) (since 1994)	
Türksat 2A (Eurasiasat) (since January 2001)	Europe and Asia

Source: Budde Communication: Turkey-Key Statistics, Regulatory & Fixed-Line Telecommunications Overviews –June 2007

The only satellite operator in Turkey is Türksat is a publicly-owned and privately-operated. It was established in 2004, after it was separated from Türk Telekom. In April 2005, it became responsible for cable TV operations of Türk Telekom due to privatization of the latter. Türksat’s name was changed as Türksat Satellite Communications Cable TV and Operations Inc. It also owns a 75 percent shares in Eurasiasat SAM, a joint-venture with Alcatel initiated in 1996 to manufacture and launch the Türksat2A satellite. Eurasiasat, also known as Turksat 2A, is operated by Eurasiasat SAM. It was launched in January 2001 and provides coverage extending from Europe to Asia. Alcatel was contracted again in February 2006 to deliver Türksat 3A. It will commence service in 2008. In satellite network market, ISP İş.net awarded Israeli-based Gilat a contract in December 2004 to supply a satellite solution comprised of two hubs and 1,500 Very Small Aperture Terminal (VSAT) terminals. The terminals will be

based at remote sites throughout Turkey. The satellite network will allow İşNet, a subsidiary of İş Bankası, to provide voice, video, and data services. (Source: Budde Communication: Turkey-Key Statistics, Regulatory& Fixed-Line Telecommunications Overviews –June 2007) At the same time İşNet aims at making financial transactions secure, simple, fast and inexpensive way, bypassing traditional and still, to a large extent, state-controlled telecommunications infrastructure networks.

Liberalization and deregulation attempts have also affected the Turkish mobile communication market. In the following subsection liberalized mobile market structure in Turkey will be reviewed.

5.2 Mobile Market Liberalization: Internationalization of the Turkish Mobile Communication Market

The Turkish mobile market is one of the largest in the GEMED region given the country’s large population, with current growth rates indicating potential for further growth in the maturing market.

Table 31 shows number of mobile subscribers between the years of 2000 and 2005.

Table 31 Mobile Subscribers in Turkey

Country	Mobile Subscribers (Per 1000 People)	
	2000	2005
Turkey	239	605
Upper-Middle Income Group		671
Europe and Central Asia		624

Source: World Bank ICT at a Glance 2005

After the launch of prepaid services in 1999, Turkey became one of the fastest growing mobile markets. Growth has since been consistent despite occurring reduction in the number of total subscribers in 2006, pointing to a near maturing market structure. In Turkey, mobile data services are also available and the variety of mobile content and applications on of is increasing. Third-Generation (3G) services are not ready but government has released plans to offer four 3G licenses which would allow mobile operators to provide high speed mobile data networks and to offer high bandwidth mobile content applications by 2008. (Budde Communication: Turkey-Mobile Market-

Overview & Statistics Report- June 2007) Enormous costs of NGNs will likely accelerated merging process among corporations in the Turkish mobile market.

Until 2001, mobile market in Turkey showed a duopolistic character. Two GSM operators, Turkcell and Telsim, provided mobile services. Meanwhile foreign players acquire significant ownership stakes, attracted by the mobile market's growth potential. In April 2000, the third GSM license was auctioned. Telekomünikasyon Hizmetleri (İş-TIM/ Aria), a joint-venture backed by İş Bankası and Telecom Italia Mobile (TIM) International was awarded a 25-year GSM 1800 license. In September 2000, the government awarded a fourth GSM license, the second GSM1800 license, to Türk Telekom's Aycell subsidiary. In May 2003, Turkish (R. Tayyip Erdoğan) and Italian (Silvio Berlusconi) Prime Ministers announced that the two smaller operators; İş-TIM/Aria and Türk Telekom-owned Aycell would merge in order to response more efficiently to competitive conditions. The merger was approved by the Telekomünikasyon Kurumu in November 2003. In January 2004, Parliament approved a draft Bill facilitating Turkish merger regulations. Merging process was completed in February 2004 under the brand name of Avea. Before merging process İş-TIM discord with Telekomünikasyon Kurumu ⁽²²⁾. Consequently, today, Turkey's mobile market is served by three GSM operators; Turkcell, Avea, and Vodafone. (Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007)

Table 32 shows major mobile operators in Turkey.

Table 32 Major Mobile Operators in Turkey

Mobile Operator	Major Shareholders
Türkcell	Türkcell Holding (51%) Çukurova Group (7.46 %) Sonera Holding (13.07%) MV Group (5.07%) Publicly traded (23.39%) Others (0.01%)
Vodafone	Vodafone Plc.
Avea	Türk Telekom (81%) İş Bankası (19%)

Source: Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007

All three GSM operators are continuing to increase their market shares. Majority ownership shares of these mobile operators have changed from national investors towards foreign investors. Turkcell, Telsim, and Avea were identified as possessing

SMP in mobile market in December 2005. That is, they have power to change significant economic parameters such as prices of services, supply and demand conditions, access conditions for users into the mobile market etc.

Turkcell established in 1993 and became operational in 1994. In April 1998, Turkcell was awarded a 25-year GSM service license. It completed an initial public offering in the form of ordinary shares in July 2000. The ordinary shares listed on New York Stock Exchange. Turkcell has expanded internationally and plans to increase its focus on customer segmentation as the Turkish mobile market approaches to saturation point. It has also declared its intention that it is considering offering fixed-line broadband market. (Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007) As a consequence of this process, Turkey's mobile market has become international. Main aim of Turkcell is to find significant investment opportunities around the world in order to obtain sufficient profits.

Table 33 shows international expansion of Turkcell.

Table 33 Turkcell's International Activities

Operator	Country	Turkcell's Share
Turkcell	Azerbaijan	Azercell Telecom (51.53% Interest)
	Georgia	Geocell (83.2 % Interest)
	Kazakhstan	GSM Kazakhstan (51.% Interest)
	Moldova	Moldcell (100% interest)
	Ukraine	Digital Cellular Communications (51.% stake)
	Turkish Republic of Northern Cyprus	Kıbrıs Mobil Telekomünikasyon Şirketi (KKTCELL) Limited (100% ownership)

Source: Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007

Turkcell has expanded internationally into numerous countries, either on its own name or through Fintur Holdings, a partnership with Swedish-based TeliaSonera. Fintur has operations in Kazakhstan, Azerbaijan, Georgia, and Moldova.

The operator tried to enter into Iran's mobile market but in a very short time Turkcell had to exit this market. ⁽²³⁾ Turkcell continued its internationalization efforts, despite these complications faced in Iran. As in April 2006, it unsuccessfully bid as part of a consortium for Egypt's third mobile license, then, in early 2007, it submitted an unsuccessful bid for Saudi Arabia's third GSM mobile license. It also an unsuccessful bid for Greece's TIM Hellas in December 2006. (Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007) Türkcell, the largest operator of Turkey has been the subject of an ownership dispute between shareholders TeliaSonera, Russia's Alfa Group and Çukurova Group. ⁽²⁶⁾

Second mobile operator Telsim Mobile Telecommunications Services was founded in 1993. Telsim was previously majority owned by the Uzan family (89 percent) with local investors owning the remainder. After collapse of the Uzan family-owned İmar Bankası, ownership of Telsim was turned over by the Turkish Savings and Deposits Insurance Fund (TMSF) in February 2004. Meanwhile, Uzan family was accused of fraud by Motorola and Nokia and they commenced litigation process against Telsim. ⁽²⁵⁾

In August 2005, government published a sale tender for Telsim. Sale process was managed by TMSF. A total of 13 parties, including American European, and Middle Eastern bidders, were pre-qualified by it in early November 2005.

Table 34 indicates pre-qualified Corporations.

Table 34 Privatization of Telsim

Privatization Manager	Pre-qualified Corporations
Turkish savings and Insurance Fund (TMSF)	Telenor (Norway) France Telecom Sabancı Holding Koç Holding Doğan Holding Wataniya Telecom (Kuwait) Baker Communications (USA) Etisalat (UAE) Orascom(Egypt) Endex Telecom (Germany) MTC (Kuwait) Dubai International Investments (UAE) MTS (Russia Through its Turkish subsidiary Sistema Telekomünikasyon Şirketi)

Source: Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007

Seven bids were received by the December submission deadline. Amongst them Vodafone Group was the only major European operator. Bids were also submitted by Etisalat, Orascom, Endeks Telekom, MTC, Dubai International investments and Sistema Telekomünikasyon A.Ş. Vodafone won the tender in mid-December 2005. Vodafone, re-branded from Telsim Mobile Telecommunications Services. The sale was approved by the Competition Board in January 2006. (Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007) After completion of Telsim's sale TMSF compromised with Motorola and Nokia.

Vodafone pledged to upgrade and modernize its nation-wide GSM services and to ensure its readiness for 3G network services. To this end Vodafone made an 8-year contract with Motorola in December 2006.

Third mobile operator Avea was officially founded in February 2004 through the merger of Türk Telekom's GSM operator Aycell with Is-TIM's Aria.⁽²⁶⁾ In June 2004, the mergers chose Avea brand name to represent the merged entity, giving up the Aria and Aycell brands.⁽²⁷⁾ Avea made a contract with Nokia in 2006 for a three-year framework agreement to upgrade its infrastructure and to launch 3G services. In April

2007, the operator received a \$1.6b loan from the International Finance Corporation (IFC), part of the World Bank Group, and ABN Amro, Netherland-based private bank providing private financial credits to business sector, for new investments and for existing loans and operational expenses. (This situation may create the risk of ownership change in case of severe economic crisis, forcing the operator to sell Avea to the private banks. This possibility will likely accelerate the process what Wilson Dizard termed as erosion of economic sovereignty.) (Budde Communication: Turkey-Mobile Market-Overview & Statistics Report- June 2007)

In the mobile market, Türk Telekom has also offered analog services since 1989. Despite introducing value-added services such as SMS and voice mail, these analog services could not manage to compete with digital GSM networks. Its subscriber base has continuously fallen since at the end 1997.

Since the early 1990s, Turkey has been in a new process moving to the formation of Information Society through creating necessary legal and regulatory environment for the information and communication technologies (ICTs), including internet. In the following subsection, developments in Turkey's broadband and internet market will be studied.

5.3 Broadband and Internet Market in Turkey

Towards 2000s, intensive usage of ICTs has been accepted as a precondition of establishing a more transparent and democratic state-citizen relationship and of creating increasing number of "netizens". (Yücel, 2000:2). As a result, since the late 1990s an imposition from core Western countries has emerged that if a country wants to realize Information Society and to take place among the knowledge societies league, it should issue necessary legislation in order to build sufficient network infrastructure providing fast, secure and costless access into world information channels for all citizens and businesses.

In parallel to these developments in Information Society, an initiative was started by the Turkish government for Turkish National Information Infrastructure Master Plan (TUENA) in 1996. This initiative was coordinated by the Ministry of Transportation and Turkey's Scientific and Technical Research Council (TÜBİTAK) acted as the Secretariat Unit. Participants of this initiative prepared a framework plan to develop

information sector policy, including internet, for improving information technologies and for enabling Turkey's transition to Information Society. The framework plan was signed in March 1997. Following the approval of the Ministry of Finance, TUENA started in July 1997. In 1998, TUENA Group prepared a survey in order to gather data for determining usage of communication technologies tendencies among households. In the survey a total of 11 questions were asked in order to understand demands of the households to use the future National Information Infrastructure (NII). According to the result of survey household population of Turkey desire using the NII extensively. However, the benefit from advanced communication technologies in the population of Turkey was not widespread and balanced, pointing a digital divide between information haves and have nots in Turkey. The skill of using communications means was not very high. There was an intense interest and high expectations about communication services in every class of the population. The urban population was more willing to use communications services to be provided them by the TNII. There was a great access gap in information technologies between a part of society being able to access new networks and thus can increasingly becoming to include every aspects of Information Society and another segment of society not being able to access these information networks thus excluded from participating the Information Society formation. This situation has created a two-tiered society of the information-rich and the information-poor in Turkey. There is also access gap in information technologies between Turkey and the Western industrialized world, particularly the US and the EU, thus impeding significantly Turkey to catch up American and European Information Society levels. (www.tuena.tubitak.gov.tr)

Outcomes from the survey necessitates following principles to be included within the TUENA Master Plan. A social and economic policy which raises purchasing power of certain low income groups to prevent them from being isolated knowledge society is necessary. Necessary regulatory frameworks should be prepared in order to realize universal service especially for low income group citizens living in remote rural areas or living in suburbs of metropolises. (Yücel,2000:6) However, as a result of neo-liberal business strategies Turkey has begun ignoring the launch of socio-economic ICT policies aiming to provide widespread using of new communication technologies among

citizens. Neo-liberal policies have forced Turkey to apply liberalization policies in the ICT sector. These policies have encouraged purchasing ICT technology designed in core Western industrialized countries and leading competitive markets, claiming that buying ICTs are the necessary preconditions to reach of the requirements of the information age. (Geray,1999:497)

In February 2001, EU launched e-Europe+ Action Plan in February 2001. As a candidate member, Turkey was included into the Plan. The e-Europe+ Action Plan requires harmonization to the EU's ICT policies. Plan strongly recommended liberalization of telecommunications sector. Consequently, a new issue was added to the political agenda of Turkey by the e-Europe+ Action Plan. However, both TUENA Plan determining necessary steps to reach Information Society target and the e-Europe+ Action Plan have not yet put into the government agenda in Turkey. (Başaran, 2005:113)

Despite all of these imperfections in the Information Society area, Turkey has a growing internet economy. ⁽²⁸⁾ E-commerce projects and internet usage continue to increase due to the proliferation of ISPs and efforts of Türk Telekom. The proliferation of ISPs has reduced access fees. In addition, private sector has launched a number of initiatives to increase PC ownership, offering low priced PCs with broadband connectivity and presenting attractive payment conditions for customers. ⁽²⁹⁾ (Budde Communication: Turkey-Convergence, Broadband& Internet Market- Overview, Statistics & Forecasts Report-June 2007) By January 2006, there were 128 operators providing ISP services, many of which are affiliated to banking or media groups including the Sabancı Group's turk.net; İş Bank's is.net; and Koç's koc.net. Table 35 shows major ISPs operating in the Turkish market.

Table 35 Major ISPs in Turkey

ISP	Owner/ Major Shareholder	Services
Doğan Online (e-Kolay) (since 1999)	Doğan Yayın Holding	Dial-up, ADSL, IT services, including Muziplay for music downloading, consumer and business e-commerce portal hemalhemsat.com; and tourism portal gezisitesi.com
Superonline (since 1995)	Çukurova Group	Dial-up, ADSL, IT services, (commenced to serve to the corporate market since 2001)

“Table 35 (continued)

Sabancı Telekom (since 2003) (merger of ISP Turk.net- Sabancı Telekom and AK Internet)	Sabancı Group (70%)	Data Communications, Internet access, managed corporate services, mobile data services in partnership with Telsim, VoIP services
Iş.net (since 1999)	İş Bankası	Leased line, Frame Relay, Co- location, Data center, network security services to both the consumer and corporate markets.

**Source: Budde Communication: Turkey-Convergence, Broadband & Internet
Market- Overview, Statistics & Forecasts- June 2007**

Table 36 shows ICT sector performance in Turkey between 2000 and 2005 period.

**Table 36 Some Indicators of ICT Usage in Turkey and in the Upper-
Middle Income Group Countries (2002-2005)**

ICT Sector Performance	2000	2005	Upper-Middle Income Group 2005	Europe & Central Asia Region 2005
Internet users (per 1,000 people)	37	222	196	190
Personal computers (per 1,000 people)	37	52	113	98
ICT expenditure (% of GDP)	7.9	7.9	5.2	5.1
E-government readiness index (scale 0-1)		0.50	0.54	0.51
Secure Internet servers (per 1 million people, 2006)	3.2	24.6	16.9	13.1
Schools connected to the Internet (%)		40	60	

Source: World Bank Statistics ICT at a Glance 2005

Allocation of the ICT expenditure from GDP is an important measure of the new economy based on information technologies. According to the table Turkey registered a

good performance in this period. Its ICT expenditure level was well above both Upper-Middle Income Group's and Europe and Central Asia Region's averages. Numbers of internet user and personal computers are also other two significant indicators. According to the table Turkey's numbers of internet users were well above the averages of both income groups. However Turkey exhibited a poor performance in PC numbers. Its average was quite below both of the two income groups. As for the schools connected to internet, Turkey's average was also well below both Upper-Middle Income Group's and Europe and Central Asia Region's averages between the 2000 and 2005 period. Government services have become online as a result of ICT policies since the late 1990s in Turkey. Turksat is responsible for designing the government portal offering e-government services. E-government services are also available via mobile phones. For instance, mobile operator Turkcell provides to subscribers to submit inquiries about personal ID numbers and payments, tax office numbers, as well as vehicle related information such as traffic fines and taxes. Other government services accessible online include an e-consulate launched in early 2007, allowing citizens living abroad to conduct consular affairs via internet. Online education has been assisted through the development of an e-learning information portal developed in 2006 to provide educational software to support curriculum, educational contents for students, teachers, administrators and parents. The government has had plans to develop web-based teaching and learning materials. A partnership project between Türk Telekom and the Ministry of Education was launched in December 2003, aiming at providing ADSL connections to 42,500 schools. (Budde: Turkey-Convergence, Broadband& Internet Market- Overview, Statistics & Forecasts Report-June 2007)

The legal basis for e-commerce has been provided through Electronic Signature Act and its complementary secondary legislation. In accordance with the provisions of these regulatory frameworks, Telekomünikasyon Kurumu permitted E-Güven Corporation, TURKTRUST Corporation, and TÜBİTAK (The Scientific and Technical Research Council of Turkey) UEKAE (The National Research Institute of Electronics and Cryptology) to give electronic certificate to e-commerce firms. (Budde: Turkey-Convergence, Broadband& Internet Market- Overview, Statistics & Forecasts Report-June 2007)

Launching of ADSL services increased broadband usage in 2005 and 2006. Focusing of Türk Telekom, majority owned by the Saudi Oger Telecom, on broadband technology in order to obtain a new revenue-generating source and in this way to compensate expected losses from its fixed line services and Turkey's further integration possibility with the EU are increased expectations for further broadband growth in 2007 and beyond. Table 37 shows broadband market and major players in Turkey.

Table 37 Broadband Market in Turkey

Broadband Services	Operator
ADSL Services (2001)	Türk Telekom, Superonline, Doğan Online, Mynet
Cable Modem Services (2000)	Türksat under the "KabloNet" brand name
Wireless Broadband Services Wi Fi Services	Türk Telekom under the TTwinet brand (since 2005) with 160 hotspots in hotels, airports, shopping centers, cafes, restaurants, exhibition centers and universities. Avea provides connectivity on the country's train network through an agreement with Turkish railways while a similar agreement with numerous bus firms provides connectivity on buses
WiMAX	ISP Turbonet launched world interoperability for Microwave Access (WiMAX) equipment trials in July 2006.
Internet Via Satellite	Eurasiasat commenced offering internet services in partnership with IABG in April 2003.

Source: Budde Communication: Turkey-Convergence, Broadband & Internet Market- Overview, Statistics & Forecasts- June 2007

The significant size of Turkey's cable network is the only significant alternative to ADSL. Cable broadband services commenced in 2000 by Turk Telekom and now are provided by Türksat since Türk Telekom's cable operations were separated from the incumbent operator prior to privatization. In March 2006, Türk Telekom contracted Ericsson in order to implement wireless infrastructure in rural areas.

Since the beginning of the 2000s, increasingly expanding digital media product and service developments through the high-capacity broadband usage have created a new revenue-generating area in broadcasting sector which can be named as "triple market" (or convergence of digital broadcasting market) consisting up of voice-video-data applications in the world. Cable companies, telecommunications corporations, consumer electronics companies and IT companies are all struggling to capture lion share in the new digital broadcasting market. Turkish convergence market has also

influenced from these worldwide developments. Since the early 1990s, deregulation of state broadcasting monopoly through new flexible broadcasting laws and development of ICTs has accelerated commercialization and concentration of media ownership process in Turkey. This process has facilitated convergence development in the Turkish digital broadcasting market. In the following subsection, Turkish convergence market will be reviewed.

5.4 Convergence Market in Turkey

Commercialization process has increased the number of private transnational, national and local TV channels and radio stations. Consequently, the Turkish national media system has turned into a dynamic industry and a new media conglomerates have emerged in the Turkish media. As a result of increasingly applying neo-liberal policies since the early 1990s to the media sectors, major transnational media corporations have tried to increase their market shares in Turkish media firms through forming joint-ventures in order to eliminate their possible investment risks in Turkish media markets and to find new possibilities for marketing their media products. One result of neo-liberal policies was entrance of the Turkish media into a process of ownership concentration, serving mainly to the big businesses' corporate interests. (Kaya,1994:383) The broadcasting industry in Turkey realized enormous growth during the 1990s up to the beginning of the 2000s. In the early 2000s, Turkish broadcasting sector was strongly affected from economic crises.

In the meantime in the early 1990s, advanced communication systems, particularly satellite technologies, has led significant transformations in the state-owned broadcasting system. Private broadcasters exploiting satellite technologies began to transmit their programs from various Western countries, de facto removing the state monopoly over broadcasting. In 1990 the first private channel STAR1 began broadcasting via satellite from Germany and subsequently numerous local and commercial TV and radio channels began operating without licenses. The first immediate result of the expansion of broadcasting channels has been "electronic pollution" (Kaya,1994: 396) With the arrival of private channels, TRT have faced a fiercely competitive environment. Commercial channels have considerably undermined

TRT's share in domestic market. This situation has weakened TRT's financial power and its advertising revenues have reduced significantly since the early 1990s.

TRT tried to respond to fierce competition through developing commercial strategies, making more popular programs and launching several new TV channels, benefiting from satellite technology: TRT1 (General), TRT 2 (in October 1986, cultural and art programs), TRT3 (in October 1989, youth channel with sports and music programs and broadcasts live from the Turkish Grand National Assembly at specific hours), TRT GAP (in November 1989, regional channel for the southeastern region of Turkey), TRT INT (February 1990, for Europe) TRT4 (in June 1990 educational programs), and TRT AVRASYA (April 1993, for Central Asia and the Caucasus).

In the 1990s, TRT INT began broadcasting Turkish communities living in Western Europe particularly in Germany. With this channel linkage with Diaspora Turks has strengthened, providing huge amounts of information about Turkey and satisfying the need for information and viewpoints on the issues relating to Turkish society and the Turkish Diaspora. (Aksoy and Robin;2000:346-347)

Meanwhile in the early 1990s, rejection of Turkey's EU membership has forced Turkey to seek new alliances. In this framework, in April 1993, TRT launched a new satellite channel TRT Avrasya in order to re-establish cultural, linguistic and political relations that had been prevented during the Soviet era with the Turkish Central Asian Republics (Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan). (Çatalbaş, Spring/Summer 2003: No 10) To this end, TRT signed agreements with the Central Asian Republics' broadcasting organizations to transmit Avrasya channel's programs on terrestrial channels. In addition to the Avrasya channel, in the mid-1990s, Turkish government planned, through the first Turkish satellite, Türksat, to provide opportunities for TV transmissions as well as high speed data, telephone, fax and telex traffic and used for telecommunication broadcasting links with Central Asian and the Caucasian Republics. TRT Avrasya channel has aimed at reaching and connecting all Central Asian and Caucasian Turkic Republics and in this way to become one of the largest transnational broadcasting media organizations, expressing its target as "from the Atlantic Ocean to the Great Wall of China". In the mid-1990s, the Turkish foreign policy-makers considered TRT-Avrasya channel as a very useful tool in order to spread

Turkey's influence in the newly independent and strategically very important geographical region. (Aksoy and Robin; 2000:346)

These transformations in broadcasting system and the public broadcasting corporation's, TRT's, policies have led to changes in the legal framework relating to broadcasting law. From the mid-1960s until 1993 state-owned broadcaster TRT operated in accordance with legal monopoly conditions, without any legal regulation for operations of the private media. In August 1993 Parliament lifted TRT's monopoly on TV and radio broadcasting, modifying the related article of the Constitution. After termination of the state monopoly on 13 April 1994, Parliament issued a new broadcasting law, replacing Radio and Television High Council of the 1980 with the Radio and Television Supreme Board (RTÜK). The 1994 Broadcasting Law granted significant authority to RTÜK for regulating the private broadcasting and to control the conformity of their broadcasting policies with the legal framework. Law also gave the authority to supervise all TV and radio broadcasters.

The 1994 put significant restrictions on the private ownership and advertising time. According to the law, one company could not own more than one radio and one TV station at the same time. The law defined maximum amount of the shares that could be possessed by the same person as 20 percent. Foreign investment in the Turkish media market and in the Turkish newspaper companies could not 20 percent. (Çatalbaş, Spring/Summer 2003: No 10). Main aim of these restrictions was to prevent media concentration and cross-media ownership in the hands of the very few numbers of corporations and in this way to provide necessary conditions for pluralistic and diversified media. However, these restrictions stipulated by the 1994 Law could not manage to provide an efficient private media ownership control system.

The 1994 Law facilitated entrance of foreign media companies in to the Turkish television broadcasting sector, accelerating international partnership process between the major Turkish TV channels belonging to the major corporations and foreign TV channels.

Table 38 shows TV channels having international partner in Turkey.

Table 38 TV Channels Having International Partner in Turkey

TV Channel	Joint-Venture	Program Content
CNN TÜRK (Since 1999)	Doğan Media Group and Turner Broadcasting International of AOL Time Warner	National and international news, as well as extensive business, financial, political and sports programming and analysis
CNBC-e	Doğuş Media Group and American CNBC-e TV	Financial News, including NBC and Dow Jones, Turkey's Stock Exchange (İMKB) news and all major European and international financial markets. Foreign series and films in their original language with Turkish subtitles.

Source: Dilruba Çatalbaş, [www. transnational broadcasting studies journal.com](http://www.transnationalbroadcastingstudiesjournal.com)

/ “Globalization”-a Case History: Commercial Partnerships and Cooperation between Turkish and American Satellite Broadcasters, No. 10, Spring/Summer 2003

CNN TÜRK is the first Turkish TV channel having an international partner. This partnership has been formed in accordance with the CNN’s rules of investments based on the principle that “think globally act locally”. CNN has aimed at reducing its investments risks in the Turkish TV market through the joint-venture agreement with the Doğan Media Group (DMG) and providing new local channels; reaching Turkish viewers via terrestrial cable TV and satellite TV broadcasting; and using DMG’s extensive local news. DMG has targeted to reach the Turkish –speaking Central Asian and Caucasian Republics and to the Turkish Diaspora living mainly in Western Europe, benefiting CNN’s editorial and production expertise and accessing CNN’s 36 bureaus and more than 800 affiliates worldwide. The joint-venture agreement between the DMG and CNN International has provided the international partner significant opportunities to increase its reach and its news gathering resources costless. DMG has obtained significant opportunity to attract audiences and advertisers, establishing partnership with the famous brands. Doğuş Media Group (DG) and CNBC Europe made a franchising agreement providing different advantages for the parties. CNBC Europe has obtained a

significant possibility to increase its income through this agreement. DG has increased its market share, using well known international CNBC brand and benefiting CNBC's technology, know-how and news, and major countries' Stock Exchanges news resources. (Çatalbaş, Spring/Summer 2003: No 10)

On 7 June 2001, certain provisions of the law were modified in order to satisfy the private media companies' demands. The modified 2001 Law supports strongly for private media interests, lifting media ownership restrictions provisions. (Ruken, Media Landscape Turkey,2006 www.europeanjournalismcenter.nl) The 2001 Law has created three important conclusions. First, all of major commercial broadcasters belonging to the cross-media groups, which are part of conglomerates, have expanded their activities in various sectors, including tourism, finance, automotive, industry, construction and banking. Second, very few numbers of media conglomerates have begun dominating the media market. Third, the increasingly commercialized media market has begun attracting major significant foreign media players. For instance, in July 2006 News Corporation in partnership with Ahmet Ertegun acquired TGRT from İhlas Group. Private national broadcasters are obliged to provide 70 percent coverage. (Budde Communication: Turkey-Convergence, Broadband &Internet Market- Overview, Statistics & Forecast Report-June 2007)

In the beginning of the 2000s, increasingly expanding digital media product and services have led significant changes in telecommunications, entertainment, video, and multimedia markets, creating a "triple play" market (digital broadcasting market) consisting up of voice-video-data applications. In the triple play market all voice, video and data services are provided over a single access subscription. Triple market provides convergence of all voice, video and data services, removing boundaries between them. This is a new market that will create a new revenue-generating area for both domestic and international corporations in the very near future. Under the liberalized communications market and growing broadband usage conditions, the triple market has begun transforming players operating in telecommunications and broadcasting industries into direct competitors. (Budde Communication: Turkey-Convergence, Broadband &Internet Market- Overview, Statistics & Forecast Report-June 2007)

Digital TV network has gained significant importance in Turkey, stemming mainly from developments in the triple play market. Digital TV market in Turkey includes three submarkets: Digital Terrestrial Television (DDTV) market, Cable TV market, and Satellite-based Digital Pay TV market.

In the late-2004, the Communications High Council confirmed the Digital Video Broadcasting Standard (DVB) for Digital Terrestrial Television (DTTV), preparing basis for activities of DDTV, Cable TV, and Satellite-Based Digital Pay TV operators in Turkey. In April 2007, national broadcaster TRT and a number of private broadcasters formed a transmission company, delegating the responsibility of building and operating DTTV to it. DTTV services are planned to commence in 13 major cities by 2008, with intention to spread into other cities. Experimental DTTV broadcasts were commenced in February 2006 in İstanbul. (Budde Communication: Turkey-Convergence, Broadband & Internet Market- Overview, Statistics & Forecast Report-June 2007)

Cable TV services were commenced in 1988. After privatization of Türk Telekom, Türksat undertook its cable TV services through the Türksat Kablo in April 2005. Other major cable operators are KabloNet and Ultra Kablo TV.

Table 39 indicates major operators in cable TV markets in Turkey.

Table 39 Cable TV Market in Turkey

Operator	Ownership	Services
Türksat (since 2005)	Public	Cable TV services
KabloNet (since 1997)	Eser Telecom, ERE Holding's subsidiary (ERE Holding has operated in telecommunications, defense industry, energy, and automotive areas since 1975)	Cable TV services, broadband, internet and VoIP telephony
Ultra Kablo TV	Koç Group (50%) DYH (50%)	Cable TV services, digital TV, cable modem, and private data network

Source: Budde Communication: Turkey-Convergence, Broadband & Internet

Market- Overview, Statistics & Forecasts- June 2007

In 2001, Radio and Television Supreme Board (RTÜK) issued an ordinance determining conditions for operating digital Direct-to-Home (DTH) services for new and satellite-based TV channels, creating a legal base for the activities of satellite-based TV operators. In Turkey, a number of satellite-based pay TV operators have entered and

existed the market. Today, satellite-based pay TV services are provided by two operators Dsmart and DigiTürk.. Previous players were Star's Star Digital and Cine Digital+. (30)

Table 40 shows major operators in satellite-based digital pay TV market in Turkey.

Table 40 Satellite-based Digital Pay TV Market in Turkey

Operator	Ownership	Services
Dsmart	DYH	Pay-per-View TV, satellite-based TV
DigiTürk (since 2000)	Çukurova Holding	Satellite-based TV, Pay-per-View TV, Interactive TV

Source: Budde Communication: Turkey-Convergence, Broadband & Internet

Market- Overview, Statistics & Forecasts- June 2007

SUMMARY

Turkey's telecommunications market offers great possibilities for investors stemming mainly from its continuously growing economy, its strategic geopolitical position in the GEMED region and the country's integration possibility with the EU.

Enactment of the Telecommunications Law of 2000 has paved the way for completion of necessary neo-liberal changes. The Law permitted establishment of an independent regulatory body, the Telekomünikasyon Kurumu, and pledged full telecommunications market liberalization by January 2004. Turkey's telecommunications regulatory framework has also been amended in order to provide harmonization with the EU's legal framework defending strongly pro-competitive policies in telecommunications sector. Turkish telecommunications market has been liberalized with a number of licenses awarded to the alternative operators.

Privatization plans were put into effect in November 2004, after a number of unsuccessful attempts. A number of consortia and joint-ventures showed great interest for national operator Türk Telekom's privatization. In June 2005, a consortium led by Saudi-based Oger Telecom submitted the highest bid of of 55 percent stake of Türk Telekom (\$6.55 b). Therefore, the public fixed-line operator was privatized and began entering into denationalization process.

Türk Telekom had had a number of infrastructure modernization plans prior to privatization. This trend will likely to continue since Oger Telecom digital network upgrading investments over a seven-year period. Further network upgrades are expected

to focus on increasing bandwidth and the implementation of NGN which will be new lucrative areas in the very near future. Main target of these networks will be the business sector whose operations rely heavily on secure and high-speed voice, content and data transmissions providing through broadband services. Huge costs of these NGN technologies will inevitably accelerate merging processes and increase concentration in the Turkish fixed-line telecommunications market.

Until 2001, there were two GSM operators, Turkcell and Telsim, operating under dupolistic market conditions in Turkey. In 2001, Turkish government awarded two further GSM licenses to Türk Telekom-owned Aycell and Aria, partly owned by Telecom Italia. The two new operators began competing Turkcell and Telsim in order to obtain a lion share in mobile market. Aycell and Aria merged in February 2004. This merge was a strategic response to the increasing competition in the Turkish mobile market. Under the competitive and maturing market conditions, Turkcell has begun operating internationally to acquire sufficient profits. Government seized Telsim in 2002 since its owners, Uzan family, were accused of fraud by mobile vendors Nokia and Motorola. In December 2005, Telsim was purchased by Vodafone Group and began operation under the Vodafone brand name. Türk Telekom also offers analog mobile services but its market share is continuously declining. Today its market share is at negligible level. In the Turkish mobile market revenues from mobile voices have begun reducing, signing saturation in the market. As a result, operators have begun increasingly focusing on seeking new revenue-generating areas such as mobile data services and content applications. Today mobile data services usage is low in Turkey. Turkish government has declared its intention which would allow the mobile operators to offer high-speed mobile data, mobile content, and applications. High costs of these new technologies will possibly increase concentration process in the Turkish mobile market.

Since the beginning of the 2000s, increasingly expanding digital media product and service developments have created a new revenue-generating area in broadcasting sector, “triple play” market (or digital TV market) consisting up of voice-video-data applications. Cable operators, telecom corporations, consumer electronics, and IT companies are all competing to acquire significant shares in the new market. Digital TV market in Turkey includes three submarkets: DTTV, Cable TV, and satellite-based

digital TV markets. DTTV services will begin in 2008. In the late 2004 RTÜK confirmed the Digital Video Broadcasting standards for DTTV. Cable market in Turkey operates under oligopolistic conditions. Today, satellite-based digital TV market operates under duopolistic market conditions.

In the broadband market, Türk Telekom has focused mainly on the Asymmetrical Digital Subscribers Lines (ADSL) connections as a new revenue-generating source in order to compensate expected losses in the fixed-line voice market. Enormous size of cable networks and availability of cable broadband services has transformed the cable market into the main competitors against Türk Telekom, offering cable connections as a significant alternative to the ADSL networks.

Since the beginning of the 2000s, developments in digital media field have led to the emergence of “triple play” market converging voice-video-data services as a new revenue-generating field in digital TV broadcasting market. Turkish broadcasting market has also significantly influenced from the changes in the triple play market.

Today, Turkish telecommunications sector has begun exhibiting a highly concentrated market characteristic. Huge costs of NGN technologies have accelerated merging and resulting concentration processes in all segments of telecommunications market. This increasing concentration will likely create an uncontrolled “natural monopoly” structure in the Turkish telecommunications market. This process can be defined as “back to the natural monopoly” position.

Greece following pro-Western policies in GEMED is another important actor in the region. The country has intense investment activities in GEMED and has also traditional cultural and marketing ties within the region. In the next chapter political economy of communication in Greece will be studied.

NOTES

- (20) Hüseyin, Bayazıt. “Telecommunications in Turkey” ” in *Telecommunications in Western Asia and the Middle East*. ed.by Noam, E. (New York, Oxford University Pres,1997) p.196. However, the defeat of Ottoman Empire led to postponement of international telephony services until 1931
- (21) Geray, H.,(1999). Network policy formation between idealist and strategic models: a political economy perspective from Turkey. *Telecommunications Policy*, 23 (6): 501 Military demanded NETAŞ to produce digital exchanges. Initially NETAŞ tried to resist military, claiming that there were insufficient human resources required especially for the software production of digital technology. After lengthy and severe negotiations, and military’s threat that NT’s operations in Turkey would be terminated, NT had to agree to start digital exchange production in Turkey.
- (22) (Budde Communication: Turkey-Mobile Market- Overview & Statistics Report- June 2007) İş-TIM disputed the Telekomünikasyon Kurumu. It had demanded €2.5b, the price of its license, from the Telecommunications Authority, claiming that the regulator violated the terms of its license in that the Authority had an obligation to create and maintain market conditions such as enable market operators to compete equal conditions. İş-TIM also claimed that the Telecommunications Authority failed to control price increases by Türk Telekom for connection to its fixed-line network. After the announcement of the merger with Aycell, Is-TIM dropped the charges.
- (23) (ibid, June 2007) Irancell, a consortium 51 percent owned by Turkcell won a tender in February 2004 for the second GSM license in Iran. Irancell’s operations in the Iran mobile market were short-lived. Since Conservative government passed a new law relating to foreign direct investment (FDI) in September 2004 that required Irancell’s contract to gain approval from the government. A special commission decided in accordance to the framework of the new law that Turkcell’s stake in Irancell should be diminished. Turkcell’s seized ownership shares were transferred to two national companies: Bank Milli and Post Bank. Consequently, Turkcell had to withdraw from Irancell consortium in October

2005. MTN, who submitted the second-best bid in the original tender, later agreed to acquire Turkcell's stake in November 2005. Turkcell demanded to redress the situation in the Iranian courts. However, Turkcell's appeal was rejected in April 2006.

(24) (ibid, June 2007) In March 2005, shareholder TeliaSonera AB reached a preliminary agreement to purchase a 27 percent stake of Turkcell from Çukurova Group. The deal, which would have increased TeliaSonera's stake from 42 percent to 64.3 percent with the Çukurova Group retaining a 13.5 percent stake in Turkcell, was planned to apply on 23 May 2005 but Çukurova Group failed to sign the necessary documentation. It had entered into an agreement with Russian-based Alfa Group offering a \$3.3b financing arrangement, comprised of a \$1.71b six-year loan and the purchase of \$1.53b of convertible shares, equivalent to a 13.2 percent stake of Turkcell. The agreement was conditional if Çukurova Group could not repay \$1.71 loans Alfa Group would obtain control over Turkcell Holding, a holding company jointly-owned by Çukurova Group and TeliaSonera, from Çukurova Group.

TeliaSonera appealed arbitration process against Çukurova Group at the International Chamber of Commerce's (ICC) International Court of Arbitration in August 2005, claiming that Çukurova Group violated the terms of its shareholder agreement by selling shares in Turkcell to Alfa Group without giving TeliaSonera first right of refusal. In October 2005, Swiss civil court had blocked Alfa Group's possible stake purchase until claims challenging the deal have been heard. Çukurova Group claimed the decision only applied to Turkcell Holding not to Turkcell shares. Based on this claim, the Alfa Group and Çukurova Group made an agreement in December 2005, allowing Alfa Group to increase its stake in Turkcell to 28.22 percent from the 13 percent it held in November 2005. During the same period Çukurova Group exercised an option to acquire a 13.15 percent stake in Turkcell from Yapı Kredi Bank.

TeliaSonera's arbitration process concluded in January 2007. Court decided that the agreement between TeliaSonera and Çukurova Group in March 2005 was binding, forcing Çukurova Group to fulfill the agreement to increase

TeliaSonera's stake to 64.3 percent. As January 2007, Turkcell holding held a 51 percent stake in Turkcell, while Çukurova Group held 7.46 percent; Sonera Holding 13.07 percent; MV Group 5.07 percent; others 0.01 percent, with the remaining 23.39 percent publicly traded.

Turkcell Holding is 47.09 percent owned by TeliaSonera and 52.91 owned by Çukurova Group, which in turn, is 51 percent owned by Çukurova Group and 49 percent owned by Alfa Group. The ownership arrangement gives TeliaSonera a direct and indirect stake 37.09 percent, while Çukurova Group has 21.22 percent and Alfa Group has 13.22 percent. Çukurova Group originally held a 42 percent stake in Turkcell until 2001, when the conglomerate almost collapsed in 2001 due to the devastating effects of the economic crisis. Its shares in Turkcell were seized by government in 2003 as a guarantee for \$6.2b in debts to Pamukbank and Yapı Kredi Bank, both of which were owned by Çukurova Group. The Group's original recovery plan entailed repaying the debt over 15 years although this was later negotiated to 18 months in exchange for a 35 percent discount on the debt. The Çukurova Group's stake was to be returned by upon full repayment.

(25) (ibid, June 2007) Telsim was previously majority owned by the Uzan family (89 percent), with local investors owning the remainder. In February 2004, the TMSF reported it had seized the assets of some 219 companies controlled by the Uzan family as the Uzans had failed to repay debts of over \$5.5b. The confiscate was executed in accordance with the rules of the Banking law, in connection with an investigation into the Uzan-owned İmar Bank. As a result of this investigation TMSF found that the company had lied about the size of its client base and sold imaginary treasury bonds. In January 2002, Motorola and Nokia commenced a litigation process against Telsim in the US District Court in New York. They charged that the Uzan Family borrowed money (\$3b) from them but Uzans had no intention of repaying. The firms claimed that Uzans had violated the US Racketeer Influenced and Corrupt Organizations (RICO) statute. Both Motorola and Nokia lent money to Telsim for infrastructure and license purchases to develop a GSM and second generation (2G). In the court they claimed that these funds were transferred to other Uzan controlled companies. They also argued that Telsim had

failed its payments since May 2001 when the Uzan family reduced its shares in Telsim without giving information Motorola and Nokia and thus no longer had guarantee for the loans. Telsim denied the acquisition, pointing to records which indicated that regular loan payments were made to Motorola for more than three years until the collapse of the Turkish economy due to economic crisis. In August 2002, Telsim initiated arbitration process against Motorola at the ICC Court of International Arbitration, demanding almost \$300m damages, as well as replacement equipment and software. Telsim claimed that Motorola provided sub-standard equipment and repeatedly failed to address network failures causing huge damages that Telsim had to suffer. Telsim demanded Motorola almost \$300m damages and replacement equipment and software.

The legal process continued throughout 2003, with hearings held in Turkey, the UK, and Switzerland, and New York. US District Court ordered Uzans to pay Motorola \$2.13b damages in compensatory damages and another \$2.13 in punitive damages. Uzan family was also ordered by the court to give up 73.5 percent of the ownership shares and control of Telsim. According to the Court's decision Uzans would pay Nokia \$1.71b, or twice the amount of the unpaid loans and interest owed, if they did not transfer the stock within a week of the final judgment. Further, decision by the Switzerland Court reinforced the ruling.

Uzans applied appeal process but it was lost. The US Court of Appeals for the, affirmed the US District Court's ruling in October 2004. In December 2004, Motorola won a judgment in London's High Court. The decision allowed Motorola to enforce its rights over assets held by the Uzans in the UK.

In December 2004 Motorola won a judgment in London's High Court. The decision permitted Motorola to strengthen its rights over assets held by Uzan family in the UK.

In the meantime, in 2004 the TMSF declared its intention to sell Telsim.

Based on these decisions in August 2005 Telsim's international roaming and interconnection revenues were frozen both in the US and the UK, passing them onto Motorola.

In September 2005 TMSF, Nokia and Motorola concluded an agreement. TMSF would pay Motorola \$500m in cash and 20 percent of the proceeds over \$2.5b from the sale of Telsim and Nokia would receive 7.5 percent of the total proceeds from the sale. As part of the agreement Motorola withdrew litigation against Telsim and its demand for arbitration against the Turkish government at the Washington-based International center for Settlement of Investment Disputes. Agreement allowed to vendor to continue its efforts to enforce the previous judgment it obtained against the Uzan family.

The conclusion of the Telsim sale in December 2005 resulted in Motorola receiving \$910m and Nokia receiving \$ 341 m.

- (26) (ibid, June 2007) Under the brand name Aria, Is-TIM launched operations in February 2001 as Turkey's third GSM service. Is-TIM, a joint-venture between İş Bank and TIM, struggled to gain market share and demanded the refund of its license fee. Türk Telekom launched Aycell in December 2001, becoming the fourth GSM provider in Turkey. Services are provided in Northern Cyprus through roaming agreement with KKTC Turkcell and KKTC Telsim. The merger of the two mobile operators resulted in a network redesign to merge the networks of the two operators, resulting in a network of approximately 7,700 base stations. During 2006, Avea invested \$300m network infrastructure. Ericsson was contracted during 2006 for \$85m to expand capacity and coverage of its GSM network.
- (27) (ibid, June 2007)Türk Telekom and Telecom Italia Mobile (TIM) each owned a 40.5 stake in the merged entity, with the remaining 19 percent owned by İş Bank, until July 2006 when Türk Telekom acquired Telecom Italia's stake for \$500m.
- (28) (Budde Communication: Turkey-Convergence, Broadband& Internet Market-Overview, Statistics & Forecasts Report-June 2007)Turkey's first internet connection was established in 1993 between Ankara and Washington DC.
- (29) (ibid,June 2007) Both Doğan Online and DYH have launched a number of initiatives to broaden their service offering low priced PC from AMP in December 2005 with micro financing offered a strategic alliance with a

mail2web in February 2006 to provide a Microsoft Exchange-based free e-mail service.

(30) (ibid,June 2007)Turkey's first internet connection was established in 1993 between Ankara and Washington DC. Star Digital commenced broadcasts in 2000. It was owned by the Uzan Group while Cine Digital+ was owned by Avrupa-Amerika Holding (AAH), a local media and finance oriented holding company.

Cine5, an analog pay TV platform was operational during the 1990s. It was very popular as it held the rights to broadcast live football games. It later lost those rights and fell from favor in the market.

CHAPTER 6
INTERNATIONALIZATION OF COMMUNICATION
IN GREECE

6.1 Telecommunications Sector Liberalization in Greece

Hellenic Telecommunications Organization SA, OTE or OTE SA was established in Athens under the laws of the Hellenic Republic in 1949 and the following to the Legislative Decree 1049/1949. According to this Decree OTE would operate as an autonomous enterprise under the legal status of a private company (SA) owned by a single share-holder, state. Under Law 1049/ 1949 state had guaranteed OTE the exclusive right to administer and exploit all telecom media on wire and radio transmission, local trunk, national and international communications.

6.1.1 Evolution of the Greek Telecommunications Sector
From the Establishment of the Greek Republic to the Early
2000s

Evolution of the Greek telecommunications sector can be considered within four phases. First phase covers from the establishment of the Greek Republic until the early 1980s period. In the 1950s, to provide conformity the rules for allocation of the Marshall funds, Greek government had to prepare medium and long-term plans consisting of four or five year economic development programs which were indicative, but not compulsory. These programs' targets reflected Keynesian economic principles that were also applied in other Western European countries. (Pakos and Paleologou, 2003:62) These policies represented a model for Greece. Main objectives of long-term development planning were to create a strong infrastructure in the sectors of transport, communication and energy; to realize structural changes; to follow efficient employment policy; to provide economic stability; to control balance of deficit and to alleviate regional development disparities, using fiscal and monetary instruments and protecting domestic production mechanisms. During the 1950s, state intervention in the economy was the only way for development target. Since the Greek private sector had no sufficient resources to undertake large scale development projects and to contribute structural transformation initiatives.

In 1963, Greece made an Association Agreement with the EEC. The 1963 agreement was a turning point in Greece's both political and economic structures. Economically it would facilitate transformation of the Greek economy with more efficient and competitive structure by means of new advanced technologies and increasing flow of capital into the country. Politically, the Association Agreement led to strong challenges to the prevailing order established in the 1950s under the supervision of the US. (Tayfur; 2003:63)

Greek telecommunications sector performance over the years and its efforts to develop an advanced infrastructure was constrained by several factors, including inability of state to provide the necessary financial investment for telecom; domestic economic differences in the Greek economy as compared to other European Community members; and permanently bureaucratic climate affecting the organization's activities. Constraints have also delayed the response of the organization to external pressures for change and reforms by the European Commission. (Constantelou, 1993:435)

However, the emerging new political environment was ended by a military coup in 1967. Colonels came to power and again American-oriented policies were begun following in Greece. In August 1974, seven years lasting Junta regime collapsed and Greece left American-oriented policies and began adapting itself into the European-oriented policies. Greece and EEC signed the Financial Protocol in 1975. Through this agreement Greece's participation process into the EEC gained a momentum.

Developments in telecommunications sector showed a little progress throughout the 1970s. OTE followed pricing policies based on cross-subsidization of local calls with the long distance and international calls (revenue-generating operations). This policy did not reflect real costs in telecommunications services. OTE's monopoly position and its high pricing policies, especially in the long-distance and international calls fields, generated very high profits. However, these high profit rates were not allocated to upgrade telecommunications infrastructure. (Yannelis, 2000:876). In the 1970s and the early 1980s, Greek telecommunications infrastructure was the poorest among the EEC members. OTE's earnings were used to subsidize state's budget deficits. Its public sector mentality caused very slow expansion and modernization policy that created obsolete

telecommunications network infrastructure and reduced service quality level. (Constantinou and Lagodakis, 1996: 262)

Second phase includes the period from the early 1980s to the early 1990s. In 1982, PASOK (Pan Hellenic Socialist Movement) won election and came to power. PASOK's victory ended the long ruling period of conservative administrations in Greece. PASOK's first government program mainly focused on necessary institutional and structural economic reform. Papandreou administration was well aware of the limited sources of both the public and private sectors for realizing these economic reform targets. Socialist PASOK regime was seen these reforms as a means for increasing the Greek state's role over the economy, particularly, in telecommunications, energy and transportation areas. (Lyberaki and Tsakaltos, 2002:103-104)

Until the early 1980s, telecommunications sector in Greece exhibited only a little progress due to the economic difficulties and intense bureaucracy delaying decision-making process for necessary policies in order to develop Greek telecommunications system. In the early 1980s, two important developments have changed Greece's telecommunications policies. First development was Greece's EEC membership in 1981. By joining the EEC, Greece gradually began adopting its telecommunications sector to the requirements of the Pan-European liberalization policy. Since 1981, the EU has become the most important actor shaping Greece's telecommunications policies. Second development was worldwide tendency of deregulation and privatization of national telecommunications organizations beginning in the early 1980s. Deregulation process has begun forcing the Greek governments to prepare telecommunications law permitting telecommunications companies to operate in accordance with the global competitive rules and relaxing monopolistic structure.

During the early 1990s, Greek national telecommunications policy was also influenced from the European Commission's initiative targeting to manage a European response to the American superiority in the telecommunications area.

Third stage in the Greek telecommunications sector development covers throughout the 1990s period. In the early 1990s, Commission issued various directives in order to realize full liberalization of European telecommunications market in order to strengthen the EC's telecommunications industry. The EU wished to abolish state

monopolies on the telecommunications services and equipment markets and establish a more liberal status that would allow intra-EU competition which would take place amongst the several carriers. More specifically EU wished to realization of full liberalization of the European voice telecommunications market, both local and long-distance by 1998. (Lyberaki and Tsakolotos, 2002:109). In the late 1990s, EU granted to countries, namely Greece, Ireland, Spain and Portugal, having less developed telecommunications infrastructures extra five year time in order to be able to harmonize their legislative administration and financial function in accordance those of the European countries. As a member state of the EC, Greece had required to follow EU regulations and to enact domestic legislation to EU directives and decisions.

The Commission's approach to the restructuring of the European telecom sector was based on the belief that advanced communications systems could be used as a tool to increase the cohesion of community by solving social and economic problems and by overcoming geographical inequalities. However, uneven economic development of European countries and increasing concentration of economic resources and industrial capabilities in such countries as Germany, Britain and France created a heated debate about the appropriateness of European Commission's telecommunications between the Northern and Southern members of the community.⁽³¹⁾ (Constantelou,1993:441-442)

In the early 1990s, Greece was a very cheap place to make a phone call, cost of local call and monthly subscriptions were among the lowest (but waiting calls for hours) in Europe and in the EU. This policy reduced OTE's profitability significantly. In addition, all Greek governments since 1990 have been struggling to bring down the inflation rate to a single digit number therefore they showed strong tendency to prohibit any increase in OTE's price policy. (Constantinou and Lagodakis, 1996:264)

During the early 1990s, Greek telecommunications infrastructure was one of the poorest in the EU. OTE was still a monopoly carrier and governments showed little efforts to change this monopolistic structure. Partly due to the fact that OTE's earnings had to subsidize the state's budget deficits and partly due to its state mentality, OTE could not manage to allocate sufficient resources for infrastructure modernization projects. This had led to outmoded telecommunications network infrastructure and poor quality of services. In the technical issues, OTE continued to show a bad performance.

The quality of telecommunications services was well below the European average. Other important factor for the poor performance of the OTE and the Greek governments' telecommunications policies was that the vast majority of Greek enterprises were still family business that were unaware of the benefits of information technologies or were unwilling to invest in. In the financial side OTE also registered a bad performance. This situation began changing in the early 1990s through the various EU funds. European Commission allocated substantial financial support for development of telecommunications in Greece through the European Regional Development Fund (ERDF), STAR (Special Telecommunications Action for Regional Development) Program lasting from 1987 to 1991, and subsequent Telematique Program aiming at spreading telecommunications services into the Small and Medium Scale Enterprises (SMEs) and the public domain. In the framework of these assistance programs, the Greek government began restructuring its telecommunications sector by focusing on three interrelated processes. In the first step, government canalized huge amounts of investments to the sector in order to modernize and upgrade telecommunications network (£ 4,8 b was assigned between 1992 and 2000). In the second stage necessary institutional changes would be made for providing harmonization of the Greek telecommunications regime. In the final process OTE would be restructured. (Constantelou, 1993:441) Main aim of the final process was to realize corporatization of the OTE in order to provide further competition in the Greek telecommunications sector.

To this end on 31 July 1992, government enacted a new law concerning telecommunications, Law 2075 "Organization and Operation of Telecommunications Sector". Creators of law tried to include relevant EC rules governing telecom sector in a national regulatory act. The law attempted to define the responsibilities of different bodies for the communication sector and charged the mission of Ministry of Transport and Communication (MT&C) as: creation of the appropriate conditions for the development of Greek telecom at national and international level; provision of the national territory and under competitive conditions of technically reliable and financially reasonable telecom services; the adoption of advanced communication technologies; and the protection of consumers interests. (Budde Communication: Greece-Key Statistics, Regulatory & Fixed Line Telecoms Overviews Report-May 2007)

Responsibilities of the MT&C were establishment of a national telecom policy, modernization of Greek telecommunications legislation; representation of the country in international conferences, the overall allocation and administration of frequency spectrum, decisions about the number of licenses for the provision of services, supervision of type approvals and standardization procedures and creation of a National Telecommunications Committee (NTC) and contribution to this committee's activities. NTC maintained its operations under the supervision of MTC. According to the 1992 law in the use of public network, OTE should allow third parties access to its network. Although the 1992 law was a necessary step to re-regulation, it did not cover much about terms and conditions of competition in the provision of services but, nevertheless, the 1992 Law accelerated privatization process. In this framework, the Greek government officially announced its plans for partial privatization of OTE in late November 1992. (Constantelou, 1993:440-441)

During the 1990-1993 Conservative government period, modernization of telecommunications network with digitalization process exhibited a great progress stemming from increasing OTE's investment program and implementing of EU's Crash Program. However despite the clear development in the quality of telecommunications services in the Athens area, the quality of services in Greece remained poor. (Cologhriou and Constantelou, 1995:316) Conservatives established in 1992 National Telecommunications Commission (EET). However, it did not become operational until 1995.

In 1993, the Conservative New Democracy Party declared its privatization program. In July and August 1993, in accordance with the EU directives and government's privatization plan, OTE began preparing for change. The Conservative government planned to sell of 35 percent of OTE's share to strategic investor and further 14 percent to the company's employees and the general public. Big telecommunications companies like AT&T, Cable & Wireless, France Telecom, NTT and others showed great interest for the government's bid (for the 35 percent share). However, the plan faced strong challenges from Opposition claiming that prices of telecommunications services and unemployment rate in the sector would rise after selling of OTE. In that period, government was under strong pressures coming from

business world wishing to preserve OTE's monopolistic structure. Since these businessmen had significant contracts with the state-owned OTE and they operated largely in domestic communication market. Government and the parliamentary parties wished to keep the current status of monopolistic structure as much as possible and to realize a slow and painless transformation. (Constantelou, 1993:437) In that period, Socialists successfully manipulated anti-government feeling and consequently New Democracy Party lost power in September 1993.

In July 1994, subsequent PASOK government prepared a new reform plan aiming at upgrading the infrastructure of the economy in the transport, energy and telecommunications sector. In the mid-1990s, Greece benefited largely from the EU's funds for realizing this target. In that period, public enterprise reform and the privatization of public enterprises, including Hellenic Telecommunications Organizations (OTE), became a policy priority. In the mid-1990s, the Greek economy exhibited significant performance. This economic boom also affected the Greek telecommunications sector. As a result, OTE was first listed on Athens Stock Exchange in April 1996. In the following year it was traded in the form of Depository Receipts on the London Stock Exchange. The company was also listed on the NYSE in 1998. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007) Greece's economic success registered in the 1990s also affected the performance of Greek equities and bonds in the international markets. For instance, the popularity of the OTE floatation in the US Stock Market was significant. (Moore, 1998:77)

However, despite all of these progresses in the economic structure, the PASOK government's privatization plan failed due to insufficient planning that caused lower market prices for OTE's share in the Stock Exchange than expected. Furthermore, lack of competition in telecommunications sector created uncertainty and suspicion among the entrepreneurs. Despite these inefficiencies, in the mid-1990s, government continued to liberalize its telecommunications sector.

PASOK government revised the 1992/2075 Telecommunications Law in 1994. The modified Law of 1994 provided necessary framework for the establishment of cooperation agreements between OTE and private sector providers, for attracting TNCs

investments, and for encouraging collaborative agreements between domestic Greek companies and big transnational telecommunications corporations. The 1994 Law increased TNCs' interests to the Greek communication market. For instance, IBM Global Network has established a node in Athens, BT and Sprint negotiated their accessions to the Greek telecommunications market. (Cologhirou and Constantaleou, 1995:317) Domestic entrepreneurs sought possibilities for establishing strategic alliances with the OTE in order to overcome barriers imposed by telecommunications regulation and to guarantee their investments. OTE adopted a policy of forming joint-ventures with other Greek and foreign partners to promote advanced communications services in Greece and the Balkan countries. However, the 1994 Telecommunications Law did not permit to remove OTE's monopoly and not to allow other companies to develop their own infrastructures in order to compete with OTE. In the mid-1990s, OTE maintained its dominant player position in telecommunications market with some degree of competition in mobile telephony service. In 1996, Simitis government started an extensive privatization program accelerating privatization of OTE.

In the meantime, in 1997, EU signed Basic Telecommunications Services Agreement (BTS). This agreement required full compliance with basic WTO rules; opening up markets to foreign telecommunications carriers operating in global market. In effect, the BTS agreement has paved the way for removing Greek national telecommunications monopoly, OTE.

In the framework of the full liberalization of the telecommunications sector target, in December 2000 Greece modified the Telecommunications Law of 1994 (Law 2246/1994) with Law 2867/ 2000 Telecommunications Act. The new law defined the principles of the regulatory framework for telecommunications in Greece. It described the general principles for the organizational and operational structures of the Greek telecommunications sector. The Law of 2000 aims at protecting the interests of the customers, developing free competition, securing users' personal data and progressing of telecommunications sector. The new telecommunications act defined EETT (Greek National Regulatory Authority) as an independent regulatory authority having administrative and financial independence. One of the most significant changes in the new telecommunications law is the delegation of legislative powers to the EETT. It is

empowered to impose administrative sanctions on telecommunications providers violating the legal and regulatory rules. OTE was declared subject to Universal Service Obligation (USO) under the Telecommunications Law of December 2000. The incumbent continues to be designated as the universal service provider in Greece. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

The Greek telecommunications market was liberalized in January 2001, but the national incumbent, OTE, has continued to dominate the markets for fixed-line voice, internet, and broadband services. OTE also has a significant stake in the mobile market. The incumbent operator was the exclusive provider of fixed-line voice services until January 1, 2001. (Budde Communication: Greece- Key Statistics, Regulatory and Fixed-Line Telecoms Overviews-May 2006.Report)

Following the liberalization of the Greek telecommunications market, OTE has faced increasing competition in the provision of international telephony services. OTEGlobe began seeking to increase its market share in the Balkans and in other newly emerging markets such as the Middle East, Central Asia and the Caucasus. OTE wishes to become a telecommunications hub in the region. To realize this goal OTE focuses on the marketing efforts and activities on building long-term customer relations with other telecommunications firms and as well as establishing key partnerships in international markets. To this end, OTEGlobe has applied a strategy consisting up of three parts in order to generate new revenue sources. First part is to increase both incoming and outgoing traffic and related revenues. Second part is to raise its market shares and to become a regional telecommunications hub. Final part is to develop strategic alliances. (www.edgar-online.com/ Hellenic Telecommunications Organization SA-OTE)

Greece was the last of the EU-15 nations to liberalize its market in accordance with the 2002 EU regulatory framework, and European Commission had threatened to seek fines from Greece due to the country's complacency in implementing the framework. A new EU regulatory framework for the electronic communications sector was agreed by EU member states in December 2001 and become effective on July 25 2003. The new framework was designed to realize full market liberalization in the telecommunications sector, and to facilitate convergence of telecommunications

technologies, removing boundaries between telecom, computer and satellite networks and, since the beginning of the 2000s, between voice, video and data services (triple play market) in the communications sector. Main aim of the framework is to establish a temporary regulation until markets are operating correctly under technological neutrality and consistency conditions in the internal EU market (In other words, the European Commission and Council have targeted to create a regional telecommunications regime based on liberalization and further competition). The framework consists up of five Directives and an important decision. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

Table 41 summarizes the EU regulatory framework.

Table 41 EU Regulatory Framework

Directive /Decision	Aim
The Framework Directive 2002/21/EC	General framework for regulation of the sector Establishment of objectives for regulators Setting out key procedures for managing the regulatory program Providing a new basis for determining significant market power (SMP)
The Authorization Directive 2002/20/EC	Standardized authorizations to replace individual licenses All types of electronic communication, transmission and services
The Access Directive 2002/19/EC	Consolidation of the position on access and interconnection in the electronic communications market
The Universal Service Directive 2002/22/EC	Setting out the range of services that may be subject to a Universal Service Obligation (USO) including provisions relating to consumers' and Users' rights
The Competition Directive 2002/77/EC	Consolidation of previous liberalization Directives.
Data Protection Decision (e Privacy) 2002/58/EC	Protection of personal data communicated over public networks

Source: Budde Communication: Greece- Key Statistics, Regulatory and Fixed-Line Telecoms Overviews/ May 2007.

[www.europa.eu. int/](http://www.europa.eu.int/) Glossary-Telecommunications or Electronic Communications

The framework has been complemented by the EU Commission with a number of decisions, recommendations and guidelines such as Dir 2002/77/EC deals with conditions of competition in the electronic goods and services markets, Dec 2002/676/EC (the Radio Spectrum Decision) defining a regulatory framework for radio spectrum policy in the EU, Dec 2002/627/EC setting up the European Regulators Group for Electronic Communications Networks and Services, Commission's Recommendation C 497/11.02.2003 for electronic goods and services within the electronic communication market, and Guidelines of the Commission for the market analysis and evolution of the ICT market. ([www.europa.eu.int/ Telecommunications](http://www.europa.eu.int/Telecommunications) or [Electronic Communications](http://www.europa.eu.int/ElectronicCommunications)). These directives aimed at defining rights, responsibilities and procedures for National Regulatory Authorities, creating open and competitive European markets for telecommunications goods and services and strengthening internal market in a converging technological environment. The Commission has defined a deadline for the implementation of the new framework. According to the Commission's deadline plan, all member states had to adopt national legislation to the first four directives by July 24, 2003. For Data Protection directive this period was until October, 31, 2003.

Greece failed to meet the July 2003 target to harmonize the EU's regulatory framework for communications and the EU began violation proceedings against Greece in October 2003. After two warning, the EU took legal action against Greece and the other five members (Belgium, Germany, France, Luxembourg and the Netherlands) at the European Court of Justice for failing to transpose the Access Universal Service, Framework, and Authorization Directives. Commission sent a formal request demanding information about its stage of compliance process with the European Court of Justice ruling that Greece had delayed to implement electronics communication liberalization in its market by the determined deadline of 2003. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007) As a result, the Ministry of Transport and Communications (MT&C) prepared a draft Telecommunications Law in 2003 in order to transpose EU's regulatory framework for Communications; the Access Directive; Authorization Directive; Framework

Directive; and the Universal Service Directive. The new draft Telecommunications Law was published by the MTC for consultation in May 2005.

During 2005, OTE has still maintained its position as the only access network provider in the fixed market. The regulator was also unable to complete its tasks of market analysis and to establish appropriate remedies or review existing remedies in order to provide full liberalization and to encourage competition in most markets. This was particularly felt in the area of broadband, where Greece remains at the bottom level amongst the EU members.

Greece completed transposition of four of the five Directives on January 2006. Transposition does not include Directive 2002/58/EC (e-privacy Decision), for which a law is being prepared separately by the Ministry of Justice. The telecommunications market is regulated by the Telecommunications Law of 2005, which modified its predecessor, the Telecommunications Law of 2000, and came into force in February 2006. The Law finally transposed four of the five Directives on 17 January 2006. Transposition does not include Directive 2002/ 58/2000 for which a law is being prepared separately by the Ministry of Justice. In order to transpose Data Protection Directive, Ministry of Justice is preparing a separate law. In the meantime, the Greek government modified the Telecommunications Law of 2000 with the Telecommunications Law of 2005. The new law came into force in February 2006, therefore, the Greek telecommunications market has been begun regulating in accordance with the provisions of the new 2005 Law. The 2005 Law transposed four of the five EU Directives on January 17, 2006. In the meantime, in January 2006, Greece was the last EU member state implementing the electronics communications directive aiming at encouraging further competition and improvement of consumer service quality. After transposing four of the five main EU directives, Greek government began planning privatization of OTE.

6.1.2 Attempts for Privatization of OTE in Greece

In September 2006, the Greek government announced its plans for privatization of OTE. To this end, in December 2006 Parliament issued a law allowing reduction of the state's shares in OTE to below 33.3 percent, thereby paving the way for sale. Therefore, privatization process gained a significant momentum. Government formed a

Privatization Committee in order to determine consultants for privatization of OTE. Credit Suisse Group, UBSAG and EFG Eurobank Ergasias SA. were chosen as consultants. In January 2007, government charged these consultants with the task of preparing a list of potential investors by March 2007. Conservative New Democracy government was seeking an international strategic investor having technical knowledge that could be transferred to the telecommunications corporation. OTE's investments in the Balkans region have become attractive this operator in the eyes of the potential investors. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

By the end of 2003, the state's share in OTE had fallen to 33.8 percent through several public offerings and issuing convertible bonds. In August 2005, the government re-increased its stake to 48.6 percent. In the following month, it announced that it would float a 10 percent stake which would reduce the government's stake to 39 percent. The government had stipulated that it would not reduce its stake in OTE below 34 percent, the amount required for a blocking minority. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007) (Main aim of this stipulation may provide the government to veto power over strategic decisions and to alleviate security concerns about strategic communication) Table 42 indicates the situation of telecommunications sector in Greece.

Table 42 Telecommunications Sector Structure in Greece

GREECE	2000	2005	High Income Group (2005)
Separate Telecommunications Regulator	Yes	Yes	
Status of Main Fixed-Line Operator (OTE)	Mixed	Mixed	
Level of Competition: International Long Distance	M	C	
Level of Competition: Mobile	P	P	
Level of Competition: Internet Service Provider	C	C	
Government Prioritization of ICT (Scale 1-7)		4.1	4.1

Source: World Bank ICT at a Glance 2005 (P: Partial Competition;

C: Competition; M: Monopoly)

Liberalization attempts have significantly influenced the Greek fixed-line telecommunications and infrastructure markets. In the following subsection developments occurring in these markets will be reviewed.

6.1.3 Fixed-Line Communications and Infrastructure Market in Greece

OTE lost its exclusive right to provide fixed-voice services following liberalization in early 2001 but is still strong in the fixed-line market, with an estimated 73 percent of the fixed-line market in June 2006. Liberalization of telecommunications market has facilitated entrance of a number of fixed-line network operators recently focusing predominantly on the business voice and data and as well as long-distance segments of the market. As a result, by the early 2006 there were approximately 24 authorized public fixed-voice telephony operators, of which thirteen were commercially offering services over a leased or their own network. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007) Nevertheless, there has been some significant progress towards more competition, principally from smaller, cheaper operators including Tellas and FORTHnet. Consequently, OTE's market share has fallen significantly since 2003.

Today, fixed-line telecommunications services in Greece are provided by OTE, Tellas, FORTHnet, Teledom and Vivodi Telecom in Greece.

Table 43 indicates fixed-line operators in Greece.

Table 43 Fixed-line Communication Operators in Greece

OPERATOR	MAJOR SHAREHOLDERS
Hellenic Telecommunications Organization (OTE)	State (38.7 %) International Institutional Shareholders (40%) Greek Institutional Shareholders (12.1%) Other Shareholders (9.2%)
Tellas (Since August 2001)	Tellas (50 percent minus one share) Wind Telecomunicazioni (50 percent plus one share)
FORTHnet (Since October 1995)	As of June 2006 Novator Equities (38.65%) Cycladic Catalyst Master Fund (11.94%) FORTH (11.7%) Talpa Beheer (Dutch) (5.82%) In January 2007 Novator Equities, Cycladic Catalyst Master Fund and FORTH sold a 21 percent of total share to domestic and international investors

“Table 43 (continued)”

Teledome (Since 1999)	Teledome
Vivodi Telecom (Since March 2001)	Vivodi Telecom

Source: Budde Communication: Greece-Key Statistics, Regulatory & Fixed-line

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OTE is the largest Greek telecommunications company in Greece and a major telecommunications company in Europe. The OTE Group plays an active role in the Balkans and the Middle East through the acquisition of substantial stakes in foreign telecommunications companies. (Budde Communication: Hellenic Telecommunications Organization-2003) OTE has begun operating internationally to acquire sufficient profits from these regions. It owns a number of significant subsidiaries, including the largest Greek mobile operator, CosmOTE, and Greece’s largest ISP, OTEnet. It is the largest Greek company on the Athens Stock Exchange and has had a strong presence in the international stock exchanges of London and New York. Since January 2001, it has operated in a fully competitive environment in Greece.

OTE was established in 1949 as a state-owned monopoly. State retained a significant stake as of September 2006 (38.7 percent), with international institutional shareholders (40 percent), Greek institutional shareholders (12.1 percent), and other shareholders (9.2 percent) making up the remaining owners. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

In 2002, OTE management began restructuring OTE, establishing four main business units. These are: International (OTE International) is responsible for the management of the Group’s international wireless assets and as well as the coordination for all Group telecommunications activities outside Greece. Wire- line Greece is responsible for serving retail, corporate, and wholesale customers with wire-line services in Greece. Mobile is responsible for the management of the Group’s mobile activities in Greece and abroad. Internet is responsible for the management of the Group’s internet activities in Greece and abroad. (Budde Communication: Hellenic Telecommunications Organization Report-2003)

Table 44: shows OTE’s major subsidiaries.

Table 44 OTE's Subsidiaries

Subsidiary	Major Shareholders	Services	International Operation
CosmOTE	OTE (33 %) OTEnet (67%)	Mobile services, 3G network, value-added services, news entertainment, transaction, and communication services through a mobile communication portal, MyCosmos	Stakes in Albanian Mobile Communications AMC; Bulgarian mobile Communications Cosmo Bulgaria; Macedonian Mobile Communications; MTS
OTEnet	OTE (80%)	Internet products and services	Stakes in RomTelecom (54.01%) Telecom Srbija (20%) Cosmorom in Romania (70%) AMC(82.5%) Armentel (90% until 2006. In November 2006, Armentel was sold to Russian operator Vimpelcom)
OTESat/ Maritel		Whole spectrum of telecoms services Value-added services for the Greek and global maritime industry Integrated telecommunications solutions	
InfOTE		Improving OTE's publications and electronic directories Providing products for customers advertisements needs	
OTEConsulting	OTE (100%)	consultancy services in telecommunications and information technology services including: corporate strategy; investment appraisal; development of sales networks; research and market analysis; network design; telecommunications project management; technical studies; studies of the regulatory framework; organizational development projects; and in-house training.	Active in the Balkans, the Mediterranean, the middle East, and the Black Sea

“Table 44 (continued)”

CosmoONE	OTE, CosmOTE, The national Bank of Greece, the Alpha Bank and Diinekis IT	Horizontal e-market Total solutions for applications of electronic trade between businesses Electronic auctions between companies through website www.b2bauctions.gr Vertical e-market-electronic bill, logistics, travel services, community services etc is also planning	
OTEGlobe	OTE (100%)	Solutions for international connections as well as value-added services	
Hellascom		Digital networks, mobile telephone networks card phones etc.	

Source: Budde Communication: Hellenic Telecommunications Organization and Greece-Key Statistics, Regulatory & Fixed-line Telecoms Overviews-May 2007; Budde Communication: Hellenic Telecommunications Organization Report-2003

As part of its international investment strategy, OTE Group invests in the Balkans, Black Sea and the Eastern Mediterranean countries, thereby strengthening these regions’ cultural, economic and historical ties with Greece. To coordinate its activities in the region, OTE established a wholly-owned subsidiary OTE International Investments in early 2001.

Table 45 shows OTE’s international activities in the GEMED.

Table 45 OTE’s International Activities

Country	OTE’s Share
Albania –AMC	82.5% through its mobile arm CosmOTE
Bulgaria-Globul	OTE 100%
Jordan - Trans-Jordan Telecommunications Services	OTE and its subsidiary Hellascom International (50%)
Romania-RomTelecom	OTE (54.01%)

“Table 45 (continued)”

Serbia –Telecom SrbiJa	OTE (20%)
Yemen-Yemen Payphone Company Joint-Venture	OTE (10%) Hellascom (15%)

Source: Budde Communication: Greece-Key Statistics, Regulatory &Fixed-line Telecoms Overviews-May 2007

In March 1998, OTE acquired a 90 percent stake in ArmenTel, In November 2006; OTE sold its 90 percent share of Armentel to Russian-based operator VimpelCom. In Ukraine OTE is active in the field of wireless communications, through its participation in the Ukrainian Wave, a joint-venture for the installation and operation of wireless fixed and mobile telephony network in the region of L’viv West Ukraine. According to Ukrainian Wave’s business plan the company’s commercial operation was planned early in the second half of 1999. In December 1999, the joint-venture commenced its commercial operation with a six months delay. ⁽³²⁾

Tellas was established in August 2001 as a joint-venture between Greek Power Public Corporation (PPC) and Italian telecom corporation Wind Telecomunicazioni which owns 50 percent plus one share and 50 percent minus one share. PPC was renamed as Tellas in November 2002, declaring its intention to become the largest alternative operator. (Budde Communications: Hellenic Telecommunications Organization Report-2003)

In the first quarter of 2006 Tellas introduced “Izi” residential services and “Dikthotheite II” program funded by the ERDF and the Greek government to promote usage of their business ADSL service in Greece.. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

Hellenic Telecommunications and Telematics Applications Company, ForthNet, was established in October 1995 by the Foundation for Technology and Research (FORTH) and Minoan Lines. It was listed on the Athens Stock Exchange in 2000 and began offering fixed-line services in January 2002. The operator provides voice, data, and value-added IT services. By June 2006, Novator Equities was FORTHnet’s majority shareholder, with a 38.65 percent stake. Other significant shareholders included Cycladic Catalyst Master Fund (11.94 percent); FORTH (11.7 percent); and Dutch firm

Talpa Beheer (5.82 percent). In January 2007, Novator Equities, Cycladic Catalyst Master Fund and FORTH sold a 21 of total share capital to domestic and overseas investors. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

Teledome was granted a telecommunications license in 1999, becoming one of the first privately owned telecommunications operators in Greece providing fixed telephony services, internet services and prepaid calling and internet cards.

Vivodi Telecom was founded in March 2001 as a private telecommunications operator, providing low telephone rates for OTE subscribers through call-by-call, CPS or prepaid cards, as well as for business customers. It was the first company in Greece to develop a privately owned DSL network in Athens, Thessaloniki and other major cities. Vivodi also offers ADSL nationally as an ISP on OTE’s ADSL network, holding approximately 15 percent of the Greek ADSL market. Vivodi is installing a fiber-optic metropolitan network in Athens to provide triple play (Video, voice, data) services. The first stage of implementation was completed at the end of 2005. (Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007)

Rapid changes arising in communications field have increased telecommunications infrastructure investments, both national and international, in Greece. The country has showed great efforts to upgrade its telecommunications infrastructure.

Fixed-line market liberalization has resulted in a number of infrastructure expansions. One important result in the national infrastructure development has been a gradual decline in the teledensity levels in Greece. The number of fixed-lines has been falling since 2000, down 1.2 percent year-on-year. (ITU Statistics: Main Telephone Line-2005) Table 46: shows teledensity level in Greece.

Table 46 Teledensity Networks in Greece-2005

Country	Main Telephone Lines (Per 100 Inhabitants)	
	2000	2005
Greece	53.57	56.75
Europe	39.74	40.66

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Table 47 shows national telecommunications network infrastructure in Greece.

Table 47 National Telecommunications Infrastructure in Greece

Operator	Infrastructure Network	Contracts
OTE	<p>ISDN Lines</p> <p>Wireless Local Loop Services in remote areas</p> <p>Sub-marine cable networks linking off-shore islands to various points on the mainland and to each other</p> <p>Asynchronous Transfer Mode (ATM) backbone (Hellas Stream) for the business market</p> <p>IP/Multi-Protocol Label Switching (MPSL) network</p> <p>Broadband services</p>	<p>OTE awarded contract to ZTE (Chinese-based telecom equipment supplier) to provide Digital Subscriber Line Access multiplexer (DSLAM) products for broadband and data services in Greece and for OTE's European subsidiaries in February 2006.</p>
Tellas	<p>1,800km fiber-optic national backbone</p> <p>Synchronous Digital Hierarchy (SDH) network</p> <p>IP/MPSL network connected to the Athens Internet Exchange (AIX) and the number of international IP transit carriers</p> <p>Fiber-optic Metropolitan area Network and Local Multipoint Distribution Systems (LMDS)</p> <p>Ethernet-based NGN solution</p>	<p>Tellaw awarded Italian equipment vendor Italtel a contract in November 2006</p>

“Table 47 (continued)

FORTHnet	<p>85 km of fiber-optic cable linking municipalities of Metamorphosi, Philadelphia, Nea Ionia, Nea Heraklio, Kiffissia, Holandri, Ilioupoli, Daphne and Maroussi, with work construction underway in the municipalities of Athens and Thessaloniki will be interconnected. The operator’s network is connected to the Athens Internet Exchange (AIX).</p> <p>ADSL2+ equipment is being installed to allow FORTHnet to offer fast broadband and convergence services.</p> <p>LMDS networks</p>	
Teledome	<p>Wireless network Network Operations Center (NOC) located in Athens and eight satellite stations Backbone network linking NOC with the satellite stations and interconnection point and as well as operator’s own node in London. LMDS Networks</p>	
Q-Telecom	LMDS Networks	

Source: Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007

OTE aims to develop its position as a regional telecommunications hub. To this end through its subsidiary Hellascom International OTE involves various telecommunications infrastructure projects.

Table 48 indicates Greece’s international Telecommunications Infrastructure.

Table 48 International Telecommunications Infrastructure in Greece

Operator	Submarine Cable Networks	Connecting Points	Satellite Networks	Connecting Points
OTE	<p>Black Sea Fiber-Optic Cable system(BSFOCS) (since the end of 2000) (OTE holds 33% of the project)</p>	<p>Bulgaria (Varna), Ukraine (Odessa), Russia(Novorossiysk) It extends to North/Central/ Eastern Europe to the Mediterranean Sea and the Caucasus and beyond</p>	<p>EUTELSAT INTELSAT INMARSAT HELLASSAT (Hellas-2) (Since September 2003)</p>	<p>Atlantic and Eastern Indian (via Thermophile Station) Greek language services around the world.</p>
	<p>SEA-ME-WE3 (South East Asia-Middle East-Western Europe) (OTE's investment is 2.4%)</p>	<p>starts from Western Europe (Germany, the UK) and runs through the Gibraltar Strait to the Mediterranean Sea (Italy, Greece, Cyprus Island), it continues from the Suez Canal to Asia (India and Singapore) and then it splits in two parts: with one end landing in Japan and the other reaching Australia.</p>		
	<p>ADRIA-1 (since February 1997) (OTE holds 38.5% of the venture)</p>	<p>Greece (Corfu), Albania (Dures) and Croatia (Dubrovnik), providing special rates for connections to Germany and to SE-ME-WE3 under the transnational agreement Trans-Adria-Corridor (TAC).</p>		
<p>TAT-12/13 (OTE holds 2.3% of the venture)</p>	<p>TAT-12/13 (Transatlantic) is a ring structured transatlantic cable system with landing points in France, the UK, and USA</p>			

“Table 48 (continued)”

	GWEN	Consists of a Greek domestic ring, a submarine ring, the Italian Ring, and Western European Ring		
	FLAG and Med-Nautilus (Med-Nautilus is controlled by Telecom Italia, OTE is co-owner)	Italy-Greece-Turkey-Israel		
	DWDM-SDH	Greece-Italy, a part of terrestrial European network		
	Fiber-optic links (since December 2006) (Operated by the telecom division of Bulgarian gas distributor Overgas)			
	EMOS-1 (Since December 1990)	fiber-optic cable system in the Eastern Mediterranean, linking Italy, Greece, Israel, and Turkey		
	Keşan- Dedeğaç (Alexandrooulis) submarine cable (Since August 1999) (Financed by NATO)	Turkey-Greece		
Tellas	Greece-Italy submarine cable			

Source: Budde Communication: Greece-Key Statistics, Regulatory and Fixed-Line Telecommunications Overviews Report-May 2007

New infrastructure investments, both national and international, have been directed towards business’ communication needs. All operators have made infrastructure

investments mainly in Athens-Thessaloniki points and from there these networks connect Greece to major trade and finance centers, such as New York and London, of the world.

Liberalization of telecommunications has significantly influenced the Greek mobile market. In the following subsection structure of the mobile market in Greece will be examined.

6.2 Mobile Market Liberalization: Internationalization of the Greek Mobile Communication Market

Greece has competitive mobile market structure. A number of mobile telephony firms are operating in the Greek mobile market, focusing predominantly on mobile voice, mobile data and mobile content services. Table 49 indicates numbers of mobile subscribers in Greece.

Table 49 Mobile Subscribers in Greece

Country	Mobile Subscribers (Per 1000 People)	
	2000	2005
Greece	543	904
High Income Group		835

Source: World Bank ICT at a Glance 2005

Mobile market in Greece is saturated, reducing possibilities for revenue growth through new subscriber additions. Saturated mobile market has begun forcing to focus increasingly on data services, encouraging prepaid users to become to postpaid mobile voice and data services users. Despite recent significant investments in 3G networks, mobile data usage remains low in Greece. But, nevertheless, mobile operators offer increasingly various mobile data and content applications services. (Budde Communication: Greece-Mobile Market-Overview& Statistics Report -May 2007)

Greece granted its first GSM licenses in 1992 to Panafon and TIM Hellas. Subsequently, OTE's subsidiary CosmOTE launched a GSM 1800 network in 1998 and quickly gained a significant market share, growing faster than other operators into first place in 2001. Q-Telecom launched in 2002. As a result, the high penetration rate has increased competition, putting pressure on voice tariffs. In July 2006, CosmOTE, Vodafone and TIM Hellas/Q-Telecom were designated as possessing Significant Market

Power (SMP) for voice market. (Budde Communication: Greece-Mobile Market-Overview & Statistics-May 2007 Report)

Table 50 indicates major mobile operators in Greece, after liberalization of telecommunications sector.

Table 50 Major Mobile Operators in Greece

Operator	Major Shareholders
TIM Hellas and Q-Telecom (merge)	Troy GAC Telecoms (100%)
Vodafone Greece	Vodafone Group Plc (99.8%)
CosmOTE	OTE (67%) Publicly held shares (33%)

Source: Budde Communication: Greece-Mobile Market-Overview & Statistics Report-May 2007

Previously known as Stet Hellas, TIM Hellas was the first licensed mobile operator in Greece. It launched services in July 1993 and is owned by Troy GAC Telecoms, a holding company owned by private equity firms (Finance sector likely aims at making financial and commercial transactions secure, simple, fast and inexpensive way) Texas Pacific Group and Apex partners. The equity firms acquired TIM Hellas from Telecom Italia Mobile (TIM) in April 2005 for € 1.1b for a 80.87 percent stake before acquiring all remaining shares for € 263.5 million the following November 2005. Operations are provided under the TIM Hellas brand under a license agreement with Telecom Italia.

Recently, TIM Hellas is concentrating on the high income group corporate customers and is encouraging its customers to become high-speed speed data services users.

TIM Hellas also expanded, through acquisitions, acquiring alternative operator Q-Telecom in January 2006 for €350m. During the acquisition process, Texas Pacific Group and Apex Partners stated that they wished to keep TIM Hellas and Q-Telecom separate. ⁽³³⁾ TIM Hellas was put up for sale in September 2006 for €4b, a sale that was later cancelled in December 2006. Since a suitable buyer could not be found. The UAE's Etisalat withdrew from the bidding process in December 2006. Turkcell's bid was founded as too low at under €3.5b. Other interested parties interested in TIM Hellas' sale were included: private equity firm Providence, Egypt's Orascom, Kuwait's Mobile Telecommunications Company (MTC). Morgan Stanley and Lehman Brothers were

chosen to handle the sale. (Budde Communication: Greece-Mobile Market-Overview& Statistics-May 2007 Report)

Vodafone Greece was launched in July 1993 as Panafon. (Budde Communication: Vodafone Plc. Report- April 2007) Vodafone Greece is 99.8 percent owned by Vodafone Group Plc. Vodafone bought France Telecom's 10.85 percent share in December 2002, increasing its ownership to 62.73 percent. During 2003, Vodafone increased its shares to 64 percent in early 2003 and then in December 2003 it bought a 9.433 percent share from Intracom and announced a public offer for all remaining shares not owned. As a result, its ownership increased to 99.8 percent by end-March 2005. It has increasingly focused prepaid customers, encouraging them to become and high-speed data users. The operator was looking at possibilities of forming a partnership with ISP Hellas OnLine in December 2006 in order to increase its revenue-growth opportunities, trying to expand its operations into fixed-line services area. (Budde Communication: Greece-Mobile Market-Overview& Statistics-May 2007 Report) Vodafone involved in a scandal named "Greek Watergate", (The Guardian, London Monday, February 6,2006) after it discovered its network was being used to eavesdrop on the country's political and military elite. ⁽³⁴⁾

CosmOTE was launched in March 1998 and by April 2006 it was 67 percent owned by OTE, the remaining shares are publicly held. As the domestic mobile market approaching saturation, CosmOTE has expanded into the Balkans region and became international, acquiring 82.5 percent of the Albanian Mobile Communications Company (AMC) in August 2000. In July 2005, CosmOTE acquired 70 percent of Romanian Mobile operator CosmOTE Romania (Cosmorom), later followed by 100 percent of Bulgarian mobile operator Cosmo Bulgaria Mobile (Globul) in August 2005. It has also acquired 100 percent of Macedonian operator Cosmofon. International expansion still exists on the CosmOTE's agenda. CosmOTE achieved 98.99 percent ownership of telecommunications retailer Germanos in December 2006, after earlier acquiring a 42 percent stake in October 2006 to increase its ownership stake to 62.75 percent. Germanos operates 547 retail outlets in Greece, Romania, Bulgaria and Macedonia. (Budde Communication: Greece-Mobile Market-Overview& Statistics-May 2007 Report)

Table 51 indicates CosmOTE's in the Balkans Peninsula.

Table 51 CosmOTE's Investments in the Balkans

Country	Mobile Operator	CosmOTE's Share (%)
Albania	AMC	82.5
Romania	Cosmorom	70
Bulgaria	Globul	100
Macedonia	Comofon	100

**Source: Budde Communication: Greece-Mobile Market-Overview & Statistics
 Report-May 2007**

As a result of voice tariff reductions and saturated mobile voice market, mobile content and applications market become increasingly important as a new revenue-generating areas. Despite the falling price of 3G services and continuously improving capabilities of handsets providing a wide range of content and application, usage of mobile content and application is still very low in Greece.

Table 52 indicates mobile voice, data, and content services market in Greece.

Table 52 Mobile Voice, Data, and Content Services in Greece

Mobile Operator	Mobile Voice Services	Mobile Data Services	Contracts	Mobile Content Services
TIM Hellas	Prepaid cards	Short Messaging Service (SMS) Multimedia Messaging Service (MMS) Wireless Application Protocol (WAP) General Packet Radio Service (GPRS) Wideband Code Division Multiple Access (WCDMA) Mobile TV Mobile Video Streaming Services Black Berry Services	TIM Hellas contracted with Nokia in August 2006 in order to launch 3G Radio Network services	Mobile sales application allowing mobile sales people: to interact with their office IT sales systems to place orders, control stocks, financial transactions, and track sales statistics

“Table 52 (continued)

Vodafone Greece	Prepaid cards	(SMS) (MMS) (WAP) (GPRS) for its contract and business customers Mobile Video Streaming Services Black Berry Services	In the mid-2003 Vodafone Greece contracted with Ericsson and Siemens to provide core network technology, engineering, consultancy, and network management services. Services were launched in August 2004.	Vodafone live!, an integrated multimedia platform targeted primarily at the young adult segment. Available content includes videos, Java games and full track music, tracks from record companies BMG, EMI, Sony Music and Warner. Business-related applications include a vehicle management solution, which allows tracking vehicle or people via Vodafone’s GPRS network and satellites
CosmOTE	Prepaid cards	(SMS) (MMS) (WAP) (GPRS) WCDMA i-mode Black Berry Services for corporate customers. CosmOTE offers BlackBerry enterprise solution, which integrates with Microsoft Exchange, Novell Group Wise and IBM Lotus Domino and Works with existing enterprise systems to offer push based, mobile access to e-mail and other corporate data.	CosmOTE contracted with Nokia for the delivery of Radio Access Delivery equipment. In addition, Nokia will provide implementation project management and support services. CosmOTE launched an agreement with the Japan DoCoMo to launch i-mode services. It also agreed to launch the service through its subsidiaries in Albania, Macedonia, Bulgaria, further expanding DoCoMo’s European footprint.	MyCosmoview offering a range of service categories, including sports, travel, astrology and entertainment Video streaming services i-mobile content MSN-cmpatible mobile messaging 3D Games Mobile Banking
Q-Telecom	Prepaid cards			Mobile e-mail, ring tones, images, variety of text-based information services (news, finance, weather and sports)

Source: Budde Communication: Greece-Mobile Market-Overview & Statistics

Report-May 2007

Despite, the entire progressive leaps continuing since the mid 1990s in the Greek telecommunications sector, Greece can not manage to reach its final aim; to become a telecommunications hub in the Balkans. Since, despite its potential, the Balkans market is very insignificant in the eyes of the European entrepreneurs and since, some countries are unsustainably small in terms of population and economic activity and in terms of development levels in the Balkan Peninsula. The small economies of the region operate in a politically fragmented and in some cases hostile environment. This situation further aggravates their problems of inefficiency and making it unsustainable in the new globalized and competitive economic environment. Several Balkan countries despite being neighborhoods and despite similarities in development levels, culture, and consumer preferences, have insignificant trade relations. As a consequence of this process intra-regional and cross-border trade in the Balkans is very limited. Lack of trade relations among Balkan countries pushes them further inter-industry type of specialization with the technologically more advanced Western European countries, which is unfavorable for their industrial development, rather than intra-industry specialization contributing their industrial progress. (Petraikos, 2003: 95) All of these factors severely restrict the target of Greece to become a telecommunications hub in the Balkans.

Since the early 1990s, Greece has gradually begun involving in Information Society and its complementary part of information economy process, creating necessary legal frameworks for the ICTs, including internet and broadcasting technologies. In the following subsection, developments in Greece's broadband and internet market will be studied.

6.3 Broadband and Internet Market in Greece

Compared with other EU members, Greece has focused, to a large extent, on traditional manufacturing and services sectors with insufficient R&D and investments in new products and production processes fields. As a result, today, there is a small rate of diffusion of new technologies and a relatively small ICT sector in the country. Internet usage among the Greek companies remains also low. The country's broadband penetration was the lowest among the EU-25 members as at March 2006. Despite the emergence of the information economy and the new conditions and pressures generated

by it, many of owners and general managers of SMEs do not use the internet at all and do not have websites, declaring that they do not interest internet. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts Report- May 2007)

In addition, in Greece the development of value-added services is rather slow this can be partly explained by low PC density and high cost of services for end users. (Iosifidis and Leandros, 2003: 74-75). In order to struggle these negative conditions in the ICTs area Greece has increasingly focused on convergence and broadband markets since 2005. In this framework, the dominant telecommunications operator OTE has begun shifting its strategies, focusing on internet and broadband technologies and on convergence services such as Voice over Internet Protocol (VoIP) and triple play (voice-video-and data). These technologies will make money in the near future. To this end, it has invested in promoting broadband offerings. This investment policy together with reduced access costs resulted in strong growth in broadband market in 2006. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts Report- May 2007)

Greek governments' efforts, OTE's new investment policies together with reduced access in ICT costs, and, more importantly, EU's efforts in order to form a regional ICT regime, emphasizing the potential of ICTs to overcome obstacles to social and economic development resulted in strong growth in broadband and internet market. All of these factors have gained significant impetus for designation of new ICT policies in Greece in order to adapt the requirements of Information Society and its byproduct of emerging information economy. To this end Greece has attempted to create necessary conditions for Information Society and internet economy, focusing strategies on improving broadband access as well as creating a supportive legal framework harmonized with that of the EU.

The 1999 White Paper (updated in 2002) Greece in the Information Society: Strategies and Actions was the first paper relating to ICT issues. Paper encouraged broadband infrastructure development and affordability of on-line access services, raising the quality of public services through universally available and cost-effective broadband. Improving quality of public services on-line (e-services) were seen as

necessary components for business infrastructures which could be developed in conjunction with business partners. In the framework of the implementation of the e-Europe 2005 Action Plan, the EU had supported the Greek government's Operational Program for the Information Society (OPIS) covering the period between 2000 and 2006 through the Community Support Framework. The OPIS Program aimed at involving public sector into the internet economy through various e-government projects designed to exchange information and services with citizens, business, and other government organizations improving efficiency, convenience and better accessibility of public services. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts Report- May 2007) Table 53 shows ICT sector performance in Greece.

Table 53 Some Indicators of ICT Usage in Greece and in the High Income Group Countries (2000-2005)

ICT Sector Performance	2000	2005	High Income Group 2005
Internet users (per 1,000 people)	92	180	527
Personal computers (per 1,000 people)	69	89	579
ICT expenditure (% of GDP)	4.4	4.1	4.5
E-government readiness index (scale 0-1)		0.59	0.77
Secure Internet servers (per 1 million people, 2006)	10.6	40.0	444.4
Schools connected to the Internet (%)		59	99

Source: World Bank Statistics ICT at a Glance 2005

According to the table, Greece's ICT performance was well below the average of the High Income Group countries.

Data for January to March 2006 from the National Statistics Service (NSS) showed that: 37.6 percent of Greeks used PCs while 28.9 percent accessed the internet either at home or at work. PC usage was significantly higher for children aged 12-15, with 90 percent using a PC. Internet household penetration remained at 23 percent while 55.77 percent of Greeks did not find the internet useful and hence avoided it. Another 10.6 percent mentioned cost factors for not using PCs. The most popular on-line activity

for the 16-19 age group was gaming and music; sending e-mails for the 20-24 age group; and seeking information on products and services for the 25-69 age group. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts Report- May 2007)

According to the other data prepared by research firm Nielsen/Net Ratings found that between July and November 2005 approximately 67 percent of Greek internet users accessed the internet from work. According to the statistics from the Observatory for the Society of Information: 20.8 percent of households used the internet and 17.9 percent used it on a regular basis; approximately 84 percent of internet users benefited internet for obtaining information about products and services, 60 percent for entertainment, 4 percent for finding information on hospital and health issues; and 5 percent for e-commerce services. In the business sector, approximately 92.8 percent of companies employing more than 10 people had internet access while 55.6 percent had their own websites. Although 80 percent of companies used on-line government services, only 25 percent of public services were accessible on-line. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts Report-May 2007) Table 54 indicates the aims of internet usage in Greece.

Table 54 Internet Usage Motivation in Greece

Activity	Internet Users (%)
Seek information on products and services	78.9
Send e-mails	58.5
Read newspapers/magazines	48.0
Seek information on travel and accommodation	40.2
Gaming/Music	38.7

Source: Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007

In order to spread broadband usage in March 2005, government announced a three year, between 2005 and 2007, program aiming at spreading of e- government projects in all administrative levels (central, regional administrations, municipalities). Greek citizens can access public service information and administrative procedures through the Citizen Service Center (or KEP in Greek) website, provided that these projects can be put into action. In early 2006 Citizen Service Centers began spreading around Greece, as a part of Adriani Program. These centers are linked together by an IP

network and use a platform called e-kep to file citizens' requests; to create a relevant e-directory, electronically register KEP mail; to manage citizens' requests; and to monitor their progress. The e-kep platform is accessible through the centers of the internet and supports real-time on-line transactions between citizens and administrators. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

Greece's ISP market is dominated by a handful of ISPs offering both dial-up prepaid and postpaid internet services. Free dial-up internet services are also available.

Table 55 indicates major ISPs in Greece.

Table 55 ISP Market in Greece

ISP	Owner	Services
Mediterranean Broadband Services (Since November 2000)	FORTHnet (100%)	Leased line integrated services, Digital Network (ISDN), ADSL, and dial-up internet access services.
OTENet	OTE (95%)	Internet access, VoIP solutions targeted towards businesses are sold through OTENet's subsidiary Voice @ net.
Hellas On Line (HOL)	Comstar, Russian operator, (51%) Intracom (49%)	Internet access and value-added services to residential and corporate customers.

Source: Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007

FORTHnet provided services through Mediterranean Broadband Services, a joint-venture established in November 2000 in partnership with Telecom Italia subsidiary, Stet International Nederland. FORTHnet held a 60 percent stake in the joint-venture and later acquired its partner's stake in 2003. During 2005; Hellas On Line was totally acquired by Intracom which later sold a 51 percent stake in HOL to Russian operator Comstar.

Broadband penetration in Greece in early 2006 was the lowest in the EU. OTE holds 74 percent of the market. In order to improve and facilitate accessibility to services, Greek government introduced various projects in late 2006 to expand broadband infrastructure across the country in partnership with private sector companies. To this end government allocated € 210m for encouraging private sector investment. The government has exhibited great performance to expand broadband services in the

country, encouraging a widening of broadband use in public sector services especially in areas such as e-government, tele-medicine, and tele-education. However, despite all efforts, in early 2006 Greece remained at the bottom amongst the EU members for the provision of broadband. But, nevertheless, the immature Greek broadband market attracts investments. For instance, one of the OTE's rivals FORTHnet made significant investments in 2005 in its internet network. Vivodi Telecom, one of the first telecom operators to provide advanced voice and data communication services to residential and business customers in Greece has also accelerated its activities to compete with the former monopoly operator (OTE). (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

In order to encourage broadband penetration and to provide cost-efficient ADSL internet access to all higher education students, government launched a bid to encourage broadband penetration, the government launched the DIODOS project in 2005, offering the high capacity GRNET educational network service at a below average retail prices through cooperation with private ISPs. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007) Therefore, private ISPs have begun including education area. In October 2006, the government declared its plan for broadband development for 2007 as a part of its Digital Strategy for 2006-2013. Plan aims at developing broadband infrastructure as well as content and services. To this end government approved an infrastructure development plan, allocating €59m for metropolitan networks in 75 municipalities; €42m for wireless broadband networks in 1400 municipalities; €21 m for creating wireless access hubs for use by businesses; and €210m for broadcasting private sector investment to ensure affordable services to the public; €36m for broadband content and service initiative; €10m for education on the importance of broadband in local communities; and additional €11m for raising the publics' general awareness of broadband services. The EU provided €210m fund for encouraging private sector investments to create cost-efficient broadband services to the public, stipulating that this private sector investments would certainly not cause unfair competition. With the €210m EU fund, in December 2006 government contracted major ISPs Hellas Online, FORTHnet, and Southern Cyprus Telecom Authority were awarded contracts to expand broadband infrastructure.

(Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

Despite all these efforts, various factors still continue to restrict stronger broadband growth and discourage investment by alternative operators. These factors include: difficult conditions for small market; geographical composition not favorable to network development; poor business demand in rural areas; absence of services that will create demand; insufficient regulatory framework which adjusts and defines the market for broadband services and encourages competition; lack of preparation in supporting demand of broadband services by OTE.

Table 56 shows Broadband Market in Greece.

Table 56 Broadband Market in Greece

Operator	ADSL Services (Since June 2003)	ADSL2+
OTE	Integrated solution for Small and Medium Enterprises (SMEs) and target customer groups through the development of content and VoIP services	
Tellas	ADSL through LLU in the Athens metropolitan area	
HOL		ADSL2+ services in Athens.
FORTHnet	Simple user-friendly installation kit comprised of an ADSL modem with Wi Fi capabilities It plans to offer double play and eventually triple play services to its broadband subscribers	ADSL2+ access equipment in its metro area network that is currently under construction.
Vivodi Telecom	LLU-based ADSL services	In August 2005, Vivodi Telecom contracted Ericsson to supply 10,000 ADSL2+ lines. Contract was completed by the end of the year. Vivodi Telecom planned to rollout (bir ürünün yeni pazarlara girişi) a broadband network using Ericsson's Ethernet DSL Access solution and to deliver triple play services
TelePassport Hellas		Broadband services and solutions based on Symmetric DSL (SDSL) technology

Source: Budde Communication: Greece-Convergence, Broadband & Internet

Market-Overview Statistics & Forecasts Report- May 2007

Since the late 1980s, deregulation of state broadcasting monopoly through new broadcasting acts and development of new information and communication technologies have accelerated commercialization and concentration of media ownership process in Greece. This process together with efforts for growing broadband penetration has accelerated convergence market development, introducing triple play services (voice-video-data transmissions) into the Greek communication market. In the following subsection, developments taking place in convergence market in Greece will be reviewed.

6.4 Convergence Market in Greece

Developments in the late 1980s have strongly affected the Greek broadcasting sector. The need for pluralism in TV, increasing pressures for privatization of audio-visual media as a result of neo-liberal policies, the need for obtaining different news and analyses from various different sources, the intense pressures from the powerful interest groups, mainly publishers and radio station owners etc, for commercialization of media, and the fundamental restructuring of media industries worldwide due to the expansion of new communication technologies have forced governments to remove state monopoly and to open the Greek audio-visual media sector to non-public media outlets.

Deregulation process in Greece started with radio. After 1986 municipal election, three mayors from the New Democracy Party allowed first non-state radio broadcasting, removing the state monopoly for the first time. This de facto situation forced the PASOK government to change the state monopoly for radio and sought to rationalize the organization of state broadcaster. (Papathodorou and Machin; 2003:44) Subsequently in 1987, the Parliament was issued a broadcasting media law creating radical policy changes in broadcasting. The 1987 law paved the way for the abolishing of state monopoly over broadcasting. Soon, new stations started spreading all over the country as local authorities, political parties and commercial interests sought to gain a strong stake in the broadcasting field.

In June 1989, government enacted a law providing licenses to private local TV stations. The 1989 Law created a new regulatory body, the Greek National Council for Radio and Television (NCRTV) in order to supervise the media sector. However, the Council's extreme politicization and subordination to the Minister of Information has

rendered this body entirely ineffective. (Papathodorou and Machin; 2003:44) TV deregulation in Greece occurred as a result of the outcome of strong pressures from newspaper owners who wanted to have a stake in the new market. The process was resulted in concentration of information in the hands of the few numbers of publishers, recently focusing on the triple play market.

Meanwhile in October 2006, The European Commission formally requested Greece adopt a new framework for broadcasting services, imposing that failure to transpose the EU broadcasting framework into national law risked the broadcasting sector suffering from a lack of competition. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

Since CATV structure in Greece is virtually non-existent due to its high costs, Digital Terrestrial TV (DTTV) is not considered commercially efficient, and immature IPTV resulting mainly from insufficient high capacity bandwidth, the market development for digital TV largely depends on the growth of digital satellite services offering cost-effective universal coverage. Today, satellite-based digital pay TV market is limited and can afford no more than one or two operators. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

Table 57 shows the structure of satellite-based digital TV market.

Table 57 Satellite-based Digital Pay TV Market in Greece

Operator	Ownership	Service
Netmed Hellas (Since 1994) Active in both Greece and Southern Cyprus	Netmed NV Group which was 74.9 percent owned by South Africa-based multinational media company Naspers as at March 2006	Pay-TV services
Multichoice Hellas (Since 1999) under the Nova Brandname	Netmed NV Group which was 74.9 percent owned by South Africa-based multinational media company Naspers as at March 2006	Pay TV services. Approximately 50 channels were offered, 44 of which are Greek or subtitled in Greek. It has leased two transponders on the satellites Hot Bird 2 and Hot Bird3 (covering the entire Europe and the Mediterranean Basin)

Source: Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007

A third satellite based pay TV operator Alpha Digital launched in October 2001. It acquired a limited number of subscribers before it went bankrupt and ceased operations in September 2002. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

In February 2006, TelePassport Hellas announced €23m three- year collaboration with Chinese-based ZTE Corporation to spread triple play services in the Greek market. ZTE will provide TelePassport necessary equipment. TelePassport Hellas planned to expand its network with 36 nodes to expand coverage to 70 percent of the Greek population. Initially an IPTV service will be provided in Athens and Thessaloniki, which will expand to cover the whole of Greece in 2007. (Budde Communication: Greece-Convergence, Broadband & Internet Market-Overview Statistics & Forecasts- May 2007)

SUMMARY

Most of Greece's telecommunications market is considerably less developed than that of Western European countries. The Greek telecommunications market was liberalized in January 2001 but the national operator OTE dominates the markets for fixed-line voice, internet and broadband services. The operator also has a significant stake in the mobile market. Plans to privatize OTE proceeded in September 2006 when the Greek Privatization Committee decided to launch a new privatization plan.

The mobile market is serviced by four network operators, three which have launched 3G services. The market is saturated, reducing increasingly revenue growth possibilities through new subscriber additions. Consequently the operators are working on increasing Average Revenue per User (ARPU) levels, encouraging prepaid users to become post-paid services users and introducing mobile content and data to customers. The competitive mobile market has also led consolidation, with two operators merging, TIM Hellas and Q Telecom, as well as another, CosmOTE, has expanded internationally, penetrating mainly into the Balkans region.

Internet use was very low compared to Western European standards until 2005 when the government undertook initiatives in order to provide broadband growth. Despite all of these efforts, broadband penetration in Greece remains the lowest in the EU. The broadband sector is dominated by ADSL network since no cable broadband in

the country. ADSL penetration is, however, rising as the OTE and other operators increase their efforts to establish ADSL infrastructure network and improve services. Their performances increased significantly the number of ADSL subscribers in 2005 and 2006 in Greece. Usage of €210m EU funds in late-2006 increases hopes about improving broadband access network infrastructure in rural areas and ensuring access is not restricted to the cities, guaranteeing unrestricted broadband access.

Growing broadband penetration has led to the introduction of convergence services, through satellite-based digital pay TV services. In February 2006, Telepassport Hellas contracted with Chinese-based ZTE to launch IPTV services into the Greek convergence market by the end of 2007.

NOTES

⁽³¹⁾ Constantelou, N., (August 1993). Liberalizing Telecommunications Markets Political externalities in the Greek case, *Telecommunications Policy*: 431-445. The debate on the Community's approach to liberalization and competition resulted from unequal level of demand and different expectations of the developed and less developed regions. It has been argued that guidelines for the proposed changes in the sector had been designed according to the establishment of social and economic conditions of the industrially advanced countries. According to the less developed countries of the Union, regulatory changes were in favor of competition triggered by the increased demand of business users for advanced services which would not be remedy to the particular problems of the less favored and peripheral regions. These differences are reflected in national policies. The Northern European approach considered competition and liberalization of the telecommunications market as significant tools for improved industrial performance. Aim was to support the interests of the large corporate users by introducing competition in the supply of advanced services. More conservative the Southern approach stemmed from moderate domestic industrial performance and national economies based on Small and Medium Level Enterprises (SMEs). This perspective claimed that the new communication technologies would not provide solutions to compensate the effect of the centralization of economic and political power in the hands of the northern countries. (Constantelou,1993:441)

Gillespie, A.; Kevin, R.,(1989). Geographical Inequalities: The Spatial Bias of the New Communications Technologies. *Journal of Communication*, 39 (3):7 Southern approach argues that the "tyranny of geography" had led new forms of differentiation and inequality.

(Constantelou, 1993:442)Greece shared the Southern approach not only for geographical but also for economic and cultural reasons which have differentiated it within the European Community. In that period, this argument was very suitable for the Greece's geographical condition in that Greece remains a remote region having no border with any other EU member state. This remoteness hindered significantly Greece to install advanced telecommunications

network in its territory and prevented extension of its telecommunications network to the developed regions of the community.

(32) Budde Communication: Greece-Key Statistics, Regulatory & Fixed Line Telecoms Overviews Report-May 2007. As a result of this delay, the joint-venture faced cash flow problems in the year 2000. Re-financing the partnership could not be possible. Since the other partners refrained to provide additional funds in the venture's capital proportion to their holdings. Following these negative developments, OTE is reviewing its participation in the consortium.

(33) Budde Communication: Greece-Mobile Market-Overview& Statistics-May 2007 Report. Q-Telecom was launched in July 2002 as the mobile arm of Greek IT Company Info-Quest. It operates a GSM 1800 network and also offers fixed-line services, but its strategic focus is on the mobile market in particular, the prepaid segment.

In October 2005, Infoquest received an offer for Q-Telecom from Troy GAC Telecoms, a holding company led by Apax and Texas Pacific, the owners of Greece's third largest mobile operator TIM Hellas. In January 2006, the acquisition was completed. .

The two mobile operators are unlikely to be merged in the near future. Since Q-telecom is continuing to exist as an individual operating unit with its own management structure.

The European Commission approved the purchase in January 2006, having concluded that the deal would have no negative impact on fair competition in the country.

(34) Costas Tsalikidis, a 39 year-old electronic engineer and was Vodafone Greece's head of network design, was found hanged in his apartments in March 2005. His death created a shock in Greece and ascertained a scandal at Vodafone Greece.

The Guardian, London, Monday, February 06, 2006, p.6, Shortly before Tsalikidis' death, which was never conclusively proven a suicide, Vodafone Greece had discovered that someone with inside access to the cell phone company switches had been bugging more than 100 high-rank officials, including the Prime Minister of Greece, his wife, Mayor of Athens, civil rights activists, the

head of the “stop the war” coalition, journalists, the heads of the armed forces, secret services, judiciary and Arabs based in Athens from June 2004 until March 2005. Most of the bugging is believed to have taken place around the time of 2004 Athens Summer Olympics in August, when Greece focused intensively on security. No arrests have been made in the case and suspects mentioned in European press reports focused on foreign intelligence agencies, including the US National Security Agency. Vodafone Greece tried to exculpation itself from the investigation of the crime by switching off the accounts and then erasing crucial phone and physical entry log data that might have provided significant clues about the eavesdroppers.

Vassilis, Prevelakis and Diomidis Spinellis, “The Athens Affair” published in IEEE (Institute of Electrical and Electronics Engineers) Software, 24(4): 20-21, July/August 2007. The two researchers explored the methods used by the surveillance operation as well as analyzed the weakness in the security of the cellular switching systems. According to the authors shortly before the bugging of the cellular system began, the telecom equipment maker, Swedish-based Ericsson, had provided a software update to the computerized switches that route cell phone calls. But Ericsson supplied only a portion of lawful intercept system (the system prevents eavesdropping) which had not been purchased by Vodafone Greece. Therefore, the control interface software module was not included in the cellular system. However, the modules were necessary to produce clone phone calls. Eavesdroppers were able to control the modules inside the system, while effectively hiding from other Vodafone Greece technicians. Thus, the clone phone codes permitted someone to install at least 14 “shadow” cellular phone accounts. Consequently, whenever a call was made or received by one of the selected people, one of the secretly created cell phone accounts could listen in.

CHAPTER 7
INTERNATIONALIZATION OF COMMUNICATIONS
IN ISRAEL

7.1 Telecommunications Sector Liberalization in Israel

Roots of the modern Israeli state are based on small Jewish groups who had been settled by Western powers in Palestine in the late 19th century. Under rule of the British Mandate (1917-1948), the small and externally supported Jewish economic units further strengthened. The Jewish groups established strong linkages with the European colonial states, particularly with Britain. In accordance with its commitment as mentioned in the Balfour Declaration of 1917 that promised to create a Jewish nation-state in Palestine, the British Mandate provided significant privileges to the small Jewish groups. These concessions facilitated adaptation of Jews to local conditions. (Abed, 1986: 39)

In the 1930s, the Jewish units increased their efforts to intensify political and economic linkages with the powerful European economies. The Jewish groups benefited largely from capital inflows transferred by the Jewish communities living in Europe. During the pre-1948 period, the Histadrut, Jewish labor union, was the main instrument for realization and implementation of the Zionist aim in the region. British Mandate permitted Histadrut to develop its quasi-state institutions in accordance with the rules of Mandate's administration. The Histadrut benefited largely from Zionist capital flow in order to establish its own economic enterprises, Hevrat Ovdim, and to provide job opportunities for Jews only. (Grinberg, 1991:221) In the pre-Israeli state period the Histadrut undertook almost all state functions from defense to health to education, trade, industry, agriculture etc. It also contributed to development of Jewish capitalism by providing organized labor united in Zionist ideal. (Rosenne et.al, 1997: 94)

By the Second World War, the Jewish settlers expanded their industrial investment and production capacities. They successfully used this advantage to establish a modern Israeli nation-state in Palestine and at the same time they used this capacity to realize transformation of the small Jewish economy from a limited production level to a more balanced industrializing economy.

The Israeli state was established in 1948. Structure of the state was based upon principles combining with the traditions of Jewish law and practices and social

democracy. (Today the structure has been replaced with Western-style democracy understanding giving primacy to individualism, liberalism and free-market economy). (Rosenne et.al, 1997:90) Since its establishment Israeli state has changed its orientation from Britain to the US and has developed a complex relationship with America.

Since the end of the 1960s, Israel has been perceived as the only reliable and vital partner in the region by the Western alliance in general, and by the US in particular. Its ability to resist Soviet Bloc's influence in the Middle East, its political stability, pro-Western tendency and logistic potential constituted a strategic and valuable asset in the hands of the US in the Middle East. (Abed; 1986:52)

Within this framework, the maintenance of militarily superior Israel was the most important element of America's security policy in the region. The increasing American-Israeli relations accelerated the militarization process of the Israeli society. As a result of this process, greater share of Israeli national resources began to be allocated to defense sector.

Development of telecommunications sector in Israel can be reviewed within the two periods. In the following subsections phases of telecommunications sector will be discussed.

7.1.1 Evolution of the Israeli Telecommunications Sector:

From the Establishment of the Israeli State in 1948 Until the Early 2000s

With the establishment of the Israeli State in 1948, policy makers faced a serious economic problem; absorption the huge wave of Jewish immigration which came from the Middle Eastern countries (Mizrahim). The only way to provide basic needs for the Mizrahim population was intensive government intervention in the economy. (Zilberfarb; 2005:13). This policy was also included telecommunications area. In the establishment process, Israel's telecommunications infrastructure was operated by the state. All telecommunications activities, except telecommunications equipment manufacturing, were controlled by the Ministry of Posts. The Civil Service Commission, Ministry of Finance Budget Department and Comptroller General had a great influence over telecommunications industry. As a consequence of this policy, an excess demand with increasingly growing waiting lists in order to access fixed-telephony lines emerged.

The supply shortage in the fixed telephony market forced policy makers to prefer the business sector in the allocation of new line installations. The demand for fixed-line telephone services was highly concentrated in urban areas especially in Tel Aviv and surrounding region. (Rosenne et.al.;1997:93) “Development towns” where Mizrahim populations were settled by bureaucrats of Mapai, predecessor of the Labor Party, far from centers of the Jewish populations, Jewish culture and economic opportunity were much less benefited from telecommunications services.

In the years between 1952 and 1954, Mapai government launched a new economic policy for struggling inflation problem. As a consequence of this policy, fixed-line telephone installation rate was reduced in conjunction with the framework of government policy for diminishing public expenditures. This anti-inflationist program was successfully managed and created a pre-boom period lasting from 1954 to 1960 in the Israeli economy. In the pre-boom period, government funds were directed towards telecommunications network expansion in Israel. The years between 1960 and 1965 were a “boom” period in country’s economy. In that period, unemployment rate reduced, industry began developing and economy began progressing towards industrialization. During the 1960s, a gradual liberalization in the Israeli economy took place with import liberalization policy. (Zilberfarb, 2005:14). In that period, demand and supply of telephone lines grew with lags in line with the Ministry’s performance to meet and supply the economy’s requirement. (Rosenne et.al., 1997:93-94) During the boom period, government funds were directed towards building up the infrastructure within the borders of Israel. As a result, a conspicuous increase in the demand for telephone lines occurred.

In 1966 first sub-marine cable to Marseilles – in that period, France was still an important partner for Israel-was laid in Israel. (Rosenne et.al., 1997:93-94) With the construction of submarine telephony system, the Israeli firms obtained a very useful tool that would likely to facilitate their international operations. This enhanced expectations for increased traffic, such as increasing international trade possibilities.

In 1966, the Israeli economy entered a recession period. After 1966, the growing rate of GDP slowed down, per capita income declined slightly and gross capital formation was substantially negative. The 1967 Arab-Israeli war was resulted in

invasion of West Bank and Gaza Strip by Israel. Invasion provided cheap Palestinian labor force which was already accepted to lower wages. As a consequence of Israeli invasion of the West Bank and Gaza Strip, economically weak Arab workers became the secondary workforce employed by private enterprises and Hevrat Ovdim. This shift permitted transfer of Israel's own labor force towards more advanced technology. The period between 1967 and 1972 was characterized by a resurgence of economic growth which averaged nearly 14 percent per year. Refreshing investments in infrastructure by using low cost Arab workers led to the boom period in the Israeli economy. (Abed; 1986:44) In 1970 Ministry of Posts changed its name to Ministry of Communications (MoC). The MoC showed great efforts to expand the country's telecommunications capacity. (Rosenne et.al., 1997:94) In 1972, Israel joined the INTELSAT network system and completed its modern satellite earth station. Very speed development occurring in communication satellite technology area in the early 1960s and the US' economic and technological superiority in the new satellite technologies possibly led Israeli decision to join this international communication satellite system.

The October 1973 War, represented another significant milestone in the development of the Israeli society and economy. Arab success in the war, particularly Egypt's victory over Israeli forces along the Suez Canal led to the crucial conclusion that Israel had to focus on its national resources in order to maintain Israel's military superiority. After 1973, Israel increased its efforts in order to develop high technology, mostly defense-related industries especially, in the fields of microelectronics, communications technology, weapons systems and aircraft manufacturing. In this way Israel managed to establish and develop high-tech industries directing mainly defense sector's requirements. At the same time, this transformation in the Israeli economy was provided by a massive inflow of American capital to the country. The US permitted Israel to acquire and exploit the advanced technological systems through American-Israeli joint-ventures, like Lockheed Martin (combined Lockheed, Martin Marietta, Loral and much of the military lines of General Dynamics and General Electric), Boeing (which acquired Mc Donnell Douglas and Rockwell's aerospace defense electronics), Raytheon (which added E-Systems and the military arms of Texas Instruments and Hughes), General Dynamics and Northrop Grumman (which combined Northrop and

Grumman along with the military lines of LTV and Westinghouse) (Nitzan and Bichler; 2002:269). As a consequence of these developments and expansion in the size of the defense sector, military spending has turned into a major important fiscal tool in the hands of the government in order to stimulate the economy and to provide economic well-being by the governments. (Mintz and Ward, 1989:523)

The May 1977 election ended the Labor Party period that until then had been the dominant ideological and political force in Israel. The right-wing Likud Party, a coalition of composed of the Herut Party focusing mainly on foreign policy and security issues and Liberal Party having liberal economic vision, won the election and formed a new government. Likud government launched its “New Economic Policy” and began applying pro-business policies to stimulate investments in the Israeli economy. Likud Party’s economic policy was mainly based on a free market program, abolishment of foreign currency control, and creation of a floating currency system. Second part of this program targeted sales of government companies which figured predominantly in the field such as energy, banking, communication, transportation, minerals, water, manufacturing and tourism. (Zilberfarb, 2005:15)

In telecommunications sector the Ministry of Communication (MoC) maintained its monopoly position. The structure and level of communications services tariffs were mainly determined by governments, aiming at generating maximum income from these communications activities. Relatively high level of access charges discouraged new line demands from citizens and these costs have burden on Israeli citizens which had already had telephony line. Usage services were also quite above real costs. In the pre-1982 period telecommunications sector acquired significant profits but large part of them were transferred to the government treasury in order to contribute to other economic activities and only small portion of these resources were allocated to upgrade Israeli telecommunications infrastructure and services capacities. Telecommunications policies were mainly focused on the supply of basic telecommunications services and international services in order to break Israel’s geo-political isolation. (Rosenne et.al; 1997:100)

In the early 1980s, Likud government launched a new telecommunications policy. This policy recommended that telecommunications sector should be managed by

a quasi-private enterprise working under free market conditions in order to provide profits, to eliminate shortages, to prepare necessary conditions for both domestic needs and international trade expansion. This telecommunications policy was strongly influenced from similar tendencies in telecommunications industries throughout the world in that period. To this end Bezeq, Israeli Telecommunications Organization, was established in 1984.

During the Likud Party period, pro-business and expansionary economic policies and invasion of Lebanon created an inflationary boom that would sign a financial and economic crisis. (Abed; 1986: 44) The negative conditions in the Israeli economy continued to grow until 1984 economic crisis, ending Likud Party power. The result of the September 1984 election created a Labor-led coalition government whose main task was to stabilize the economy. New government began taking necessary measures in order to end the negative effects of the economic crisis. To this end government decreased expenditures and began less involving in the economy and gave priority to pro-business policies in order to attain a sustainable growth level. To support its economic policy, Labor Party government adopted many reforms that would reduce its involvement in the economy and would raise competition in markets controlled by the big monopolies many of which were controlled by the Histadrut. (Zilberfarb; 2005:17) New government initiated a consultation mechanism with the US in order to prepare a stabilization program which would end a twelve year period of very high inflation rate, low growth and chronic balance of payment crisis. The US experts were sent to Israel by the Reagan administration's Secretary of State George Schultz, who personally undertook the task of salvation of the Israeli economy, provided consultation to the Israeli authorities in order to prepare stabilization program which would improve these economic conditions. (Abed; 1986: 48)

In the early 1980s, Israeli telecommunications policy had been strongly affected from the Reagan administration's strong pro-business policies promoting competition in all economic sectors, including telecommunications, and suggestions of the 1984 Maitland Report. In conjunction with these factors, in 1984 new Telecommunications Law was approved by the Knesset, Israeli Parliament. The 1984 law provided necessary legal and regulatory framework for the creation of Postal Authority. In 1984, the

regulatory and operational functions in Israeli telecommunications were separated. Thus first step towards liberalization were initiated. Regulatory issues remained the responsibility of the MoC. Operational functions transferred into the newly created telecommunications operator, Bezeq. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

The second stage of telecommunications reform in Israel began in 1988 with a recommendation by First Boston Corporation, the US investment bank hired by the government to assist privatization of Bezeq. (Rosenne et.al, 1997:97) In the second stage, customer-premises equipment, private switch boards, mobile phones and international long-distance services were liberalized. Privatization process intensified in the early 1990s due to a boom in the Stock Exchange market during 1992 and 1993 period, facilitating selling of SOEs to private investors.

From the 1990s to the early 2000s, some significant organizational changes took place and substantial steps had been taken towards implementation of free market economy, diminishing government involvement in the economy and crating more favorable environment for the private sector. Significant reforms were implemented in capital and foreign exchange markets in maintaining budget discipline in the privatization process. (Zilberfarb, 2005:19) In the 1990s, the MoC appointed several committees to recommend policy for privatization of national telecommunications operator, Bezeq. In the following subsection, privatization process of Bezeq will be reviewed.

7.1.2 Privatization of the Bezeq: Internationalization of Telecommunications in Israel

In this framework, in the early 1990s, a committee of ministers announced its decision about selling up to 25 percent of state's shares in Bezeq to the public through privatization process in order to gradually transfer its equities to private sector. According to the decision, a part representing 1.25 percent equity would be offered to Bezeq employees. The decision reflected intention to reduce government intervention in telecommunications sector through market forces, complementation of neo-liberal changes in labor laws, the tax structure and the capital market. Main aim of the ministerial committee's decision was to revive the economy, mobilizing domestic

resources and providing efficiency in Israeli telecommunications sector and, more importantly diminishing dependency on foreign capital. As a consequence of the committee's decision a privatization package was offered to public in September 1990. (Rosenne et.al., 1997:100)

In May 1991, government appointed the Boaz Committee. The Committee recommended encouragement of competition in several areas of telecommunications such as customer-premises equipment, value-added services, data communications, mobile telephony and international services; removal of monopoly position in any infrastructure related areas; and in basic telephone services, entrance of Bezeq into competition in the provision of services through its subsidiaries. Boaz Committee also recommended that the 1982 Telecommunications Law should be modified. In conjunction with these recommendations, on May 14 1991, Israeli government started a second privatization movement by offering release 25 percent of its ownership in Bezeq. This offer resulted in excess demand and a high price per share of Bezeq. In July 1991 Israeli government decided to continue the sale of its share in Bezeq by reducing government's holdings around 28 percent. Government began seeking strategic alliance possibilities with foreign telecommunications operators. (Rosenne et.al,1997:100)

In June 1992, Labor Party came to power. Privatization of public enterprises were among the top priorities of Labor government in order to provide maximum efficiency through business-oriented management policies which would be expected to stimulate economic activity and provide higher growth rate of national economy. Labor Party administration formed a special ministerial committee for privatization as a part of this policy. Committee headed by Prime Minister focused mainly on the issue of Bezeq's privatization. It took into consideration two methods. One was continuous floating government shares to the general public in the Israeli Stock Market. Second way was to sell 14 percent of government's control share to a strategic partner preferred major telecommunications operators from abroad or from major Israeli corporations. The latter way created heated discussions since there was a great resistance to permit control of foreign telecommunications operators over strategic telecommunications infrastructure. As a consequence of these oppositions government decided to maintain its control over 51 percent of Bezeq's shares, the remaining 49 percent would be offered

in the Israeli Stock Exchange. According to the government's plan privatization of would be realized after complementing liberalization of the Israeli telecommunications sector. (Rosenne et.al,1997:101) In July 1992 MoC issued a policy paper supporting the main ideas presented by the Boaz Committee and suggesting measures to encourage competition in the relatively small Israeli market place.

However, competition recommendation and limitation of Bezeq's activities and investments and recommendation of competition were met cool by some parties, amongst them Bezeq management, worker unions and the industrialist lobby. They created strong public pressures. These pressures forced Labor Party to change Minister of Communication. The new minister appointed a new committee, the Moaz Committee in order to review the Israeli telecommunications sector.

The Moaz Committee prepared its report in September 1992. This report supported the Boaz Committee's recommendations, emphasizing strongly liberalization of the Israeli telecommunications sector must be completed before privatization of Bezeq. Committee suggested that Bezeq holding company should control competitive services provided by its subsidiary companies. Recommendations of the Committee were approved by the Kneset in January 1993. Israeli Parliament's approval created necessary competitive environment for both cellular telephony and international telecommunications services. (Rosenne et.al, 1997:99)

Further liberalization sector movement in Israel started with the March 1994 MoC Bezeq general license reflecting generally the Moaz Committee's recommendations. It represents a starting point for a new regulatory regime in Israeli telecommunications. To implement this new structural regulation regime, Bezeq formed its subsidiary companies to provide services other than domestic, fixed wire-line telephony such as cellular and international market sectors and Bezeq transferred its non-monopoly activities into subsidiaries. In 1995 four major subsidiaries were formed: Pelephone (50% owned by Bezeq, 50 % by Motorola Israel) providing cellular services; Bezeq-Bit (100% owned by Bezeq) providing residential and small business terminal equipment; Bezeq-Kol (100% owned by Bezeq) providing business enterprise telecommunications systems and customer-premises wiring, and Bezeq International Projects (100% owned by Bezeq) undertaking overseas activities, through partnering in

telecommunications projects in Europe and Asia. Therefore, Israel determined Bezeq's corporatization strategy in order to better operate under competitive conditions. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

As a result of these privatization efforts in 1995, British Cable & Wireless acquired from the public 10.1 percent of ordinary share capital of Bezeq and became a major shareholder and having seat on Bezeq's board. (Rosenne et.al,1997:101). Therefore Bezeq involved into de-nationalization process.

In July 1997, two privately owned operators, Barak and Golden Lines, were licensed to provide international calls in addition to Bezeq. Therefore, domestic long-distance fixed-line communication market was first opened to competition in June 1999, ending officially Bezeq's fixed-line services monopoly. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

Privatization of Bezeq started with the government approval of selling 50.01 percent Bezeq shares to an investor in August 2000 but the process was not realized until the publication of a tender in November 2001. In the meantime, in March 2002, the Minister of Communications appointed a public committee, known as Kroll Committee in order to formulate recommendations for opening fixed-line communications to further competition. In August 2002, Committee submitted its recommendations to the Minister and in a detailed document issued in September 2002. In the framework of the Kroll Committee recommendations, the Telecommunications Law was amended in June 2003 so that from September 2004, a special licenses for providing fixed-line services could be granted. The amended Telecommunications Law stipulated that license applicants must be at least 20 percent Israeli owned. Initially government stipulated that only foreign telecommunications companies or strategic investors would be allowed to bid for privatization of Bezeq but later included financial investors from Israel and abroad. Thus, finance sector has involved telecommunications sector. The deadline applications to take part in the tender were 13 February 2002 and the MoC announced that six groups had applied. By the end of the year most applicants had withdrawn their bids. There was then no further progress until late 2003. . In September 2003, Bezeq announced that the

state- owned operator would be privatized. (Budde Communication: Israel-Key Statistics, Telecommunications Market and Regulatory Overviews Report- May 2007)

Prior to the 2005 privatization government owned a 46.38 percent share of Bezeq. It had remained majority state owned until November 2003 when the sale of a 5.25 percent share on the open market realized, reducing the government’ share below 50 percent. In early June 2004, government offered a further 5.67 percent shares of the Tel Aviv Stock Exchange. Domestic institutional investors were the main buyers. The share owned by the state fluctuated as new share were issued. (Budde Communication: Israel-Key Statistics, Telecommunications Market and Regulatory Overviews Report- May 2007) Final privatization process was commenced in late August 2004, with eight interested parties. They were reduced to three in late March 2005.

Table 58 indicates tender consortia and joint-ventures for Bezeq.

Table 58 Tender Consortia for Bezeq’s Privatization

Privatization Manager	Consortia
Ministry of Finance	<p>Ap-Sab-Ar Holding; a consortium led by Pegasus Capital and comprised of Israeli firm Polar Investments,</p> <p>La Compagnie Financiere Edmond de Rothschild Banque, and David Azrieli’s Canit Hashalom Investment</p> <p>a consortium led by Whitepoint Communications that included US investment funds Canyon Capital and Clarity Partners, Israeli-based Insurance firm Phoenix and France Telecom as a strategic investor.</p>

Source: Budde Communication: Israel-Key Statistics, Regulatory & Fixed-

Line Telecommunications Overviews –May 2007

During privatization process France Telecom was prevented from bidding in April 2005 by the Israeli state based on the advice of security agency (MOSSAD) due to its partnership relations with number of Arab telcos (telecommunications corporations) and subsequently France Telecom had to left the Whitepoint Consortium. France Telecom would acquire 3 percent of Bezeq’s share, in case of the Whitepoint consortium won the tender. Three consortia were later reduced to two on May 1, 2005 when the Whitepoint consortium announced its withdrawal as it could not fulfill the requirements set by the Government Companies Authority. Privatization process stipulated that 10

percent of the share capital and 19 percent of the voting rights in the winning consortium had to be owned by an Israeli company. Privatization of Bezeq was concluded on 23 May 2005 when the Israeli Ministry of Finance completed the sale of a 30 percent stake in Bezeq, with a two-year option to acquire an additional Apax-Saban-Arkin Holdings, a consortium comprised of Apax Partners, Saban Capital Partners and Mori Arkin.

Table 59 indicates the situation of telecommunications sector in Israel.

Table 59 Telecommunications Sector Structure in Israel

ISRAEL	2000	2005	High Income Group (2005)
Separate Telecommunications Regulator	-	No	
Level of Competition: International Long Distance	C	C	
Level of Competition: Mobile	C	C	
Level of Competition: Internet Service Provider	C	C	
Government Prioritization of ICT (Scale 1-7)		4.9	4.8

Source: World Bank ICT at a Glance 2005 (P: Partial Competition; C: Competition; M: Monopoly)

A more independent National Communications Authority has been planned since the early 2002, when the MoC appointed a planning team to develop the Authority. According to the plan, the MoC's responsibilities include: formulating telecommunications policies; developing telecommunications infrastructures; supervising Bezeq and other telecommunications service provider; supervising the Postal Authority; setting and auditing Bezeq and postal tariffs; managing spectrum allocations; regulating and supervising cable TV services and tariffs; and approving usage of telecommunications equipment. The Ministry's charter is to encourage competition, increase investment, raise employment rates, and provide a wider range of quality services at lower prices. (Budde Communication: Israel-Key Statistics, Telecommunications Market and Regulatory Overviews Report- May 2007)

After liberalization of the Israeli telecommunications market, a number of alternative operators were granted licenses in order to provide competitive conditions in

the fixed-line voice market. In the following subsection, developments occurred in the Israeli fixed-line and infrastructure market will be studied.

7.1.3 Fixed-Line Communications and Infrastructure Market in Israel

Despite of all legal frameworks and regulations, Bezeq has maintained its dominant position in the domestic fixed-line voice market. HOT Telecom and Voice of Internet Protocol (VoIP) operators have only small shares in the fixed-line telecommunications sector (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007). But, nonetheless, all of these legal regulations have created a competitive international fixed line voice market and recent mergers have created strong players.

Table 60: indicates ownership of incumbent operators in Israel

Table 60 Ownership of National Telecom Operator in Israel

Operator	State's Share (%)	Major Investors
Bezeq	16.38	Ap-Sab-Ar Holdings (30%, and has a two year option to acquire 10.66% of shares) A Group of Banks (17.75%) Publicly traded shares (35.87%)
HOT Telecom	-	Golden Lines (41 %) Tevel (32 %) Matav (27%)
Bezeq International		Bezeq (100%)
Internet Gold- Golden Lines / Smile Communications	-	Internet Gold (100%) (Eurocom owns a controlling share of Internet Gold)
Barak-Netvision	-	IDB Group through its subsidiaries Discount Investment Corporation, Elron, and Clal Industries
Xfone 018	-	Xfone Inc of the USA

Source: Budde Communications: Israel Fixed-Line Market & Infrastructure- Overview & Statistics May 2007

In the international fixed-line voice market, since 2004, there have been six competitors: Bezeq International; Barak; Golden Lines; Internet Gold; Netvision; and Xfone. But mergers are in process which will leave four competitors in the market: Bezeq International; the Barak-Netvision Group; the Internet Gold- Golden Lines Group, and Xfone. Bezeq estimated its market share around 32 percent at end 2006; Golden Lines' market share was around 30%. Barak was the market leader in the same

period. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

Established in 1984, Bezeq is Israel's main telecommunications provider. In 1994, Bezeq was reorganized to provide service in market sectors other than domestic fixed-line telephony through its subsidiaries.

Table 61 shows Bezeq's subsidiaries in the 2000s.

Table 61 Bezeq's Subsidiaries

Parent Company	Subsidiary	Operations	Major Shareholders
Bezeq	Pelephone Communications Ltd	Mobile Telephony	Bezeq (100 %)
	Bezeq International Ltd	International Telephony ISP- owns ISDN-NET and Trendline Broadband Service Provider-owns 42.57% stake in internet portal Walla	Bezeq (100 %)
	DBS Satellites Services Ltd.	DBS TV Services	Joint-venture between Bezeq (49.8%) and Eurocom and others providing DBS service (50.2 %)

Source: Budde Communications: Israel Fixed-Line Market & Infrastructure- Overview & Statistics May 2007

Bezeq's subsidiaries include: Pelephone Communications Ltd. Bezeq became the 100 percent owner of mobile operator Pelephone in August 2004, buying the 50 percent share previously owned by the US-based Shamrock Corporation. Bezeq International Ltd, a wholly-owned subsidiary, responsible for the Group's international telecommunications network. It is also a large ISP and a broadband service provider. It owns a 42.57 percent stake in internet portal Walla. It entered the ISP market in early 1999, acquiring two large ISPs: ISDN-NET and Trendline. DBS Satellite Services Ltd, branded YES, a joint-venture between Bezeq (49.8 percent), Eurocom and other providing DBSTV services. In February 2006, Bezeq sold its satellite operations to an unnamed company for US\$ 9m. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

HOT Telecom is a limited partnership consisting up of the three companies providing triple play services; voice, video and internet. In November 2003, HOT was

granted a license for the provision of fixed-line domestic services, including voice telephony. HOT began offering telephony services on 25 November 2004.

Bezeq International was established in 1996 and is a fully-owned subsidiary of Bezeq. It offers international voice calls services, dial-up internet services and broadband based on ADSL and cable services. In December 2004, Bezeq International received a marketing trial license to provide VoIP. This license transformed Bezeq International into a direct competitor with its parent company Bezeq. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

Internet Gold, through its subsidiary of Smile Communications Ltd, a Wales-based consultancy offering services in marketing communications, had acquired 100 percent of its competitor Golden Lines from Fishman Holdings, Israel's largest private investment group. Takeover was completed at end 2006 and now Internet Gold is in the process of merging two companies. Golden Lines' internet access and international telephony operation have been transferred to Smile Communications. Eurocom Communications, an Israeli based company offering telecommunications and telephony services, owns a controlling share of Internet Gold. Internet Gold is a group of communications companies providing internet access and related value-added services and international telephony. It began providing internet access in 1996. It received a license to provide international telephony services in June 2004. Internet Gold received a license to provide VoIP local telephony services in February 2007. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

Barak and Netvision are in the process of merging their operations. Both, together with Globecall, are owned by US-based IDB (Inter-American Development Bank) Group through its subsidiaries: Discount Investment Corporation, Elron and Clal Industries. Barak and Netvision were providers of international telephony and internet access services. Together they will hold around one-third of both markets. (Budde Communication: Israel-Key Statistics, Telecommunications Market and Regulatory Overviews Report- May 2007) ⁽³⁵⁾

Xfone 018 is a subsidiary of Xfone Inc of the USA. It was established in April 2004 and began providing international fixed-line services in December 2004. It received an ISP license in August 2006.

In the meantime, rapid changes arising in communications field have increased telecommunications infrastructure investments, both national and international, in Israel. Israel has showed great efforts to upgrade its telecommunications infrastructure.

Fixed-line market liberalization has resulted in a number of infrastructure networks. One important result in the national infrastructure development has been a gradual decline in the teledensity levels in the country. Fixed-line teledensity has declined substantially since 2000 in line with the rapid grow of mobile telephony. There has been a decline both in the number of fixed-line and the number of households and businesses holding fixed-line and the number of fixed-lines per customer.

Table 62 indicates teledensity rates in Israel between 2000 and 2005 period.

Table 62 Teledensity Networks in Israel

Country	Main Telephone Lines (Per 100 Inhabitants)	
	Year	
	2000 (%)	2005 (%)
Israel	48.1	42.9
Asia	9.40	15.63

Source: ITU Statistics: Main Telephone Lines, Subscribers per 100 People 2005

Bezeq's main competitors in the national infrastructure market are: Med Net/Med-1, Cellcom and HOT Telecom. In addition to HOT's cable and fiber-optic network and Cellcom's fiber-optic infrastructure, there are a number of other fiber-optic network in Israel, most of which are owned by state-owned companies or agencies. These include: Israel Electric Corporation, Israel Railways, Mekerot, and the Oil Infrastructure Company, and the Cross-Highway Company, providing non-commercial telecommunications services.

Table 63 shows Israel's national telecommunications infrastructure.

Table 63 Israel's National Telecommunications Network Market

Company	Owners/ Major Investors
Bezeq	Bezeq
Cellcom	Cellcom
HOT	Cable Companies
Med-1	Partner

**Source: Budde Communications: Israel Fixed-Line Market& Infrastructure-
Overview & Statistics May 2007**

Med Net /Med-1 is a 1,500 km of fiber-optic cable forming a national backbone connecting the major population and business centers with Med Nautilus, the international submarine cable. It was established by Med-1, a private company which is owned by Globescom, an enterprise of Fishman Holdings, the Fishman Group, and US-based Kama Communications, marketing and communications designed firm. In July 2006, mobile operator Partner announced that it had concluded a transaction to acquire transmission operations of Med-1. In August 2006, Partner purchased the operations of Med-1 and a special license was granted it for providing transmission and data communication services. (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007)

Israel has links to many of international cable networks. Table 64 shows Israeli international infrastructure networks connecting the country's business sectors to main trade centers, and its citizens to the various points of the world.

Table 64 Israel's International Infrastructure Networks

Network System	Linkages
Sub-marine Cable Networks	
EMOS (Since 1995)	Turkey, Italy, Greece, and Israel
CLOS (Since 1994)	Turkey, Italy, Greece, and Israel
LEV (Since 1998)	Sicily, Tel Aviv, and Cyprus Island
FLAG (Since 1999)	Turkey, Italy, Greece, and Israel
Med-Nautilus	Italy, Greece, Turkey, Egypt
Satellite Networks	
AMOS 1(Since 1996)	Israel and the Middle East and Eastern Europe
AMOS 2 (Since 2003)	Israel and the Middle East and Eastern Europe and the east coast of North America

**Source: Budde Communications: Israel Fixed-Line Market& Infrastructure-
Overview & Statistics May 2007**

Three international operators have invested in the Med-Nautilus sub-marine fiber-optic cable. Med-Nautilus is controlled by Telecom Italia. The Fishman Group previously also had a share but exchanged this for shares in Med-1 in early 2004. The project is based on the Lev Submarine Cable System which came into commercial service in March 1999 linking Sicily, Tel Aviv, and also Cyprus Island via branching unit. The Med-Nautilus Submarine System stretches 5,729 km linking Italy, Greece, Turkey, Israel and Egypt. AMOS 3 is planned to replace AMOS 1 in late 2007, and another satellite is planned to be positioned over Asia.

Liberalization efforts have significantly influenced the Israeli mobile market. In the following subsection, structure of the Israeli mobile communication market will be examined.

7.2 Mobile Market Liberalization: Internationalization of the Israeli Mobile Communication Market

The Israeli government granted the first license for cellular communications in 1983 to a partnership of the local subsidiary of Motorola and Tadiran, a major Israeli manufacturer. Mobile services were first offered in Israel by Motorola in 1987 under a Built-Operate-Transfer (BOT) contract (franchise agreement) with Bezeq. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007). After a few years, Tadiran sold its share and Motorola remained the sole owner of the cellular telephony monopoly in the country. During this period, Motorola operated the system under monopoly conditions, providing both equipment and services. Prices were high which led to the having of a cellular telephone as a status symbol. Generally only senior executives, high government officers, and members of Parliament could afford the expensive cellular services usage. High costs prevented ordinary people's usage mobile telephony system away. Motorola used advantages of its monopoly status and refrained from big and upgrading investments in mobile system and complaints about Motorola increased. (Schejter; 2006:19)

The process of government intervention in mobile telephony markets began in 1989. In November 1993, the Request for Proposals for a second mobile telephony operator was launched by government. In May 1994, government announced that Cellcom Group won the tender. Cellcom Group was led by Discount Investment

Corporation from Israel and the Safra Group of Argentina, owners of a large Israeli Bank, from Argentina. The Israel Aircraft Industry was granted an option to acquire 10 percent. The major foreign operator in this group was American Bell South. (Schejter;2006:19) Meanwhile Motorola and Bezeq were making heavy preparations for competition. American-based SouthWestern Bell attempted to join Motorola and Bezeq. Aurec, Israeli software Communications Corporation, attempted to increase its investments in the local market. Also the European management of Motorola has established a Cellular Products Group to benefit from the growing demand in Israel. (David, 1994: 32)

The second Yitzhak Rabin government’s (1992-1995) mobile communication policy led to significant change in licensing policy, awarding commercial licenses and changing focus of policy from the public interests to serving corporate interests. (Schejter, 2006: 16)

Israel’s mobile market is served by four operators; Partner, Cellcom, Pelephone, and MIRS. The third major operator Pelephone is a subsidiary of fixed-line incumbent Bezeq. Three mobile operators- Partner, Cellcom, and Pelephone- share between them 95 percent of the market, in roughly equal shares, although Pelephone’s share is falling being. The fourth operator, MIRS, has the remaining 5 percent of subscribers. Israel has one of the highest mobile penetration rates in the world, even after eliminating Palestinian subscribers from the total number of subscribers. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

Table 65 indicates the number of mobile subscribers between 2000 and 2005.

Table 65 Mobile Subscribers in Israel

Country	Mobile Subscribers (Per 1000 People)	
	2000	2005
Israel	700	1,120
High Income Group		835

Source: World Bank ICT at a Glance 2005

By 2003, Israeli mobile market was already approached to saturation point, manifesting itself through continuously increasing subscriber numbers while decreasing profit rates. Fierce jousting in the mobile market has reduced significantly mobile communication service prices. Mobile operators have tried to increase Average Revenue

Per User (ARPU) levels, encouraging higher data usage and acquiring high value customers from each other. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007). All operators are increasingly focusing on selling next-generation services and mobile content and applications. Cellcom was first to introduce Third Generation (3G) networks but Partner invested substantially faster in the 3G services and is now the market leader. Both Cellcom and Partner are launching VoIP based fixed-line services. Therefore, mobile corporations have extended their operation areas and they have become competitors to Bezeq and other fixed-line operators. In December 2001, the three major mobile operators, Cellcom, Pelephone, and Partner, were awarded 3G licenses. In September 2006, government approved a decision about the operations of the Mobile Virtual Network Operators (MVNOs) in order to liberalize further mobile market. In this framework the MoC published a tender for mobile virtual network services in 2007. The joint cable operator, HOT Telecom, negotiated with the MoC in late 2006 outlining its plans to establish an MVNO and it applied for a license in January 2007. International fixed-line operator Xfone Communications applied for an MVNO license in December 2006. MIRS has also expressed an interest. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007) These operators are trying to increase their profits through launching mobile data, content and application services.

Israel’s mobile market is one of the most competitive one in the region with four operators in a saturated market.

Table 66 indicates the structure of mobile communication market in Israel.

Table 66 Mobile Competition and Ownership in Israel

Mobile Operator	Major Investors
Pelephone Communications Ltd	Bezeq (100 %)
Cellcom	Discount Investment Corporation (78.5 %)
Partner Communications Company Ltd. (Orange)	Hutchinson Telecom International Ltd. (50.57%) Orascom Telecom (indirect share of Partner. It bought a 19.3 % share of Hutchinson)
MIRS Communications Ltd.	Motorola Israel (77 %) Ampal (American-Israel Corporation) (33%)

Source: Budde Communication: Israel-Mobile Market- Overview & Statistics- Report-May 2007

Pelephone is owned by fixed-line incumbent operator Bezeq. Motorola's monopoly in mobile services was abolished in 1992, with an amendment to the Bezeq law. In 1994, Bezeq reorganized in order to provide services in market sectors other than fixed-line telephony. These two events led to the formation of Pelephone. Bezeq and Motorola each had 50 percent shares in Pelephone. In early 2001, US-based Shamrock Holdings, a leading investor in a wide range of domestic and private equity transactions and the investment arm of the Roy Disney Family, bought Motorola's 50 percent share. Bezeq took a total control of Pelephone in August 2004, purchasing 50 percent share of Pelephone from Shamrock Holdings.

Pelephone markets its youth and mobile entertainment services under the "Esc" brand. Pelephone launched a Code-Division Multiple Access (CDMA) digital cellular network under the brand "Next" in 1998. Pelephone offered first phase of 3G network in June 2003 using mostly Canadian-based Nortel equipment, a subsidiary of NT. It made a second contract was awarded Motorola to complete the networks in the rest of the country by end 2003. In September 2004, Pelephone introduced 3G services into the Israeli mobile market. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

Cellcom first launched services in December 1994. Its primary shareholder is Discount Investment Corporation (DIC), a subsidiary of Israeli-based IDB Holding Corporation operating diversified investment, financial and related areas, with a 58.99 percent share. US-based Goldman Sachs International, a full service global investment and banking firm, owns 4 percent; Leumi & Co Investment House Ltd, one the Israel's leading commercial bank, owns 5 percent; Migdal Insurance Company Ltd, Ha Mangen Insurance Company Ltd. and New Makefet Pension and Benefit Funds Ltd, are parts of the Israeli-based Migdal Group, own 4 percent; Stocofin (Israel) Ltd., Israel's fifth largest banking group owns 2 percent; US Public Shareholders own 20.51 percent; other shareholders own the remaining 5.5 percent. DIC greatly increased its shareholding in 2005, buying a 34.75 percent stake from the Safra Group of Brazil in September 2005 and the 34.75 percent stake of BellSouth in May 2005, bringing its share to 94.5 percent. DIC then sold several small parcels of shares during 2006, leaving it with a 78.5 percent.

The operator intended to target the business market, particularly companies who were already customers for its transmission services. In April 2006, Cellcom received a fixed-line license for the provision of domestic telecommunications services without a Universal Service obligation. DIC has intentions to expand into the mobile market outside of Israel in order to acquire sufficient profits. In early 2007, it failed in a bid to acquire controlling interest in BITE, a mobile operator in Lithuania and Latvia but it continues plans for investments in foreign markets. Cellcom contracted with Ericsson and Nokia for different phases of 3G network. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

Partner Communications Company Ltd. commenced its commercial operations in January 1999 today it maintains its operations under the Orange brand name through user license from Orange SA. Partner's major shareholder is Hutchison Telecom International Ltd. of Hong-Kong with a 50.57 percent stake. In December 2005, Orascom Telecom of Egypt bought a 19.3 percent share of Hutchinson, giving it very contentious indirect share of Partner. Any increase its share of Partner above 10 percent would require the signed approval of the Minister of Communications. IDB Group subsidiary Elron, owner of Netvision, was founder and major share holder with around 20 percent but sold its share holding in 2006. Partner was awarded a 20-year license to provide domestic fixed-line services issued in January 2007. Partner Communications commenced full commercial operations of its Ericsson built GSM network in January 1999. Partner contracted Nortel Network in November 2003 to build its 3G network and launched services in November 2004, initially covering central Israel, including Tel Aviv, Jerusalem and Haifa. Partner completed High Speed Downlink Packet Access (HSDPA) trials, a next generation network technology, and contracted with Nortel Networks in May 2005 to supply HSDPA equipment. Another contract was made with Ericsson in September 2005. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

The MIRS Communications Ltd. is fully owned by the local subsidiary of Motorola, Motorola Israel until August 2005 when its 33 percent shares were acquired by the Israeli holding company, American Israel Corporation (Ampal), a leading producer of atomized aluminum powder.

MIRS has targeted various niche markets, including sectors of the business market. A further niche market in its hands is the very conservative Orthodox Jewish community. MIRS has developed a special handset system offering only basic voice functionality without even SMS capability. In addition more than 10,000 numbers are blocked and inaccessible to the handsets for dating sites, sex lines and other adult services. The other operators have followed MIRS into the kosher market but MIRS has maintained its leadership position. (Budde Communication: Israel-Mobile Market – Overview & Statistics Report-May 2007)

Due to high penetration levels and increased competition in voice markets, the mobile operators have focused on data services and content applications to increase revenues. Consequently, data revenues are showing an increasing trend in the Israeli mobile communication market. Table 67 indicates the structure of mobile voice and data market's structure.

Table 67 Mobile Voice, Data, and Content Services in Israel

Mobile Operator	Prepaid Services	i-Mode Services	Broadband Wireless Data Services	Push-to-Talk Services
Pelephone Communications Ltd.	Prepaid cards		EVDO network on September 2004, offers access through its mobile phones and EVDO cards for laptops.	contracted Motorola to supply systems and handsets
Cellcom	Prepaid cards	launched NTT DoCoMo's (Japan) i-mode wireless data services. This agreement allowed Cellcom to offer the i-mode service with DoCoMo providing its brand, technology and patents.		Push-to-Talk Services using Nokia supplied equipment.

“Table 67 (continued)”

Partner Communications Ltd.	Prepaid cards			
MIRS Communications	Prepaid cards			Push-to-Talk Services

Source: Budde Communication: Israel-Mobile Market- Overview & Statistics-May 2007

Pelephone, Partner and Cellcom offer large amounts of mobile content and also grant access to their platform and billing services to outside content providers.

Table 68 shows the structure of mobile content services in Israel.

Table 68 Mobile Content Services in Israel

Mobile Operator	Mobile Content Services
Pelephone (Under the “Esc” brandname)	Video games and music content
Partner	Video games and music content Advertisement funded content services enabling subscribers at a partial or full discount
Cellcom	mobile betting application in partnership with the Israel Spots Betting Board, which provides betting services under the Toto and Winner brand Advertisement-funded games

Source: Budde Communication: Israel-Mobile Market- Overview & Statistics-May 2007

In March 2006, Partner launched a product combining advertisements with content services, offering alternatives for subscribers to buy services at a partial or full discount. In the first stage, Partner integrated advertisements with Celltrix games. Customer could either download games for a fee or free after agreeing to hearing advertisement while a game was being downloaded and before playing begins. A customer could either continue watching the advertisements or playing the game and also carry out such actions as obtaining additional information, sending and SMS or calling the advertiser. Cellcom also launched advertisement-funded games in early 2007. The mobile game service offers Cellcom’s mobile users the opportunity free of charge download mobile games, putting advertisements within the games as part on the

environment, using inner-active technology. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

There are few external content providers who are allowed access by the mobile operators. One of the most successful is Gold Rush targeting niche markets, particularly Arab Israelis who account for one-third of its business. Other niches target is the ultra-orthodox Jewish groups, the settler community and the various nationality groups of immigrants. (Budde Communication: Israel-Mobile Market –Overview & Statistics Report-May 2007)

Since the early 1990s, Israel has adopted itself the requirements of Information society and its complementary part of information economy through high capacity broadband and internet networks technologies. In the following subsection, broadband and internet market structure in Israel will be examined.

7.3 Broadband and Internet Market in Israel

During the 1990s, industrial growth in Israel has been in the high-tech sector. This growth reflects a gradual transaction of declining traditional industry and growing high-tech industry. Israeli industry made a huge transformation from a heavy reliance on the military industry to the civilian export market. Israel has very high broadband penetration level. Israel had the seventh highest broadband household penetration rates in the world at end-2006. (Budde Communications: Israel-Convergence, Broadband & Internet Market Report May 2007)

Since the early 1990s Israel has developed a policy of science-based industry perceived as a remedy for Israel’s political and economic future.

Table 69 shows some indicators of ICT usage in Israel.

Table 69 Some Indicators of ICT Usage in Israel and in the High Income Group Countries

ICT Sector Performance	2000	2005	High Income Group 2005
Internet users (per 1,000 people)	202	470	527
Personal computers (per 1,000 people)	253	740	579
ICT expenditure (% of GDP)	8.2	8.3	7.2

“Table 69 (continued)”

E-government readiness index (scale 0-1)	-	0.69	0.77
Secure Internet servers (per 1 million people, 2006)	46.7	182.7	444.4
Schools connected to the Internet (%)		95	99

Source: World Bank Statistics ICT at a Glance 2005

According to the table, Israel’s ICT expenditure level was quite above the High Income Group’s average between the years of 2000 and 2005. Number of internet users approached the level of High Income Group in this period. Between 2000 and 2005, Israel registered a good performance in the number of PC, an important measure of the new digital economy. As for the schools connected to the internet in this period, Israel’s ratio approached to the High Income Group’s level.

Internet penetration in Israel is quite high. Household internet penetration was over 72 percent by end 2006. A TNS Teleseker survey in late 2006 found that 54.7 percent of internet uses were men; 45.3 percent were women, 39.3 percent were aged 30-49; 35 percent were aged 18-29; 25.7 percent were over 50. Their survey in mid-2006 found that 73 percent of internet users linked on-line at least once a day up from 69 percent in mid-2005. Heavier internet use had also increased with 37 percent of Israeli population in 2006 from 31 percent in mid-2005. One group of the population that are generally not internet users are the Haredi, ultra-orthodox Jews, refusing to allow computers in their homes or workplaces. Internet penetration is also significantly lower amongst the Israel’s Arab population, signing a digital divide. (Budde Communication: Israel- Convergence, Broadband & Internet Market Report-May 2007)

Israeli internet content has been a flourishing business through very successful companies, such as shopping.com, which was later sold to eBay. In addition to local companies, Google established a Hebrew version of its search engine G-Mail and Google News and set up two research centers in Israel in 2006. E-commerce by retail chains in Israel exceeded NIS 8b in 2005, and was expected to grow 50 percent in 2006. A major trend in the sector is connecting the leading TV channels with the big internet

portals. (Budde Communication: Israel- Convergence, Broadband & Internet Market Report-May 2007)

Three major ISPs; Bezeq International, Internet Gold- Golden Lines/ Smile Communications, Barak-Netvision, struggle for acquiring significant market share of the service provision on these networks, offering low prices.

Table 70 shows ISP market in Israel.

Table 70 Major ISPs in Israel- May 2007

ISP	Owner/ Major Shareholder	Services
Bezeq International (since 1996)	Bezeq (100%)	Dial-up and broadband services based on ADSL and cable systems VoIP services
Internet Gold-Golden Line / Smile Communications	Internet Gold (100%) through its subsidiary Smile Communications	Internet Access and related value-added services and international telephony
Barak-Netvision	IDB Group (100%) through its subsidiaries Discount Investment Corporation, Elron and Clal Industries.	Internet access services, international telephony

Source: Budde Communication: Israel-Convergence, Broadband & Internet Market- May 2007

Initially licenses for the provision of Internet services have been granted to around 70 companies but as a result of merging process taking place in the early 2007 three significant competitors: Bezeq International, the Barak-Netvision Group, and the Internet Gold-Golden Lines Group have remained in the ISP market. Therefore, this market has become highly concentrated. These are also the major international fixed-line voice service operators. The fourth international fixed-line operator, Xfone received an ISP license in August 2006.

In December 2004, Bezeq International was granted a marketing trial license to provide VoIP. Trial was originally for one year but was extended. This transformed Bezeq International to a direct competitor with its parent Bezeq. In February 2007, its trial license was extended to last until the decision had been resolved. (Budde Communication: Israel- Convergence, Broadband & Internet Market Report-May 2007)

Internet Gold, through its subsidiary Smile Communications Ltd. has acquired 100 percent of its competitor Golden Lines from Fishman Holding. The takeover was

completed at end-2006 and today Internet Gold is in the process of merging the two companies: Internet Gold and Golden Lines. ⁽³⁶⁾

Barak and Netvision are in the process of merging their operations. ⁽³⁷⁾ Both, together with Globecall, are ultimately owned by IDB Group through its subsidiaries Discount Investment Corporation, Elron, a high-tech holding company with strategic equity investments in medical device, semi-conductor, advanced materials and ICT ventures in Israel, and Clal Industries, investment company holding a portfolio a diverse industrial fields ranging from manufacturing-oriented activities to advanced technology-based companies. Both were providers of international telephony, and internet access services. After merging they will hold around one-third of both markets. IDB also owns control share of mobile operator Cellcom. (Budde Communication: Israel- Convergence, Broadband & Internet Market Report-May 2007)

In Israel, since the beginning of the 2000s, increasingly expanding digital media products and services through the high capacity broadband have created a new revenue-generating area which can be defined as “triple market. Since the mid-1990s, deregulations of state broadcasting monopoly through new broadcasting laws and development of ICTs have accelerated commercialization and concentration of media ownership in Israel. This process has facilitated convergence development in the Israeli digital broadcasting market. In the following subsection, convergence market structure in Israel will be studied.

7.4 Convergence Market in Israel

During the late 1990s, Israeli broadcasting industry underwent a significant transformation, moving away from the state-owned broadcasting controlled by the Israeli Broadcasting Authority towards a competitive and commercial broadcasting structure. In November 1993, the first commercial channel, Channel Two, began broadcasting. Activities of the Channel Two are monitored by the Second Television and Radio Authority. Channel Two has created significant changes in the Israeli TV market, paving the way for entrance of more than 40 channels programming in more than dozen languages. One important result of this process has been sharing of state-owned Channel One’s power and influence with commercial channels, particularly with the commercial Channel Two and HOT Cable TV which have considerable market shares in the Israeli

broadcasting market. Commercialization process has accelerated media ownership in Israel. Today, in Israel three families and their companies dominate the almost entire mass media: Moses, Nimrodi, and Shocken Families. The three media barons control 84 percent of the Israeli media market.(Cohen-Almagor,2005:256) Table 71 indicates media ownership in Israel.

Table 71 Media Ownership in Israel

Media Groups	Ownership
Moses Family	Yedioth Ahronot (the first largest daily covering more than 40 percent of press circulation on working days, and 70 percent on weekends) 17 local newspapers 6 periodicals A Russian-speaking daily A publishing house A music company Partnership in commercial Channel Two Partnership in HOT Cable TV (Arutzei Zahav)
Nimrodi Family	Ma'riw (the second largest daily with a circulation of more than 20 percent of the press market) 1 local paper 3 periodicals A publishing house A music company Partnership in commercial Channel Two Partnership in HOT Cable TV (Matav)
Shocken Family	Haaretz (Liberal-oriented newspaper) A publishing house An on-line information company Partnership with the International Heral Tribune Controlling shares over 14 local newspapers and some local radio stations

Source: Cohen-Almagor., (2005). Israeli Democracy at the Crossroads. *Israel*

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Second Broadcasting Authority was split among three production networks: Keshet, Reshet (Yedioth Ahronot has 24 percent of the holding) and Telad (Ma'riw has 18 percent of holding), giving these networks control power on different days of the week. Through this agreement government has aimed at preventing any network would determine the agenda alone and giving a voice to various interests and in this way providing plurality and diversification in the Israeli broadcasting market. Some of the major national or international (Coca-Cola is among them) economic corporations and banks have shares in these three production networks companies. (Cohen-Almagor, 2005:257)

In the mid-1990s, government issued Second Authority Law restricting media ownership to a maximum 24 percent share. The publishers discontenting from the law began lobbying extensively to increase their ownership shares above the 24 percent. During this lobbying campaign, publisher families were very active in the Knesset, trying to change the Law at their benefits. None of the newspapers discussed the issue and raised criticisms against these attempts, causing the public were totally unaware of this issue and its potential influences on the public mind control and independent and different voices. (Cohen-Almagor, 2005:257)

Since the beginning of the 2000s, the oligopolistic media has increasingly focused on the triple play market converging voice-video-data transmissions as a new revenue-generating area.

Israel has one of the highest household broadband penetration rates in the world. Broadband market competition is fierce, both between cable and DSL infrastructures and between ISPs. Israel's very high broadband penetration rate provides great potential for triple play and digital media market developments. Both Bezeq, together with its satellite TV subsidiary YES, and HOT Telecom have great potential to deliver triple play services. In addition, Israel has a developed high-tech development industry producing all manner of hardware and software products related to digital media and convergence. (Budde Communication: Israel-Convergence, Broadband & Internet Market Report-May 2007)

Triple-play market development has led significant changes in Israeli cable and satellite TV markets.

Cable TV is available to over 95 percent of Israeli households. In December 2006, three cable operators: Matav Cable Communication Systems; Tevel Israel International Communications, and Arutzei Zahav Co- Golden Channels merged into a single company, forming HOT Cable Communications System Ltd., which supplies cable TV services to all of the subscribers of the cable companies that were merged into it. (Budde Communication: Israel-Convergence, Broadband & Internet Market Report-May 2007)

Table 72 shows the structure of Cable TV market in Israel.

Table 72 Cable TV Market in Israel

Cable TV Operator	Major Shareholders
HOT Cable Communications System Ltd.	<p>Yediot Communications, leading Israeli media group (16.96 percent),</p> <p>Delek Investment and Properties, a wholly-owned subsidiary of conglomerate Delek Group Holding, it manages the investments of the Delek Group in automotive, chemicals, energy, infrastructure, media, insurance and wealth management (15.392 percent),</p> <p>Fishman Family Companies (14.587 percent),</p> <p>Barak Leumi Holding (15.364 percent)</p>

Source: Budde Communication: Israel-Convergence, Broadband & Internet

Market- May 2007

Cable TV services were first introduced in 1990. The country was divided into 31 (later reduced to 27) areas, each awarded to a franchisee licenses. Since then, increasing merging process has reduced the number of franchisees to three. The three cable companies invested significant amounts in cable infrastructure for providing advanced digital TV services as well as broadband internet access. (Budde Communication: Israel-Convergence, Broadband & Internet Market Report-May 2007)

An amendment to Israel’s telecommunications law in 1998 permitted granting of DBS licenses and regulation of the satellite industry. A law passed during 1999, allowing multi-channel DBS transmissions. The broadcast license granted to YES is valid until 2014. Today, YES is the only company currently operating in the satellite multi-channel TV broadcasting market.

Table 73 shows satellite TV market structure in Israel.

Table 73 Satellite TV Market in Israel

Satellite TV Operator	Major Ownership
YES TV (Since July 2000)	Bezeq (50 %)

Source: Budde Communication: Israel-Convergence, Broadband & Internet

Market- May 2007

Bezeq is prohibited from increasing its ownership share in YES TV. The operator has long been desired to increase its ownership share of YES to above 50 percent but it has been blocked by the Israeli Antitrust Authority.

SUMMARY

Israel has a very dynamic telecommunications market with one of the highest mobile penetration rates in the world and one of the highest household broadband penetration rates. It is also involving convergence market. There is a very flourishing venture-capital funded ICT start-up sector with all manner of leading edge software and equipment companies. All of the major international players including Microsoft, Cisco, Lucent, Alcatel, and Nokia have bought Israeli start ups and their technology.

Fixed-line telecom operator Bezeq has maintained almost a monopoly position in the domestic voice market despite all liberalization attempts. HOT, a consortium of three cable TV operators has had a domestic fixed-line license for some time but it has only recently entered the domestic fixed-line market and its market share can be defined as only marginal. The MoC has begun granting VoIP licenses without the universal service obligations but universal service is an obligation for both Bezeq and HOT. It is expected that this contradiction will likely create significant objections in the domestic fixed-line market. The international voice market has had a very competitive with a number of operators providing services, causing reduced costs for consumers but little profit for international voice service providers. The major competitors, who are also major ISPs, are in the process of merging, which leave four competitors in the international market.

The privatization of Bezeq was finished in May 2005, when the Israeli Ministry of Finance completed the sale of a 30 percent stake in Bezeq to a consortium comprised of Saban Capital Partners, a private investment firm specializing in the media, entertainment and communications industries ⁽³⁸⁾ Apax Partners, a private equity and venture capital firm ⁽³⁶⁾ and Mori Arkin ⁽⁴⁰⁾.

Israel's mobile competition market is extremely competitive. Four operators provided mobile services in a saturated market. This saturated mobile market has created difficulties in new customer acquisition and voice tariff competition, forcing the operators to focus increasingly on mobile data and content through 3G technologies as a source of revenue growth. 3G services have been launched by the three major operators. Despite all of these attempts by the mobile operators to increase their ARPU levels, subscriber numbers are growing only steadily.

There are two competing broadband infrastructures-the DSL network of fixed-line telecom operator Bezeq and the digital cable network of the merged cable TV companies, HOT Cable Communications. ADSL is the leading broadband infrastructure, covering approximately two-thirds of the broadband market. Both Bezeq and HOT are charged to provide broadband universal service obligations. Following mergers, three major ISPs are jousting for acquiring significant market share.

Israel's high broadband penetration rate offers great potential for triple play and digital media market developments. Both Bezeq, together with its satellite TV subsidiary YES TV, and HOT Company have enormous potential to deliver triple play services. In addition to a competitive Free-to Air (FTA) TV market, the majority of the Israeli population subscribe to cable or satellite TV, mostly digital. Both HOT and YES offer personal Video Recorders (PVRs) and HOT also offers Video-on-Demand (VoD) services.

NOTES

- ⁽³⁵⁾ (Budde Communication; Israel-Key Statistics, Telecommunications Market & Regulatory Overviews Report- May 2007) Barak began offering international telecommunications services in July 1997, but has struggled in the market. It is also the smallest of five major ISPs in Israel with a (declining) market share of 11 percent. Netvision founded in 1994 by Net Manage and Elron Industries. It is primarily on ISP offering a variety of internet service packages including dial-up, ADSL, cable and ISDN. It was awarded an international carrier license in August 2004 and offered a range of international telephony services on its VoIP-based network.
- ⁽³⁶⁾ (Budde Communications: Israel-Convergence, Broadband & Internet Market Report May 2007) Golden Lines' internet access and internet telephony operation have been transferred to Smile Communications. Eurocom Communications owns a controlling share of Internet Gold (last known estimation 69 percent) Internet Gold is a group of communication companies providing internet access and related value-added services and international telephony. It began providing internet access in 1996 and received a license to provide international telephony. Internet Gold received a license to provide international telephony services in June 2004.
- Golden Lines launched international telecommunications services in 1997. It was also a major ISP. It received a license to provide VoIP local telephony services in February 2007. It was the first operator in Israel to receive a permanent VoIP license.
- ⁽³⁷⁾ (ibid, May 2007) Netvision signed a deal with Barak ITC and Globecall Communications for purchasing all the shares of both companies. Terms of deal involve Netvision providing Barak ITC with 46.5 percent of its shares to Globecall and Barak ITC. The MoC gave approval for the merger on condition of the cancellation of Netvision's license to provide international call services in February 2007. Netvision would be permitted to operate international calls from its facilities for one year, at which time the operation would be transferred to Barak.

Barak began offering international telecommunications services in July 2007 but has struggled in the market. It is the smallest of five major ISPs in Israel, with a (declining) 11 percent market share of 11 percent.

Netvision was founded in 1994 by NetManage and Elron Industries. It is primarily an ISP, offering a variety of internet service packages, including dial-up, ADSL, cable, and ISDN. Netvision was awarded an international carrier license in August 2004. It offered a range of internet telephony services on its VoIP- based network.

- (38) Saban Capital Group Inc. Website. Based in Los Angeles, Saban Capital Group (SCG) was established in 2001 by Haim Saban, founder of Fox Family Worldwide, a global television broadcasting, production, distribution and merchandising company owned in partnership with The News Corporation until its sale to The Walt Disney Company in October 2001. SCG makes both controlling and minority investments in public and private companies, and adds strategic value from both a financing and operating perspective through its established relationships and industry operating experience.
- (39) Apax Partners Website. based in the United Kingdom which operates in Hong Kong, China, India, United Kingdom, United States, Europe, and Israel. The firm has raised approximately \$35 billion (USD) and existed for over 30 years (being founded in 1972 by Ronald Cohen). Apax invests in a series of business sectors including: telecommunications, IT, retail and consumer goods, media, healthcare and financial/business services. At the moment Apax has a portfolio of around 340 companies in all stages of development.
- (40) Bezeq's investor relations website (www.bezeq.co.il) Mori Arkin was the principal shareholder and Chairman of Agis Industries (1983) Ltd. from its establishment in 1983 and until its merger with Perrigo in 2005. Agis, one of the leading generic pharmaceutical companies in Israel, merged with the U.S. Company, Perrigo, in March 2005 in an \$850 million transaction. As a result, Mr. Arkin was appointed Vice Chairman of Perrigo.

CHAPTER 8

CONCLUSIONS

Distinct characteristics of the telecommunications sector-natural monopoly; public service obligation; no separation between the regulatory and operational functions of telecommunications organization; strongly protected national telecommunications equipment manufacturers from external competition through various tariff and non-tariff measures; and transferring significant parts of PTT's profit to politically determined development programs- has changed and telecommunications sector has entered into a significant transformation process since the early 1980s, shaping the new global communication order.

Prime factors of this change were new technologies and neo-liberal policies applying intensively into telecommunications sector. As a result from the early 1980s and throughout the 1990s, the view defending the structure of telecommunications should be a natural monopoly has begun losing its importance. Worldwide neo-liberal policy applications into the telecommunications sector have led loss of governments control over national telecommunications systems in favor of more open conditions through liberalization, deregulation, and privatization policies.

The 1984 ITU Maitland Report contributed significantly to change attitudes on world communication system. Report emphasized that governments should give up control over national communication systems, permitting private investment and ownership. Otherwise developing countries would not register significant progress in their telecommunications sectors. In line with the suggestions of the Maitland Report, aids and funds allocated to the developing countries have become conditional, forcing them to give up economic sovereignty claims and adopt macroeconomic policies prescribed by the international financial organizations like the IMF and the World Bank.

Meanwhile the process of globalization has triggered internationalization of production, providing TNCs increasing integration possibilities with their plants and offices scattered around the world through sophisticated communications systems and services. This process increased pressures by the TNCs to open international communications into competition.

Introduction of competition into international telecommunications area has represented a significant turning point in development of a new global communication order. Competitive international telecommunications has expanded digital based world trade, giving priority trade considerations as the main determinants of global communications policy. This situation has necessitated re-regulation of world information and communication trade.

Both the 1993 WTO GATS agreement including liberalization of telecommunications services and the 1997 BTS agreement providing full liberalization of national telecommunications market and ending national telecommunications monopolies have institutionalized global information and communication services trade. The US has imposed a new world information and communication trade order to the countries of the world and formed a normative structure and a new international communication regime through these agreements.

At the ITU conference held in Buenos Aires, Argentina, in March 1994 the US Vice-President Al Gore introduced GII Project, emphasizing the needs of reducing trade restrictions on information technology goods and services in order to remove information gap and digital divide between developed and developing nations of the world. This was a new US imposition in the mid 1990s, aiming to form a new ICT regime having neo-liberal philosophy. Main target of the international ICT regime was (and is) to create new markets for the US-based IT companies' products. The US also imposed a developmentalist communication view that having advanced telecommunications and computer networks would significantly serve the economic development policies of developing countries. Therefore, the less developed countries should give priority for establishment of sophisticated communication and computer networks, exporting information and communications technologies from the Western world. This high-tech communication system should mainly serve the communication needs of the business sector since in the less developed countries business sector would play an engine role for economic development.

As a result of these communications policies, a highly concentrated domestic telecommunications market has emerged in the US, creating an oligopolistic market structure consisting up of AT&T, Verizon, and Qwest (Big Three Players). As for the

mobile market, neo-liberal policies have created a two-tiered market structure in the US market. The first-tier comprises of Cingular Wireless, Verizon Wireless, and Spring-Nextel, together having 75 percent of mobile market share. The second –tier consisting up of T-Mobile, Alltel, and US Cellular having a remaining 25 percent.

As a result of strong oligopolistic market tendencies in the US telecommunications market, expected benefits from competitive telecommunications market structure have begun disappearing due to increasing concentration of communication resources in the hands of very few numbers of corporations. This process will likely create two significant results in the near future. First, state will completely loose its control and regulatory power over communication and information sources. Second, increasing concentration will accelerate monopolization process and telecommunications sector will return to the “natural monopoly” position (“back to natural monopoly”), creating an uncontrolled telecommunications structure whose rules will be determined by powerful private monopoly consisting up of merging three or four global telecommunications giants.

Britain was the second country applying neo-liberal policies to its national telecommunications sector. These policies transformed the British telecommunications system into a corporate-oriented sector aiming to meet business sectors’ needs. The policy changes attracted major TNCs operating in continental Europe. This situation led TNCs to increase their pressures on continental Europe in order to liberalize their telecommunications sectors. Consequently European governments began changing their national telecommunications, seeing it as an important opportunity to attract FDI and to expand their telecommunications market internationally.

In order to realize these aims, since the early 1980s European Commission has developed Community-wide telecommunications framework through various initiatives and directives, playing a central role in determining telecommunications policies. Commission has imposed member countries that economic development and increasing welfare could be best realized through the development of European-wide telecommunications policy framework, encouraging them to make necessary regulations in their telecommunications sectors.

The 1987 Green Paper was the first document considering telecommunications-related regulatory issues. Paper advocated strongly that members' telecommunications sectors should be liberalized and should contribute to creation of a single EU-wide telecommunications sector.

In the 1990s, European Commission's efforts for liberalization and Europeanization of telecommunications accelerated, launching a series of proposals for future European telecommunications in 1992. These proposals stressed the need for liberalization of all voice telephony services EU-wide no later than 1998 (or 2003 for less developed regions of the Union) in order to response the EU's main trading partners' superior positions in information and communication goods and services areas.

In December 1994, European Council of Ministers agreed a resolution pledging member states' to open completely their telecommunications sectors into competition with a deadline of 1998. EU's efforts to create a European-wide telecommunications sector policy and international telecommunications regime imposed by both 1993 WTO Agreement and the 1997 BTS Agreement accelerated the preparation of 1998 European Telecommunications Framework. Commission issued series of liberalization directives extending competition to voice telephony market and creating competition in alternative telecommunications networks (mobile, cable, satellite etc.). To realize these targets Commission put forward series of proposals at the end of 2001 for removal of entry barriers into telecommunications sector and harmonization of national telecommunications regulatory regimes with that of the EU by the member states.

All of these regulations and directives put forwarded by the European Commission aimed at constituting a regional EU-wide telecommunications regime, imposing member states that full liberalization of telecommunications sector and harmonization of national telecommunications regulations with that of the EU would provide competitive and advantageous position to them in global communications market operating under competitive conditions.

In the 1990s, Europeans began to corporatize and then privatize their state-owned national telecommunications organizations, ending their monopolies and establishing independent telecommunications regulatory organizations. As a result, European states relinquished the functions of owner/ operator and supplier of services to

commercial players. All of these policies have created a strong oligopolistic telecommunications sector in very few telecommunications corporate dominantly in the internal EU market. These firms are Cable& Wireless Plc., Deutsche Telecom AG, France Telecom and Koninklijke PTT Nederland (KPN).

Neo-liberal policy applications have caused significant transformation in the EU's ICT policies, reducing the role of state and giving private sector a more powerful player role in shaping Information Society. Advocates of the commercially managed ICT developments argue that these policies will provide important opportunities for social development in the near future, creating a user-friendly information society to overcome economic backwardness and isolation and to realize social and economic cohesion throughout the EU.

In the light of these approaches to the Information Society, EU has begun focusing on the creation of an EU-wide ICT regulatory framework. The 1993 White Paper expressed the need for an EU-level ICT regulatory framework, stressing the importance of the information sector. Subsequent Bangeman Report (1994) emphasized the importance of the creation of flexible regulatory framework in order to make EU telecommunications and ICT markets more competitive and enable EU to integrate into the Information Society, pointing out potential economic benefits of commercialization and liberalization while ignoring social aspects of Information Society.

In July 1994, European Commission launched "e-Europe" initiative aiming at providing maximum use of ICT technologies; transforming EU's communications industry into a more competitive structure; and guaranteeing all EU citizens to access modern communication technologies. Main target of this initiative was to create a strong European challenge to the US' and Japan's superior positions in the internet technology and internet usage. EU enhanced scope of this initiative, launching "e-Europe 2005 Information Society for Everyone Action Plan in 2002.

However, despite all of these directives and initiatives, quite large disparities in ICT diffusion still continues, creating significant digital divide between the developed and less developed regions of the Union. Neo-liberal ICT policies have further extended digital divide in less developed regions of the EU. A European Commission research made in the early 2000s over the ICT usage in Europe has revealed that the business

sector had benefited mostly from the opportunities of the new economy based on digital technology.

Japan was the third industrialized country realizing significant transformation in its telecommunications sector under the pressures of the US-based IT firms supported strongly by the US government. The 1985 Telecommunications Law allowed incorporatization and privatization of the NTTPC and renamed it NTT. In parallel with the privatization efforts of the NTT, necessary legislation was passed to make overall changes in the Japanese telecommunications market. Therefore Japan telecommunications sector has completed its internationalization of communications process. Telecommunications reforms have transferred Japanese telecommunications market into a triple player oligopolistic industry. Saturation of internal market has forced Japanese telcos to invest mainly in Asia-Pacific region's markets through joint-ventures, acquisitions, and mergers. Internationalization of the Japanese telecommunications will possibly create a highly concentrated Asia-Pacific communication market in the hands of the very few numbers of Japanese-based telcos.

Today, most of the GEMED countries are moving towards less government intervention and more competition in their telecommunications market. This competitive movement has been encouraged by the prospective WTO membership and its rules.

Western countries having advanced information and communication technologies, particularly the US, have imposed the idea into the GEMED countries that having state-of-the-art telecommunications systems providing fast, secure, and inexpensive communication possibilities to business sector is sine qua non condition in order to attract global and local investors into the region and in this way to realize economic development and increase welfare level. According to the Western countries defending strongly developmentalist telecommunications policy models, there is a close relationship between development and ownership of advanced telecommunications systems. Since, development requires business sector-oriented advanced communications networks and sophisticated computer infrastructures.

International financial organizations serving the Western developed countries' interests also inject the view into the GEMED that competitive fixed and mobile telephony markets, allowance of foreign ownership in national telecommunications

markets and pro-competitive legal framework having strong neo-liberal philosophy are the necessary conditions for telecommunications development and ICT growth.

Main target of all these impositions is to provide new markets for Western information and communication goods and services. Western countries 'ICT sectors' long-term growths rely heavily on expansion of international markets because Western countries' domestic markets have already saturated. Therefore, Western-based TNCs supported their home governments through various measures struggle intensively to obtain long-run dominant position in the GEMED countries' domestic telecommunications markets. To this end, two major global actors, the US and Western industrial powers like the EU, Canada, and Japan, and major local players, Russia, Turkey, China and Israel compete intensively to acquire significant market share and sufficient profit rates in the GEMED countries communication markets.

Despite all these neo-liberal policy impositions, most telecommunications operators in the Arab Middle East are still 100 percent state-owned. Most of the Arab countries' governments pursue reluctantly deregulation and privatization policies due to the strong pressures coming from Western industrial countries and international financial organizations. In addition, there is no sufficient private sector demand for deregulation and privatization of national telecommunications systems. Today, only two telecommunications operators; Bahrain's Batelco (Cable & Wireless, and Jordan's Jordan Telecom (France Telecom Consortium), have major strategic investors from outside the region. Bahrain government aims at realizing full privatization of Batelco.

Despite all efforts to improve and upgrade telecommunications infrastructure systems, less developed countries of the Arab Middle East, such as Yemen, Syria, Jordan, and Lebanon, depending heavily on foreign aids and funds have to cope serious financial problems slowing down infrastructure upgrading policies and creating lack of investments in many telecommunications systems field. Therefore less developed regions of the Arab Middle East have been pushed into a periphery position. On the contrary, the oil-rich countries, the Gulf countries in particular, have allocated sufficient funds for necessary investments in telecommunications infrastructure. Especially, the UAE and Saudi Arabia have participated important submarine cable projects such as

SEA-ME-WE 4 linking 14 countries from France to Singapore. These cable systems link Gulf countries to major trade and finance centers of the world.

Mobile penetration in the Arab Middle East shows disparities from country to country, stemming mainly from differences in wealth, economic development, and market competition level, and restrictive government policies as well. Today, there are only two countries in the Arab Middle East: Kuwait (MTC Vodafone) and UAE (Etisalat) have made significant investments outside the region as their home markets approach saturation and profit opportunities become scarce. Therefore, internationalization (or denationalization) process and business-oriented policies have gained significant momentum in these two Gulf countries.

There is a paradoxical situation in the ICT performance is in the Arab Middle East. Despite having the highest GDP per capita rate, one of the richest countries of the region Kuwait have always allocated the lowest ICT spending from its GDP. Other rich countries' ICT spending rates are not much different from that of Kuwait. However, oil-rich Gulf countries, Bahrain, Kuwait, Qatar, and UAE have exhibited better performances in the number of internet users and PC density areas than other countries in the Arab Middle East.

Internet has significantly contributed to development of internet banking in the Arab Middle East, Gulf region in particular. Especially, Bahrain-based and UAE-based Banks have increasingly adopted themselves to the conditions and rules of the digital-based financial trade. Therefore, Gulf countries have begun deregulating their financial markets, making financial transactions simple, fast, and reliable and cost efficient. Therefore, "digitization of money" process eroding economic sovereignty of state has begun showing its effects on the Gulf countries' economies, shifting control from the state to private financial groups. On the contrary to the heavy usage of ICTs from the business world, ordinary citizens' usage is extremely low in the Arab Middle East, resulting mainly from low GDP per capita income, high illiteracy rate, low PC density and high access costs to ICTs.

In sum, today, Arab Middle East exhibits a dualistic communication market structure where some Gulf countries have increasingly become realized internationalization (or denationalization) of their communication markets, following

pro-business communication oriented policies and trying to realize full liberalization and privatization of their telecommunications markets, while in most Arab Middle Eastern countries telecommunications sectors are still strongly controlled by the state due to the lack of powerful private sector demanding more competitive telecommunications sector. There are significant ICT disparities both between the oil-rich Gulf countries and poor countries and between business sector and ordinary citizens. This situation points out a significant digital divide in the Arab Middle East region.

The EU also aims to impose its EU-wide regional telecommunications regime in the Balkan Peninsula, supporting strongly liberalization, deregulation, and privatization initiatives of the Balkan countries. Consequently, telecommunications sector in the Balkans has entered into a significant transformation process. Most of the Balkan countries have liberalized their markets and begun privatizing their national telecommunications operators. Today, none of the domestic operators have been thoroughly privatized in the region. Investments in the fixed-line telecommunications sector have remained limited due to the poor economic conditions of the Balkan countries. The dominant fixed-line telecommunications operator in the region is OTE, owning shares in the fixed-line operators in Romania and Serbia. Other investors are interested in fixed-line telecommunications sector are Deutsche Telecom AG (DT), and the Hungarian Matav, whose major share holder is DT.

Most countries in the region have competitive mobile markets due to the requirements of the EU regulations. Balkan countries' mobile markets have begun showing oligopolistic market characteristics. OTE, Vodafone Group Plc, Telenor ASA, Mobilkom and Orange SA are major investors in mobile markets in the Balkan Peninsula. Therefore mobile markets in the Balkans have entered into the internationalization (denationalization) of communication stage. Balkan countries exhibit poor ICT performance, resulting mainly from low GDP per capita income, low PC density and high access costs to ICTs.

Since the early 1990s, Central Asian countries have been under strong pressures coming from the core Western countries seeking investment possibilities for their ICT goods and services and international organizations serving the needs of Western

developed countries in order to apply liberalization, deregulation, and privatization policies into their telecommunications markets.

Today, liberalization efforts in the region are slowed down by the heavy interventions from the state-owned regulators. State's significant role in determining telecommunications policies has created a less competitive and less attractive fixed-line telecommunications markets in which investments have remained limited. But, nevertheless, efforts to liberalize telecommunications market continue, attracting particularly Russian telecommunications firms such as MTS, Vimpel Communication, and Mega Fon. Region's mobile market has a more competitive structure than that of the fixed-line sector. Internet usage in Central Asia is extremely low, stemming mainly from low GDP per capita income, high illiteracy rate, low PC density and high access costs to ICTs and as well as restrictive government policies.

Western core countries and international organizations have obtained a significant opportunity for imposition of further liberalization of telecommunications sector idea through prospective WTO membership negotiations with Kazakhstan, Uzbekistan and Tajikistan; Rose Revolution in Georgia; and a new economic reform and steady movement towards a market economy maintained in Kyrgyzstan since the late 2005.

Until the 1980s telecommunications sectors of Turkey, Greece, and Israel had showed similar characteristics. First there was a strong state intervention in these countries' economies, including telecommunications. In these countries state intervention was the only way for realizing development target since private sector had no sufficient resources in order to finance large scale infrastructure projects and to contribute realization of structural economic transformation. Second, these countries' Ministries of Communications were responsible for their telecommunications organizations activities. Third, governments gave low priority to telecommunications infrastructure development and upgrading network investments. Treasury transferred significant parts of telecommunications organizations profits in order to finance development projects determined politically rather than economically. Capital required for these activities was scarce since telecommunications development and upgrading projects had to compete with other sectoral development projects for allocation of

necessary capital. As a result of this policy advanced telecommunications were not available. There was a slow expansion and modernization that created obsolete telecommunications network. Fourth, these countries telecommunications organizations followed pricing policies based on cross-subsidization mechanism.

Since the early 1980s Turkey's, Greece's and Israel's telecommunications sectors have begun entering into a significant transformation process. Under the effects of the global information and communication order regime and the regional EU-wide telecommunications regime impositions, Turkey, Greece and Israel have begun seeing telecommunications as an important tool facilitating their integrations into the global market. They have exhibited great performances in order to establish sophisticated, rapid, reliable and cost-efficient telecommunications systems and network infrastructures, adopting corporate-oriented strategies and making necessary changes consisting up of liberalization, deregulation (re-regulation), corporatization and privatization steps in their telecommunications sectors.

In Turkey, changes in telecommunications sector began the standby agreement with the IMF on 24 January 1980. The IMF strongly recommended installation of free market economy conditions; reduced state's role in the economy, privatizing SOEs and decreasing government expenditures; and providing integration of the Turkish economy into the global economy operating under highly competitive conditions. This stabilization program reflected recommendations of SAPs prescribed by the IMF and the World Bank. Under the impacts of these impositions defending strongly neo-liberal policies Turkey began seeing telecommunications as an important tool facilitating its integration into the global market. In the early 1980s, Turkey exhibited great performance to establish rapid, reliable and cost-efficient telecommunications systems and network infrastructures in order to meet mainly business sector's communications needs. In 1984 government launched a new telecommunications plan inspiring suggestions of the 1984 ITU- Maitland Report. Plan emphasized the important role of telecommunications in promoting economic development and modernization. Therefore, government gave first priority for telecommunications projects, canalizing significant funds from both domestic resources and international financial organizations. The Plan targeted privatization of telecommunications equipment sector. Thus commercialization

of the Turkish telecommunications equipment sector was initiated. As a consequence of this commercialization policy, merging of foreign firms with powerful Turkish industrial groups gained significant acceleration.

Poor economic conditions in the 1980s had forced MT&C and PTT to reconsider their financing policies for a comprehensive telecommunications infrastructure development, defining three strategies. First strategy was multilateral funding, causing PTT to accept funds and conditions of international financial organizations. Second strategy was to allow private investments in certain segments of the telecommunications market on a revenue-sharing basis. Final strategy was privatization of various PTT services in three stages: separation of postal services from telecommunications service; corporatization of telecommunications services by establishing Türk Telekom A.Ş. and sale of PTT's stocks to private investors.

In the early 1980s, two important developments had strongly affected Greece's telecommunications policies. First development was Greece's EEC membership in 1981, forcing the country to harmonize its telecommunications sector with that of the EEC. Therefore, the EEC became the most important actor in shaping Greece's telecommunications policies. Second development was the worldwide tendency of deregulation and privatization of national telecommunications organizations beginning in the 1980s. These factors forced the Greek government to prepare telecommunications law allowing private telecommunications companies to operate under competitive conditions and relaxing monopolistic structure.

The year 1984 represented a major step in the history of the Israeli telecommunications sector. Labor-led coalition government initiated a consultation mechanism with the US in order to prepare an economic stabilization program. Reagan administration's strong pro-business policies encouraging competition in all sectors of the economy, including telecommunications and recommendations of the 1984 ITU-Maitland Report affected strongly Israel's new telecommunications policy. First step towards liberalization of telecommunications sector was started by the 1984 Telecommunications Law providing necessary legal and regulatory framework for the creation of Postal Authority. The law allowed separation of regulatory and operational functions of the telecommunications sector, giving regulatory issues under responsibility

of the MoC and operational function to the newly created telecommunications operator, Bezeq.

In Turkey, in the framework of the privatization efforts, Canadian-based NT acquired 51 percent of NETAŞ's shares and became a major shareholder. This sale to foreign investors forced NETAŞ to relinquish its R&D based telecommunications equipments production policies for national requirements and transformed it into a firm producing equipments only under the NT license.

In 1994 Parliament approved a new Telecommunications Law permitting separation of the Turkish PTT into two divisions, Post Administration and Türk Telekom A.Ş. (Türk Telekom) Law gave Türk Telekom the right to build and operate telecommunications structure; to seek joint-venture possibilities both national and international private companies; and to authorize private companies for establishing fixed, mobile, satellite, and other communications operations. Privatization policies gained significant momentum with the 1994 Law. Privatization of Türk Telekom was taken into consideration within two steps. In the first step, in March 1997 a Value Assessment Committee was formed with the assistance of Goldman Sachs in order to determine general rules for the telecommunications sector and to develop a sale strategy and valuation of Türk Telekom's shares. In 1997, Turkey signed a BTS agreement and pledged to full liberalization of its BTS market by 2006. To this end Parliament approved a new Telecommunications Law in January 2000. MoT transferred its functions of owner and supplier of telecommunications services to an independent authority, Telekomünikasyon Kurumu in accordance with the provisions of the 2000 Law. After establishment of the Telekomünikasyon Kurumu, Parliament approved a new Telecommunications Law in May 2000. Law permitted to sale for 100 percent of the capital of Türk Telekom with the exception of a nominal 1 percent "golden share" to be retained by the state. The provision gave the government to veto power over strategic decisions and eliminated security concerns of the Army relying heavily on Türk Telekom's networks for its communication. Military officials warned the government not to allow foreign investors to take full control of Türk Telekom. In the framework of 2001 economic reform program backed by the IMF and the World Bank, a 55 percent share of Türk Telekom was to be privatized as a condition of the program. In November

2004; Privatization Administration commenced proceedings for the sale of 55 percent shares of the Türk Telekom. A number of consortia and joint ventures showed great interests for Türk Telekom's privatization. In June 2005, Saudi-based Oger Telekom won the tender.

Therefore, Turkey completed changes consisting up of four stages: liberalization, establishment of an independent regulatory body, corporatization, and privatization.

During the early 1990s, Greek telecommunications infrastructure was one of the poorest in the EU and national telecommunications organization OTE still maintained its monopolistic position in domestic telecommunications market. In the 1990s, European Commission allocated substantial financial support for the telecommunications infrastructure development in Greece through various programs such as ERDF, Star, Telematique, and Crash programs. These programs significantly contributed Greece's telecommunications restructuring policies. To reorganize its telecommunications sector Greece focused on three interrelated processes: canalizing huge amounts of investments to the sector in order to modernize and upgrade telecommunications networks; making necessary institutional changes to align Greek Telecommunications regime with the EU's regulatory framework; and corporatization of OTE in order to provide further competition in the Greek telecommunications sector. To realize these aims Greek Parliament approved a new Telecommunications Law on 31 July 1992. Law aimed at transposing relevant EC rules into a national telecommunications regulatory act and allowed to separate responsibilities of different bodies for the telecommunications sector. The 1992 law accelerated privatization process. In 1994 PASOK government revised the 1992 Law. The revised 1994 Law provided necessary framework for the establishment of cooperation agreements between the OTE and private sector telecommunications services providers for attracting major TNCs investments and for encouraging collaborative agreements between domestic Greek companies and big TNCs. In the mean time in 1997, EU signed BTS agreement, committing to open up domestic markets to foreign competition through ending national monopolies. Thus, the BTS agreement paved the way for removing OTE's monopoly position in Greek national telecommunications market. In the framework of the realization of full liberalization of the telecommunications sector target, in December 2000 Greek

government modified the 1994 Law. The modified 2000 Law allowed establishment of EETT as an independent regulatory body, delegating MoC's power to this new authority.

In January 2001, the Greek telecommunications market was liberalized. Following the liberalization of the market OTE faced increasing competition in the provision of international telephony services. In December 2001, a new EU regulatory framework for electronic communications sector which would be put into effect on 25 July 2003, aiming to realize full market liberalization in the telecommunications sector was introduced. Greece transposed four of the five Directives in January 2006. After transposing, the Greek government began preparing privatization plans, declaring its intention for privatization of 20 percent stake of OTE. To this end in December 2006 Parliament issued a new law allowing the reduction of government's share in OTE. Therefore, privatization process gained significant momentum. In order to realize privatization, Privatization Committee determined advisors for sale, Credit Suisse Group UBSAG and Eurobank Ergasias SA. They listed potential investors in March 2007. Greek government seeks a strategic international investor having technical knowledge that could be transferred to the OTE. Investors show great interests for the privatization of the national telecommunications organization. Main reason for this interest is OTE's investments in the Balkan region. Government stipulated the privatization process that it would not reduce its stake in OTE below 34 percent, a blocking minority. This provision will provide the government veto power over strategic decisions and to alleviate security concerns about strategic communications.

Therefore, Greece completed three of four stages: liberalization, establishment of an independent regulatory body, corporatization. Government initiated privatization process in December 2006.

Second stage of telecommunications changes in Israel began in 1988. US-based investment bank the First Boston Corporation was chosen by the government to advice on privatization of Bezeq. In the early 1990s, privatization efforts intensified. The MoC appointed several committees to recommend policy for developing telecommunications. Government began seeking strategic alliance possibilities with major foreign telecommunications corporations. These committees' recommendations were approved

by the Knesset in January 1993, creating necessary liberal environment for both cellular telephony and international telecommunications. Further liberalization progress were made in 1994, establishing Bezeq's subsidiary companies: Pelephone (for cellular services); Bezeq-Bit (residential and small business terminal equipment); Bezeq-Kol (Business sector enterprise telecommunications systems and customer-premises wiring); Bezeq- International Projects (overseas activities, partnering in telecommunications in Europe and Asia). Aim was to provide services in market other than domestic fixed-line telephony. Therefore, Israel determined Bezeq's corporatization strategy: to better operate under competitive conditions.

Privatization of Bezeq commenced in August 2000. Government approved selling of 50.01 percent of Bezeq shares. Initially government stipulated that only foreign telecommunications companies and strategic investors would be allowed to bid but later included financial investors from Israel and abroad. At this point it is possible to argue that ownership of Bezeq would provide considerable advantages for financial investors in order to make fast, secure and costless financial transactions bypassing government's restrictions. In June 2002, government amended the Telecommunications Law, stipulating that license applicants must be at least 20 percent Israeli-owned. Final privatization process was commenced in late August 2004, with eight interested parties.

Privatization of Bezeq was concluded on 23 May 2005 when the Israeli Ministry of Finance completed the sale of a 30 percent stake in Bezeq, with a two-year option to acquire an additional Apax-Saban-Arkin Holdings, a consortium comprised of Apax Partners, Saban Capital Partners and Mori Arkin.

Therefore, Israel completed three of four stages: liberalization, corporatization and privatization. A more independent National Communications Authority has been planned since the early 2002.

After completion of necessary neo-liberal changes, Turkish, Greek and Israeli Telecommunications markets became international. Foreign investors, telecommunications and media companies have begun including into this process. Internationalization of telecommunications has increased numbers of mergers and acquisitions, accelerating concentration in the sector. Turkey, Greece and Israel have relinquished their control rights over their telecommunication systems in favor of more

open market conditions. As a result, major telecommunications giants seeking new markets for their advanced NGN technologies have begun showed great interest to enter the Turkish, Greek and Israeli markets. These telecom giants will likely struggle among them in order to obtain long-run position in these markets. (William Melody defines this struggle as “medieval jousting”)

After liberalization of telecommunications sector in Turkey, a number of licenses have been awarded to the alternative operators in the fixed line voice market but Türk Telekom has maintained its dominant position. Liberalization and deregulation of telecommunications sector has facilitated entrance of foreign firms to the Turkish communication market. This major telecommunications operator majority owned by the Saudi Oger Telecom has increased its focus on broadband sector in order to launch NGN, major revenue-generating technologies in the very near future. To this end Türk Telekom contracted with a telecom giants British Telecom in order to provide advice and upgrade its network structure to offer NGN technologies. At this point, it is possible to argue that other telecom giants having advanced NGN technologies and seeking new markets for their advanced technologies will show great interest to enter into the immature Turkish broadband area. These giants shaping the world communication structure will also aim to acquire a long-term dominant position in the Turkish broadband and NGN market.

Rapid changes in communication field since the early 1980s have also affected the Turkish telecommunications infrastructure market. VoIP services are becoming increasingly important for both long distance service providers and VoIP providers. These firms are making contracted with major telecom giants. In the satellite based infrastructure market liberalization process has created a duopolistic market structure. These services are provided by the Türk Telekom’s majority owned by the Saudi Oger Telecom TTnet and TR-1, a partnership formed by major ISPs Bnet, Doğan Online, Koçnet, Sabancı Telecom, SBS, and Superonline. TR-1 aims at reducing dependency on TTnet for domestic internet traffic and posing a significant competitive power. This sector has a highly concentrated structure that may create a monopolistic position in the future. In the Multi-Protocol Label Switching infrastructure area Türk Telekom contracted telecom giant such as Redback Networks, an Ericsson company, Alcatel, US-

based Telenity in order to provide NGN equipment for broadband infrastructure and assistance broadband access network developments. Therefore, foreign telecommunications firms have found a significant market in order to sell their NGN equipments. Transformation of the NETAŞ, was an important R&D firm in the national telecommunications market, into a firm producing equipments only under the NT license and imposition of neo-liberal communication policies have significantly contributed the emergence of this situation.

In the fixed-line data services area, increasing demand for data usage from business sector has forced Türk Telekom to increase its band width capacity. To this end it concluded an agreement with OTEGlobe in July 2005 in order to obtain additional bandwidth and to provide advanced communication services for business sector having commercial and financial linkages with major centers in Europe, America and Asia. This contract has also facilitated a Greek-based firm, subordinating the traditional hostility between the two countries, and security reasons for the sake of providing customer-oriented services, into the Turkish telecommunications market.

In the satellite network area Turksat established a joint venture with Alcatel. One of the major ISP in the Turkish internet market İşNet, a subsidiary of İş Bankası made a contract with Israeli-based Gilat to supply a satellite solution, allowing it to provide triple market services (voice-video-data) and to make financial transactions secure, simple, fast and inexpensive way, bypassing traditional publicly supplied networks. These kinds of agreements will likely accelerate the process of erosion of economic sovereignty.

Turkey's mobile telephony sector is one of the largest markets in the GEMED, indicating potential for future growth. After liberalization foreign players attracted by the mobile market's growth potential have hold significant ownership stakes, Russian-based Alfa Group, Swedish Telia Sonera, Vodafone etc. Today mobile services are provided by Turkcell, Vodafone Telsim and Avea. As a result of the internationalization process, Turkcell has expanded its activities internationally in order to find sufficient investment opportunities and to find sufficient profits as the Turkish mobile market approached saturation point.

Mobile operators are increasingly focusing on 3G technologies in order to increase their ARPU levels. To this end Avea contracted with Nokia for a three year period in order to upgrade its infrastructure and to launch 3G services. Therefore, Nokia has obtained significant opportunity to market its 3G services in the Turkish mobile sector. In April 2007 Avea received loan from IFC, a part of the World Bank and ABN Amro, Netherland-based private bank.

Since the early 1990s, Turkey has been included in a new process, accelerating its efforts for preparing necessary legal and regulatory environment for the ICTs, including internet, in order to reach Information Society target. In this framework, government started TUENA Project in 1996. Plan emphasized the importance of a social and economic policy which would raise purchasing power of the low income groups in order to ease their participation into knowledge society and to prevent them being excluded it. The Project also stressed that necessary regulatory ICT policy framework should be prepared immediately in order to realize universal service especially for low income groups living in remote rural areas or suburbs of metropolises.

In February 2001, Turkey was included into e-Europe+ Action Plan launched by the EU. Plan recommended effective harmonization of the EU's Information Society policies. Plan imposed liberalization of telecommunications sector idea.

Turkey has not yet e-Europe+ Action Plan and TUENA Project determining necessary steps to reach Information Society put into its agenda.

At is point it is possible to claim that neo-liberal business strategies have forced Turkey to neglect socio-economic sides of ICT policies aiming at providing widespread and more balanced using of new advanced technologies. Since neo-liberal policies impose the view that it is more important to establish advanced telecommunications and computer infrastructure for corporate communication needs than to build mass communications systems. Neo-liberal policies have also encouraged purchasing state-of-the-art ICT technologies produced in core Western countries and leading markets, claiming that buying ICTs are sine qua non condition to reach the information age. These neo-liberal policies have increased information gap between different socio-economic groups, creating a two-tiered society; information-rich being able to access new networks and thus can easily become integrating into every aspect of the

Information Society and information-poor not being able to use these advanced information networks and thus excluded from participating the Information Society. This situation has deepened digital divide between different socio-economic groups in Turkey and between Turkey and Western core countries like the US, the EU, and Japan (and will increase the digital divide due to the aggressive neo-liberal policies applying into the ICT market).

After liberalization Turkey's ISP market has become competitive. Today, there are 128 operators are providing ISP services but market is dominated by a handful major ISP operators many of which affiliated strong linkages to banking or media groups, or conglomerates including Sabancı Group's Sabancı Telecom, Çukurova Group's Superonline, Doğan Yayın Holding's Doğan Online (e-kolay) and İşNet. As a result of this process internet is (and will) increasingly becoming commercial.

Turkey has oligopolistic market structure in cable TV services generally concentrated in the hands of the conglomerates. Cable TV services are provided by KabloNet owned by ESER Telecom, subsidiary of ERE Holding operating in telecommunications, defense industry, energy, and automotive areas, Ultra Kablo TV owned by Koç Group and Doğan Yayın Holding, and publicly-owned Türksat.

Satellite-based digital pay TV services are also concentrated in the hands of the conglomerates. Today satellite-based TV services are supplied by D-Smart owned by Doğan Yayın Holding and Digi Türk owned by Çukurova Group.

OTE has lost its monopolistic structure in fixed-line voice services area since the realization of liberalization of telecommunications market in the early 2001. Liberalization has facilitated entrance of foreign firms in domestic telecommunications market. However, it has maintained its dominant position in the market. But there is some significant progress towards more competition in fixed-line market, principally from; Tellas jointly owned by Tellas and Italian Wind Telecomunicazioni, FORTHnet owned by Novator Equities Cycladic Catalyst Master Fund, FORTH owned by Talpa Beheer (Dutch), and domestic and international operators, and Teledome, and Vivodi Telecom.

Internationalization process has provided OTE an opportunity to play an active role in the Balkans and the Middle East through the acquisitions of substantial stakes in

foreign telecommunications companies. OTE also owns a number of significant subsidiaries focusing mainly on corporate-oriented strategies, including the largest Greek mobile operator CosmOTE and Greece's largest ISP OTEnet.

Rapid advancements in communication field have increased importance of infrastructure investments in Greece. The country has showed great efforts to upgrade its telecommunications infrastructure. OTE aims to become a regional telecommunications hub and to this end it has involved various regional telecommunications infrastructure projects through its subsidiary Hellascom International. New international infrastructure investments have been directed towards business communications needs. All operators have intensified their infrastructure investments mainly in Athens-Thessaloniki points and from there these networks connect Greece to major trade and finance centers.

Greece has competitive mobile market structure, a number of mobile telephony firms TIMHellas, Vodafone Greece, and CosmOTE are operating in the Greek mobile market after liberalization. Greek mobile market approaches its saturation point reducing significantly revenue growth possibilities through mobile voice services. Consequently, the mobile operators are increasingly focusing on data services. However, data usage is low despite significant investments in 3G networks. Mobile operators contracted major telecom giants to provide data and content services: TIM Hellas with Nokia, Vodafone Greece with Ericsson and Siemens, CosmOTE with Nokia and Japanese-based DoCoMo. These telecom giants having advanced NGN technologies will continue to show great interest to enter into immature Greek broadband market. As for the broadband and internet market in Greece, there is relatively small ICT sector and small rate of diffusion of IT technologies in the country. Internet and other advanced IT usage among the Greek companies are also low. To eliminate these negative conditions in the broadband market Greece has increased its efforts to develop an internet economy and to improve social well-being among the different groups of the Greek society through various programs such as OPIS, DIODOS, and Digital Strategy for 2006-2013 since 2005. However, despite these efforts various factors still continue to restrict broadband growth and discourage investment by alternative operators. These are difficult conditions for small market; geographical composition not favorable to network development; poor business demand in rural areas; absence of services that will create

demand; and lack of preparation in supporting demand of broadband services. These factors also make difficult (and will make difficult) to Greece's integration into the Information Society and deepen (and will deepen) Greece's dependency position to the West.

ISP services are provided by a handful of ISPs. These are Mediterranean Broadband Services owned by FORTHnet, OTEnet, and HOL jointly owned by Comstar, Russian operator and Intracom. Therefore, in the hands of the very few numbers of groups internet market is becoming increasingly commercial and will become to be commercial.

Greece's significant efforts for growing broadband penetration has led introduction of triple play services. Parallel to this development in the Greek triple play market, in October 2006 European Commission formally requested Greece to adopt new framework for digital broadcasting services, imposing that to transpose the EU broadcasting framework supporting strongly foreign competition into national digital broadcasting markets.

CATV structure in Greece is virtually non-existent and DTTV is not considerably economically viable. Development of IPTV in Greece has been hampered by insufficient capacity bandwidth with little infrastructure and only immature ADSL2 networks. Consequently, digital broadcasting TV market depends largely on the growth of cost effective satellite services providing universal coverage. Satellite TV market is limited and can sustain no more than one or two operators. Netmed Hellas and Multichoice Hellas are provided satellite based digital TV services. Both operators are owned by Netmed NV Group, a Holding company based in Netherlands.

In Israel despite all frameworks and regulations, Bezeq has retained the major domestic fixed-line operator. HOT Telecom jointly owned by three major cable companies Golden Lines, Tevel, Matav, and VoIP operators have only small shares in the domestic fixed-line telecommunications sector. In the international fixed-line voice market all of liberalizing regulations have created a highly competitive market and recent mergers have launched strong players focusing mainly on corporate-oriented strategies. Since 2004, in the international fixed-line voice market there are six competitors Bezeq International, Barak, Golden Lines, Internet Gold, Netvision and

Xfone. But mergers are in process in the international fixed-line market which will leave four competitors in the market: Bezeq International, Barak-Netvision Group, Internet Gold-Golden Lines Group, Xfone. All of these operators are majority owned by consultancy services, private investment groups, banks, and telecommunications corporations.

Israel has a competitive structure in national infrastructure market. Net/Med-1 owned by Globescom, an enterprise of Fishman Holdings, the Fishman Group, and US-based Kama communications, Cellcom and HOT Telecom are Bezeq's main competitors in the national infrastructure market. Israel has links to major international cable networks connecting country's business sector to main trade and finance centers and its citizens to the various points of the world.

Israel's mobile market is served by four operators: Partner majority owned by Hutchinson Telecom International Ltd. (Orascom Telecom has indirect share of Partner, majority owned by It bought a 19.3 % share of Hutchinson), Cellcom majority owned by Discount Investment Corporation, Pelephone owned by Bezeq, and MIRS owned by Motorola Israel. By 2003, Israeli mobile market approached to saturation point manifesting itself rising subscribers and falling profit rates due to the fierce competition causing reduced mobile voice service prices. Consequently, all operators have increasingly begun focusing on selling next-generation services and mobile content applications requiring data usage in order to increase ARPU levels.

Mobile operators contracted major telecommunications giants such as Nortel, Subsidiary of NT, Motorola, Ericsson, and Nokia to launch 3G mobile data services. Two mobile operators Partner and Cellcom have begun offering new mobile data products, advertisement funded games with content services, enabling subscribers to buy services at a partial or full discount. Therefore transnational advertising has entered into the mobile area, expanding its marketing and advertising capacities of TNCs.

As for the broadband market, Israel has very high broadband penetration level. However, nevertheless, this situation can not prevent emergence of a two tiered information-rich and information poor structure in Israel. Information poor groups consist of Haredi, ultra-orthodox Jews population refusing IT usage, including internet

and Israel's Arab population. Israeli internet content has been a flourishing business increasing e-commerce sites.

Licenses for the provision of internet services have been granted to 70 companies but mergers in process in nearly 2007 will leave three significant operators. Therefore, ISP market has become highly concentrated in the hands of the Bezeq International, Internet Gold-Golden Line, and Barak-Netvision. Therefore, internet has become increasingly commercial, ignoring the social aspects aiming to make internet international communication, available all citizen of this medium.

Israel's very high broadband penetration rate provides great potential for triple play and digital media market developments, creating significant changes in cable and satellite TV markets. Cable TV services were first introduced in 1990 through franchising agreements given to 31 areas. Increasing mergers are reduced the number of franchisees to three Matav, Tevel, Arutzei Zahav Co. - Golden Channels. They formed HOT Cable Communications System Ltd., which supplies cable TV services to all of the subscribers. (Monopoly) YES TV majority owned by Bezeq is the only company currently operating in satellite TV market.

In sum, it is possible to claim that as a result of neo-liberal policies defending strongly liberalization, deregulation (or more correctly re-regulation), corporatization, and privatization of national telecommunications sector have created highly concentrated communication and information market structure in Turkey, Greece, and Israel. This situation will likely eliminate completely state's control and regulatory power (one of the most important indicator of state sovereignty) over communication and information sources.

Neo-liberal policies encourage purchasing state-of-the-art ICT goods and services produced in core Western countries, while preventing development of R&D policies in Greece and Turkey. Lack of a comprehensive R&D policies encouraging production NGN technologies (and in this way will likely provide these countries a significant market power) will strengthened Turkey's and Greece's dependency positions to the core western countries. According to the Ministry of Foreign Affairs, in Israel, the influx of American capital to the Israeli IT industry in the 1990s has led growing diffusion of Israeli IT firms in the US due to the too small Israeli market to

support extensive R&D investments. Consequently, Israeli market has become less important than the American one. Neo-liberal ICT policies will likely increase the close relations between Israeli and American IT firms, neglecting the needs of the domestic Israeli market.

Neo-liberal ICT policies have increased information and communication gap between different socio-economic groups in Turkey, Greece, and Israel, creating a two-tiered society: informational haves and informational have nots. Neo-liberal policies ignoring social aspects of information and communication policies and focusing on corporate-oriented policies will deepen digital divide among socio-economic groups in these countries.

Inclusion of Groups operating mainly in banking and finance areas into the fully liberalized telecommunications markets will certainly accelerate the process of what Wilson Dizard named as “erosion of economic sovereignty”. Since these conglomerates will aim at making financial transactions simple, fast and inexpensive way through advanced communications systems, bypassing state’s control over economic and financial issues. Advanced communication technologies together with global deregulation of financial markets have already started erosion of economic sovereignty process and this process will likely continue in the future until removing completely state’s sovereign rights in the economic area in Turkey, Greece and Israel.

Deregulation of broadcasting sector in these countries has created highly concentrated media structure which will likely create devastating effects on democratic process. Since media concentration may lead to the danger of control of public mind which will be manipulated (and is already being manipulated) by powerful media conglomerates, creating cultural erosion and obliterating these countries’ languages, cultures, values, and beliefs. Highly concentrated media sector in the hands of the very few number of powerful private conglomerates using advanced broadcasting technologies, such as satellite TV, Cable TV, IPTV, DTTV etc, may promote consumerist life style in Turkey, Greece and Israel through advertising.

Increasing merging process resulting mainly from huge costs of NGN technologies will certainly accelerated concentration process in the Turkish, Greek and Israeli communication markets. Increasing concentration of communication resources

and technologies in the hands of the very few numbers corporations will likely conclude “back to natural monopoly position” whose rules will be defined by private monopoly consisting up of merging two or three the most powerful private conglomerates.

In order to struggle with these negative impacts of neo-liberal policies, the Turkish and Greek governments have to concentrate on encouragement R&D policies, creating necessary new regulatory framework independent from the impositions of neo-liberal policies. Israel has to issue new regulatory laws giving prime importance its internal market’s IT needs. In addition, Turkey, Greece and Israel should increasingly and immediately focus on development of new comprehensive ICT policies considering socio-economic aspects of new information and communication technologies in order to provide widespread usage of ICTs to masses, and to create more balance diffusion of these technologies among the different socio-cultural groups in their countries.

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APPENDICES

APPENDIX A

TURKISH SUMMARY

Amerika, Avrupa ve üçüncü dünya ülkelerinde yaşayan ve iletişimin siyasi iktisadi yönüyle ilgilenen araştırmacılar bu alana önemli katkılarda bulunmuşlardır. İletişim araştırmacıları esas olarak uluslar arası medya şirketlerinin özellikleri, iletişimle ilgili uluslararası kuruluşların değişen yapıları, siyasi güç ve medya arasındaki ilişkiler, medya sahipliği ve medya kaynaklarının giderek artan bir biçimde çok az sayıda şirketin elinde toplanması ve bu yolla kamuoyunun kontrol edilmesi, yeni iletişim teknolojilerinin iletişimin siyasi iktisadi üzerindeki etkileri, ortaya çıkan post-Fordist ekonomik yapı, tüm dünyada telekomünikasyon sektörünü kısıtlayan yasaların ortadan kaldırılması ve ulusal telekomünikasyon kurumlarının özelleştirilmesi hareketleri, hala devam eden küreselleşme süreci, 1993 DTÖ anlaşmaları ve bunu izleyen 1997 BTS anlaşmasının iletişim üzerindeki etkileri, Bilgi Toplumu, ve iletişim ve bilgi teknolojileri aracılığıyla daha demokratik ve daha adil toplumların yaratılması konularıyla ilgilenmişlerdir. İletişimin siyasi iktisadi alanına bölgesel bir bakış açısı sağlayan bu araştırmacıların yaklaşımları alanın gelişmesine önemli katkılar sağlamıştır. Bu araştırmacıların çalışmaları telekomünikasyon ve bilgi teknolojileri alanlarında meydana gelen değişimleri anlayabilmek için gerekli teorik çerçeveyi oluşturmak açısından büyük önem taşımaktadır.

19. yüzyılın başından 1980li yılların başına kadar olan sürede telekomünikasyon sektörü altı ana başlık altında toplanabilecek bazı ayırteci özelliklere sahip olmuştur. Bu özelliklerden birincisi tüm dünya ülkeleri tarafından telekomünikasyon sektörünün doğal tekel olarak kabul edilmiş değildir. İkinci özellik, telekomünikasyon sektöründe kamu yararı ilkesinin uygulanmasıdır. Bu ilke çapraz ikame uygulanarak belirlenen ayrımcı fiyat mekanizmalarına dayanmaktadır. Üçüncü özellik, telekomünikasyon hizmetlerinden alınan vergilerin ekonomik koşullardan çok politik ve sosyal koşullara göre belirlenmiş olmasıdır. Dördüncü özellik, genellikle bir kamu kurumunun hem

telekomünikasyonla ilgili mevzuatı düzenlemekten hem de telekomünikasyon ağlarının işletilmesinden sorumlu olmasıdır. Beşinci özellik, belli başlı sanayileşmiş ülkelerin çeşitli tarife ve tarife-dışı engellerle korunan kendi telekomünikasyon sanayicilerinin olmasıdır. Altıncı özellik ise bu dönemde sanayileşmemiş ülkelerin telekomünikasyon altyapı yatırımlarını ve hizmetlerini modernize edebilmek ve yenileyebilmek için yeterli kaynak ayırmayı başaramamış olmalarıdır. Çünkü bu ülkelerin telekomünikasyon hizmetlerinin sağlanmasından elde ettikleri gelirler siyasi nedenlerle öncelik verilen kalkınma programlarının finansmanına aktarılmıştır.

1980li yılların başlarından itibaren telekomünikasyon sektörü önemli bir dönüşüm süreci içine girmiştir. İkinci Dünya Savaşından bu yana devam eden iletişim teknolojileri alanındaki gelişmeler ve 1970li yılların başlarında Keynes'çi ekonomik anlayışın yıkılmasıyla beraber ortaya çıkan neo-liberal politikalar telekomünikasyon sektöründe ilk önemli değişikliğe, telekomünikasyon sektörünün serbestleşmesine, yol açmıştır. Bu değişiklik, telekomünikasyonun doğal tekel olduğu anlayışının ortadan kalkmasına neden olmuştur.

1980li yılların başında “Gelişme için Telekomünikasyon” olarak bilinen bir program ortaya atılmıştır. Bu program ekonomik kalkınmada telekomünikasyonun önemli bir oynadığını vurgulamıştır. Program, gelişmekte olan ülkelere modern telekomünikasyon ağları kurmak için uluslararası yardımlar aracılığıyla teknoloji transferinin gerçekleşmesini hedeflemiştir. Fakat bu programın önerileri hem kendilerini telekomünikasyon alanındaki kısıtlayıcı koşulları ortadan kaldırma (deregulation) ve özelleştirme mekanizmaları aracılığıyla serbest piyasa ekonomisi koşullarına uydurmaya başlamış olan gelişmiş ülkelerin hükümetleri tarafından hem de telekomünikasyon hizmetlerini yoğun olarak kullanan bu ülkelerdeki büyük şirketler tarafından olumsuz karşılanmıştır.

1984 ITU-Maitland Raporu dünya Telekom politikalarını radikal bir biçimde değiştirmiştir. Rapor, gelişmekte olan ülkelere devletin telekomünikasyon sistemleri üzerindeki kontrolünden vazgeçip bu alanda özel sektör yatırımlarına ve özel mülkiyetin oluşmasına izin verinceye kadar bu ülkelerin telekomünikasyon alanında önemli bir ilerleme gerçekleştiremeyeceklerini vurgulamıştır. 1984 Maitland Raporu gelişmekte olan ülkelere tahsis edilen fon ve yatırımların azaltılmamasına neden olmuştur. Bu

ülkelere yapılan yardımlar koşula bağlanmış ve gelişmekte olan ülkeler ekonomik bağımsızlıklarını terk etmeye ve IMF ve Dünya Bankası tarafından belirlenen ekonomik politikaları kabul etmeye zorlanmışlardır.

Bu gelişmelerin sonucu olarak 1990lı yılların başına kadar ülkeler telekomünikasyon alanında serbestleşme, telekomünikasyon hizmetlerini düzenleyen bağımsız bir kurumun kurulması, şirketleşme ve özelleştirmeden oluşan neo-liberal değişiklik paketini kabul etmeye başlamışlardır.

Bu arada, küreselleşme üretimin uluslararasılaşması sürecini hızlandırmıştır. Bu sürecin bir sonucu olarak çok-uluslu şirketler dünyanın her yerinde faaliyet gösteren tesisleri ve bürolarını artan bir biçimde bütünleştirmeye başlamışlardır. Üretimin artan bir biçimde uluslararasılaşması, uluslararası telekomünikasyonun rekabete açılması için güçlü baskıların ortaya çıkmasına yol açmıştır. Uluslararası telekomünikasyonun rekabet yoluyla serbestleştirilmesi dijital teknolojilere dayalı olarak yapılan dünya ticaret hacmini genişletmiştir. Bu durum, bilgi ve iletişim teknolojilerine dayalı ticaretin dünya çapında yeniden düzenlenmesi zorunluluğunu doğurmuştur.

ABD 1993 Dünya Ticaret Örgütü (DTÖ) anlaşmaları, GATS ve TRIPS, ile dünya ülkelerine yeni bir ticaret düzeni kabul ettirmiş ve bunları izleyen 1997 BTS anlaşması aracılığı ile de iletişim alanında yeni bir uluslararası bilgi ve iletişim düzeni kurmuştur.

Yeni bir dünya iletişim düzeninin oluşturulmasından sonra, ABD çabalarını bilgi ve iletişim teknolojileri (ICT) ticareti önündeki engellerin kaldırılması veya en azından azaltılması için DTÖ desteğini sağlamaya yoğunlaştırmıştır. Dünya ICT ticaretinin gerçekleştirilmesi planı Başkan Yardımcısı Al Gore tarafından Mart 1994'te Arjantin'in başkenti Buenos Aires'te düzenlenen ITU Konferansında dile getirilmiştir. Al Gore Küresel İletişim Altyapısı (GII) oluşturulması yönündeki çabaların arttırılmasını talep etmiştir. Aslında GII dünya ülkelerine yapılan yeni bir Amerikan dayatmasıdır. Asıl Amaç Amerikan bilgi teknoloji firmalarının ürün ve hizmetleri için yeni pazarların yaratılmasıdır.

1980li yılların ortalarından bu yana telekomünikasyon sektörünün serbestleştirilmesi politikaları telekomünikasyon hizmetlerini düzenleyen bağımsız kurumlar tarafından belirlenmektedir. Bu düzenleyici kurumların stratejileri

telekomünikasyon alanındaki kısıtlamaları kaldıran yasal düzenlemelerle ulusal odaklı olmaktan çıkıp uluslar arası odaklı olmaya başlamışlardır. Telekom alanındaki kısıtlamaları kaldıran yasal düzenlemeler, ulusal telekomünikasyon pazarlarındaki özel sektör yatırımlarının artmasına ve uluslar arası sermayenin giderek artan bir biçimde ulusal bu pazarlara girmesine yol açmıştır. Bu koşullar altında ulusal çıkarlara öncelik veren yasal düzenlemelerin yapılmasını neredeyse olanaksız hale getirmeye başlamıştır.

Telekom sektöründe olan tüm bu değişiklikler merkezde gelişmiş Batılı ülkelerin ve onların Çok Uluslu Şirketlerinin en çok avantaja sahip olduğu yeni bir dünya bilgi ve iletişim sisteminin ortaya çıkmasına yol açmıştır. Bu yeni sistem gelişmekte olan ülkelerin iletişim gereksinimlerini göz ardı ederek, bu ülkelerin iletişim teknolojileri alanında merkezdeki Batılı ülkelere bağımlı hale gelmelerine neden olmuş ve gelişmiş ülkelerle gelişmekte olan ülkeler arasında giderek derinleşen iletişim kaynakları eşitsizliğine yol açmıştır. Yeni sistem aynı zamanda kitlelerin iletişim gereksinimlerinin öncelikle karşılanması politikalarının terk edilerek şirketlerin iletişim gereksinimlerinin karşılanmasına yönelik politikaların benimsenmesine neden olmuştur. Tüm bu gelişmeler iletişim kaynaklarının giderek artan bir biçimde çok az sayıdaki şirketin elinde toplanmasına ve devlete telekomünikasyon ağlarının kontrolü için sınırlı bir alan bırakılarak dünyadaki zengin ve yoksul ülkeler arasında önemli bir iletişim açığının doğmasına yol açmıştır.

Telekomünikasyon alanında meydana gelen bu gelişmelerin bir sonucu olarak ABD’de güçlü oligopolcü piyasa eğilimi ortaya çıkmıştır. Bu oligopolcü yapı, iletişim kaynaklarının gittikçe artan bir biçimde az sayıdaki büyük şirketlerin elinde toplanması nedeniyle telekomünikasyon alanında rekabetten beklenen yayarları ortadan kaldırmıştır. Bu sürecin devam etmesi yakın bir gelecekte iki önemli sonucun ortaya çıkmasına neden olacaktır. Birinci sonuç, devletin telekomünikasyonla ilgili yasal düzenlemeler çıkarma ve bu alandaki kontrol yetkisinin tamamen ortadan kaybolması olacaktır. İkinci önemli sonuç ise iletişim kaynaklarının gittikçe artan bir biçimde az sayıdaki büyük şirketlerin elinde toplanmasının telekomünikasyon sektöründe tekelleşme sürecine yol açacak olmasıdır. Buna bağlı olarak ve belki de bu sektörün artık devlet tarafından kontrol edilmeyen ve kurallarının üç ya da dört telekomünikasyon devinin birleşmesiyle

oluşturulan güçlü bir tekel tarafından belirlendiği doğal tekel konumuna dönmesi söz konusu olabilecektir.

1980lerde Avrupa hükümetleri telekomünikasyon sektörünü doğrudan yabancı sermaye yatırımların çekmek ve bu yolla ekonomik büyümenin saplanması için önemli bir araç olarak görmeye başlamışlardır. Bunun için Avrupa hükümetleri telekomünikasyon alanındaki kısıtlamaları kaldıran politikalar aracılığıyla bu alana yönelik ulusal politikalarını değiştirmeye başlamışlardır. Bu amaçla 1980lerin başlarından itibaren Avrupa Komisyonu çeşitli Direktifler ve programlar aracılığıyla Avrupa çapında bir telekomünikasyon politikası geliştirme yönündeki çabalarını sürdürmektedir.

1987 tarihinde çıkarılan Yeşil Kitap telekomünikasyonla ilgili konuları ele alan ilk belgedir. Kitap üye ülkelerin telekomünikasyon sektörlerini serbestleştirmeleri gerekliliğini kuvvetle savunmuştur. 1990lı yıllarda telekomünikasyonun serbestleştirilmesine yönelik çabalar hız kazanmıştır. Bu doğrultuda Komisyon 1992 tarihindeki Avrupa telekomünikasyonunun geleceği ile ilgili bir dizi plan hazırlamıştır. Bu planlar 1998 yılına kadar (Birliğin daha az gelişmiş bölgeleri için 2003 yılına kadar) sabit telefon alanındaki ilgili tüm hizmetlerin serbestleştirilmesi gerektiğini vurgulamışlardır.

AB'nin Avrupa çapında bir telekomünikasyon sektörü yaratma çabaları ve DTÖ'nün yeni uluslararası bilgi ve iletişim sektörü rejimi 1998 Avrupa Telekomünikasyon politikası çerçevesinin hazırlanması çalışmalarını hızlandırmıştır. Oluşturulmaya çalışılan bu çerçevenin temel amaçları sabit telefon hizmetleri pazarındaki rekabeti genişletmek ve alternatif iletişim ağlarında da (uydu, mobil, bilgisayar sistemleri vs.) rekabeti sağlamaktır. Bu amaçları gerçekleştirmek için 2001 yılının sonunda Avrupa Komisyonu telekomünikasyon piyasalarına girmek için engellerin ortadan kaldırılması ve üye ülkelerin bu alanla ilgili ulusal yasal düzenlemelerinin AB'ninkilerle uyumlaştırılmasının sağlanması amacıyla bir dizi öneri öneri hazırlamıştır. Bu düzenlemelerin sonucu olarak, AB üyesi ülkeler telekomünikasyon üzerindeki devlet tekellerini kaldırarak, ulusal telekomünikasyon kurumlarını şirketleştirmeye ve daha sonrada bu kurumların devlete ait olan paylarının özel sektöre satılması yoluyla özelleştirilmesine başlamışlardır. Tüm bu politikalar AB

iç pazarında güçlü bir oligopolcü eğilim gösteren bir telekomünikasyon sektörünün yaratılmasıyla sonuçlanmıştır.

1990lı yıllarda Komisyon Avrupa çapında bir ICT çerçeve yasal düzenlemesi oluşturma çabalarını yoğunlaştırmıştır. Bu amaçla Komisyon tarafından 1993 yılında çıkarılan Beyaz Kitap Avrupa çapında bir ICT yasal düzenleme çerçevesinin yaratılmasının gerekliliğini vurgulamıştır. Daha sonra 1994 yılında çıkarılan Bangeman Raporu da AB'nin ICT piyasasının daha rekabetçi bir hale getirilmesi ve AB'nin Bilgi Toplumu ile bütünleşebilmesi için esnek bir yasal düzenleyici çerçeve oluşturulması gerekliliğinin önemini belirtmiştir. Bangeman Raporu Bilgi Toplumunun sosyal yönlerini göz ardı ederek yalnızca ekonomik yararlarına işaret etmiştir.

Temmuz 1994 tarihinde Komisyon internet teknolojisi ve internet kullanımı alanında güçlü bir Avrupa yaratmak için bir e-Avrupa programı başlatmıştır. AB bu programın kapsamını 2002 yılında e -Avrupa 2005 Herkes İçin Bilgi Toplumu Eylem Planı ile genişletmiştir. Fakat tüm bu çabalara rağmen, AB'nin gelişmiş ve azgelişmiş bölgeleri arasında önemli bir dijital bölünmeye yol açan ICT dağılımındaki önemli eşitsizlikler hala devam etmektedir. 2000 yılı başlarında AB Komisyonu tarafından yapılan bir araştırma iş kesiminin dijital teknolojilere dayalı yeni ekonominin yarattığı fırsatlardan en fazla yararlanan grup olduğunu ortaya çıkarmıştır.

Neo-liberal değişiklikler Japon telekomünikasyon pazarını da üç belli başlı oyuncudan oluşan oligopolcü bir sanayi haline dönüştürmüştür. Doymuş Japon iç pazarı Japon telekomünikasyon şirketlerini yeterli kar sağlayabilmek için ortaklıklar, birleşmeler veya satın almalar aracılığıyla özellikle Asya-Pasifik bölgesinde yatırım yapmaya yöneltmektedir. Japon iletişim sektörü uluslararasılaşma sürecini tamamlamıştır. Uluslararasılaşma gelecekte iletişim kaynaklarının giderek artan bir biçimde çok az sayıdaki Japon telekomünikasyon şirketlerinin elinde toplandığı bir Asya-Pasifik telekomünikasyon pazarını ortaya çıkaracaktır.

Soğuk savaş dönemini sona erdiren Sovyetler Birliğinin dağılması ve hala devam eden küreselleşme süreci Orta Doğu, Türkiye, Yunanistan, İsrail ve Kıbrıs'tan oluşan klasik Doğu Akdeniz kavramını önemli ölçüde genişletmiştir. Klasik Doğu Akdeniz bölgesi kavramı içine Balkanlar, Karadeniz, Kafkaslar ve belli ölçüde Orta Asya

Cumhuriyetlerinin de katılımıyla bu alan Büyük Doğu Akdeniz Bölgesi (GEMED) haline dönüşmüştür.

Sovyetler Birliği'nin dağılması Ortadoğu bölgesinin enerji kaynaklarından daha başka enerji kaynağı alternatifleri ortaya çıkarmıştır. Zengin gaz ve hidrokarbon kaynaklarına sahip olan Orta Asya ve Kafkaslar ile bu enerji kaynaklarının Batı piyasalarına taşınmasında önemli geçit noktaları olan Karadeniz ve Balkanlar enerji-bağımlısı merkez Batılı ülkelerin gözünde çok büyük bir stratejik önem taşımaya başlamıştır.

Soğuk savaş sonrası dönemde Amerika ve AB GEMED üzerindeki etkilerini ve kontrollerini arttırmak için birbirleriyle mücadele etmektedirler. Soğuk savaş döneminin sona ermesi ABD'nin dış politika, güvenlik ve ekonomi politikalarında önemli değişikliklere yol açmıştır. Bu değişimlere paralel olarak bu gün GEMED ABD'nin gündeminde daha çok yer işgal etmeye başlamıştır. ABD bölgenin zengin petrol ve hidrokarbon kaynaklarını kontrol etmek ve bu kaynakların güvenli bir biçimde Batı piyasalarına ulaştırılmasını sağlamak amacıyla bölgede kendi nüfuz alanını kurmayı amaçlamaktadır. AB' de Orta Asya ve Kafkaslardaki enerji kaynaklarının kendi piyasalarına güvenli bir şekilde ulaştırılması için yoğun çaba göstermektedir. Bu amaçla TACIS, TRACECA, INOGATE programlarını geliştirmiş ve daha yakın zamanlarda, 2000 yılından itibaren, uzun dönemli bir enerji ortaklığı kurmak amacıyla Rusya ile Enerji Diyalogu başlatmıştır.

Tüm bu çabalar GEMED bölgesinde enerji ile ilgili faaliyetlerin artmasına neden olmuştur. Enerji ile ilgili faaliyetler bölgeye belli başlı uluslar arası yatırımcıları çekmiştir. Bu yatırımcıların faaliyetlerinin etkinliği kendilerine hızlı, güvenilir, esnek ve düşük maliyetli iletişim olanakları sağlayan gelişmiş iletişim teknolojilerine bağlıdır. Bölgede gelişmiş telekomünikasyon ağlarının kurulması bu yatırımcıların işlemlerini daha etkin bir biçimde gerçekleştirmelerini sağlayacaktır. Çünkü gelişmiş iletişim teknolojileri yatırımcılara düşük maliyetli finansal işlemler yapabilme ve faaliyetleri ile ilgili daha etkin karar verebilme olanaklarını sunmaktadır. Böylece GEMED enerji ile ilgili faaliyetler çerçevesinde telekomünikasyon belli başlı uluslararası alanda faaliyet gösteren telekomünikasyon şirketlerine (özellikle ABD, AB, Kanada ve Japon telekomünikasyon şirketlerine), ve belli başlı bölgesel telekomünikasyon aktörlerine

(özellikle Türk, Rus, Yunan, İsrail telekomünikasyon firmalarına) önemli yatırım olanakları sunmaktadır.

Gelişmiş bilgi ve iletişim teknolojilerine sahip Batılı ülkeler, özellikle Amerika, GEMED ülkelerine iş kesimine hızlı, güvenli ve düşük maliyetli iletişim olanakları sağlayan gelişmiş teknolojilere sahip olmanın bölgeye küresel yatırımcıları çekmenin olmazsa olmaz bir koşulu olduğu fikrini dayatmaktadır. Bu dayatma ile Batılı ülkeler kendi ülkelerindeki firmalar tarafından üretilen bilgi ve iletişim mal ve hizmetleri için yani pazarlar yaratmayı ve GEMED piyasalarında kendi firmalarının uzun dönemli hakimiyetini sağlamayı amaçlamaktadırlar.

Arap Orta Doğu ülkelerini ulusal telekomünikasyon pazarlarını rekabete açmaya ve bu alandaki ulusal yasal düzenlemelerini DTÖ' nün düzenlemeleri ile uyumlaştırmaya zorlayan 1993 DTÖ anlaşmaları, GATS ve TRIPS, ve bunu izleyen 1997 BTS anlaşması bu ülkelerin telekomünikasyon piyasalarını şekillendirmeye başlamışlardır. Ancak tüm bu neo-liberal politika dayatmalarına rağmen Arap Orta Doğu ülkelerindeki pek çok telekomünikasyon kurumu hala tamamen devlete aittir. Bu ülkelerde telekomünikasyon alanındaki kısıtlayıcı koşulların ortadan kaldırılması ve telekomünikasyonun özelleştirilmesi için özel sektörden gelen güçlü bir talep yoktur. Yemen, Suriye ve Lübnan gibi azgelişmiş bölge ülkeleri telekomünikasyon sektörü yatırımlarını engelleyen ciddi mali sorunlarla karşı karşıyadırlar. Telekom altyapı sistemlerinin yenilenmesindeki bu eksiklik bölgede azgelişmiş ülkeleri çevre ülkeler konumuna getirmeye başlamıştır. Buna karşılık bölgenin petrol zengini ülkeleri, özellikle Körfez ülkeleri, telekomünikasyon altyapı ve sistemleri gelişimi ve modernizasyonu için ulusal gelirlerinden yeterli kaynakları aktarabilmektedirler.

Arap Orta Doğu bölgesinde mobil iletişimi ülkeden ülkeye farklılıklar göstermektedir. Bu farklılıklar esas olarak refah düzeyi ve ekonomik gelişme farklılıklarından ve kısıtlayıcı hükümet politikalarından kaynaklanmaktadır. Bölgede sadece iki ülke, Kuwait (MTC Vodafone) ve BAE (Etisalat), bölge dışında önemli yatırımlar yapmaktadır. Böylece, bu iki Körfez ülkesinde uluslararasılaşma süreci ve iş sektörü-odaklı politikalarönemli bir ivme kazanmıştır. İnternet teknolojisi Körfez bölgesinde internet bankacılığının gelişimine önemli ölçüde katkı sağlamıştır. Özellikle Bahrain ve BAE bankaları kendilerini dijital teknolojilere dayalı mali ticaretin

koşullarına giderek artan bir biçimde uydurmaya başlamışlardır. Bu yolla Körfez ülkeleri mali işlemleri basit, hızlı güvenilir ve düşük maliyetli bir hale getirerek finans piyasaları üzerindeki kısıtlamaları ortadan kaldırmaya başlamışlardır. Böylece, devletin ekonomik bağımsızlığını hızla ortadan kaldıran “paranın dijitalleşmesi” süreci etkisini bu ülkelerde mali alandaki kontrolü devletten özel finans gruplarına doğru kaydırarak göstermeye başlamıştır.

Arap Orta Doğu bölgesinde ICT kullanımının iş sektöründe yoğun olmasına karşılık, sıradan vatandaşların bu teknolojilerden yararlanabilme düzeyleri oldukça düşüktür. Bu durumun başlıca nedenleri kişi başına düşen ulusal gelirin azlığı, düşük okur-yazarlık oranı, düşük PC yoğunluğu ve yüksek ICT kullanım maliyetleridir.

Özet olarak, bugün, Arap Orta Doğu ülkeleri ikili bir yapı özelliği göstermeye başlamıştır. Körfez ülkeleri iş kesimi odaklı iletişim politikaları izleyip ve telekomünikasyon piyasalarını tamamen serbestleştirmeye ve özelleştirmeye çalışarak iletişimlerini uluslararasılaşmasını sağlarken, bölgedeki diğer ülkelerde daha rekabetçi bir telekomünikasyon için güçlü bir özel sektör talebinin olmamasından kaynaklanan nedenden dolayı sektör hala tamamen devlet tarafından kontrol edilmektedir. Bölgede hem petrol zengini ülkeler ve yoksul ülkeler arasında hem de iş kesimi ve vatandaşlar arasında ICT kullanımında önemli eşitsizlikler vardır. Bu durum Arap Orta Doğu bölgesinde ciddi bir dijital bölünmeye işaret etmektedir.

AB serbestleştirme, telekomünikasyon alanındaki kısıtlayıcı yasal düzenlemelerin kaldırılması ve özelleştirme politikalarını teşvik ederek Balkan ülkelerine kendi bölgesel telekomünikasyon sistemini dayatmaya çalışmaktadır. Tüm bu AB çabalarına rağmen, bölgede henüz hiçbir ulusal telekomünikasyon kurumunun tamamen özelleştirilmesi sağlanamamıştır. Sabit-hatlı telekomünikasyon sektöründe yatırımlar Balkan ülkelerinin içinde bulunduğu olumsuz ekonomik koşullar yüzünden sınırlı bir düzeyde kalmıştır. Bugün bölgede sabit-hat telekomünikasyon alanında yatırım yapan belli başlı firmalar şunlardır, OTE, Deutsche Telekom AG ve Macar Matav (Bu firmanın ana hissedarı Deutsche Telekom’ dur). Balkan ülkelerinin mobil iletişim piyasaları oligopolcü yapı özelliği taşımaktadır. OTE, Vodafone, Telenor ASA, Mobilkom, Orange SA, Balkan mobil iletişim piyasalarındaki önemli yatırımcılardır.

Balkan ülkelerinin telekomünikasyon piyasaları iletişimin uluslararasılaşması sürecine girmişlerdir. Bölge ülkeleri kötü bir ICT performansı sergilemektedirler. Bu durumun başlıca nedenleri kişi başına düşen ulusal gelirin azlığı, düşük PC yoğunluğu ve yüksek ICT kullanım maliyetleridir.

1993 DTÖ, GATS ve TRIPS, anlaşmaları ve bunu izleyen 1997 BTS anlaşması, Orta Asya ülkelerine DTÖ'nün yeni bilgi ve iletişim düzenine uyum sağlamanın küresel toplumla bütünleşebilmeleri için gerekli koşul olduğu fikrini dayatmaktadırlar. 1990lı yılların başlarından beri bölge ülkeleri telekomünikasyon piyasalarının serbestleştirilmesi, telekomünikasyon ilgili kısıtlayıcı yasaların ortadan kaldırılması ve ulusal telekomünikasyon kurumlarının serbestleştirilmesi için firmalarının ürettiği ICT mal ve hizmetlerine yeni pazarlar arayan merkez Batı ülkelerinden ve bu ülkelerin çıkarlarına hizmet eden uluslar arası örgütlerden gelen güçlü baskılarla karşılaşmaktadırlar.

Devlet tarafından telekomünikasyon alanına yapılan yoğun müdahaleler yüzünden bölgede telekomünikasyonun serbestleştirilmesi çalışmaları oldukça yavaş bir biçimde ilerlemektedir. Devletin telekomünikasyon politikalarını belirlemedeki önemli rolü yatırımların yetersiz kaldığı, daha az rekabetçi ve yatırımcılar için daha az çekici bir sabit-hat piyasasının ortaya çıkmasına yol açmıştır. Fakat yinede telekomünikasyon serbestleştirilmesi çalışmaları bölgeye MTS, Vimpel Communication, Mega Fon gibi Rus yatırımcılarını çekerek devam etmektedir. Bölgenin mobil iletişim piyasası sabit hat piyasasından daha rekabetçi bir yapıya sahiptir.

Orta Asya ülkelerinde internet ve ICT kullanımı son derece düşüktür. Bu durumun başlıca nedenleri kişi başına düşen ulusal gelirin azlığı, okur-yazarlık oranının düşük olması, düşük PC yoğunluğu, ICT kullanım maliyetlerinin yüksek olması ve bu teknolojilerin kullanımını kısıtlayan hükümet politikalarıdır.

Merkez Batılı ülkeler ve uluslararası kuruluşlar Kazakistan, Özbekistan ve Tacikistan'la yapılan DTÖ müzakereleri, Gürcistan'daki Gül Devrimi ve Kırgızistan'da 2005 yılından beri sürdürülen yeni ekonomik reform çalışmaları ve serbest piyasa oluşturma yönündeki çabalar aracılığıyla telekomünikasyon sektörünün daha ileri düzeyde serbestleştirilmesi için önemli bir fırsat ele geçirmişlerdir.

GEMED’ de Batı yanlısı politikalar izleyen Türkiye, Yunanistan ve İsrail bölgenin üç önemli ülkesidir. Bu ülkelerin Batılı Çok-Uluslu iletişim alanında faaliyet gösteren şirketleriyle her zaman çok yakın ve güçlü ilişkileri olmuştur. Aynı zamanda bu ülkeler telekomünikasyon politikalarını oldukça rekabetçi koşullar altında çalışan küresel iletişim piyasasının koşullarına uydurmak için gerekli neo-liberal değişiklikleri yapmışlardır.

Türkiye bölgedeki belli başlı önemli aktörlerden bir tanesidir. Ülkenin önemi Avrupa ile Asya arasında bir köprü oluşturan jeopolitik yapısından, Balkan, Kafkasya ve Orta Asya ülkeleriyle olan tarihi ve kültürel bağlarından, Batı tarzı demokrasi anlayışından, önemli askeri kapasitesinden ve hızla modernize edilmekte olan telekomünikasyon sektöründen kaynaklanmaktadır.

Sovyetler Birliğinin dağılmasından bu yana Hazar Denizi enerji havzası Türkiye’nin gözünde stratejik bir önem kazanmıştır. Türkiye Hazar denizine kıyısı olan ülkelerle enerji bağımlısı Batılı firmalar arasında bölgeye olan coğrafi yakınlığı, bölge ülkeleriyle tarihi ve kültürel bağlarını kullanarak doğal bir enerji yolu oluşturmaya çalışmaktadır. Bu amaçla 2006 yılında Türkiye Bakü-Tiflis-Ceyhan boru hattını tamamlamıştır. Türkiye aynı zamanda Azerbaycan’ın ve Gürcistan’ın İran ve Rusya tarafından kontrol edilen rotalara olan bağımlılığını azaltmayı amaçlayan ve bu yolla daha çok Türk malının Kafkaslar ve Orta Asya’ya ihraç edilmesini amaçlayan Kars-Tiflis Demiryolu, bölge ülkeleri arasındaki ekonomik ilişkileri arttırmayı ve böylece bölgede refah düzeyini yükseltmeyi amaçlayan Büyük İpek Yolu Taşımacılık Koridoru Karayolu (The Great Silk Road Transportation Corridor Highway) gibi projeleri de desteklemektedir. Bakü-Tiflis-Ceyhan boru hattı projesi ve tüm bu potansiyel projeler enerji ile ilgili faaliyetlerle uğraşan, bankacılık ve finans gibi hizmetler sektöründe faaliyet gösteren yatırımcıları Türkiye’ye çekmeye başlamıştır. Bu yatırımcıların faaliyetlerinin etkinliği büyük ölçüde ileri telekomünikasyon ağlarından ve hizmetlerinden yararlanmaya bağlıdır. Türkiye’ye gelen bazı yatırımcıların belli başlı uluslar arası telekomünikasyon şirketlerinde önemli ortaklıkları bulunmaktadır.

Yunanistan GEMED bölgesinde önemli bir pozisyona sahiptir. Bu ülke coğrafi olarak Balkanlarla bütünleşmektedir. Buna ek olarak Yunanistan’ın Karadeniz ve zengin enerji kaynaklarına sahip Orta doğu ve Kafkaslarla da tarihi ve kültürel yakınlığı vardır.

Karadenize ve Akdenizi birleştiren ve petrol ve doğal gaz ürünlerinin taşınmasında stratejik bir geçit yolu oluşturan Ege denizi üzerinde Yunanistan önemli bir yer kaplamaktadır ve deniz taşımacılığı alanında da bölgenin diğer ülkelerine göre oldukça önemli bir üstünlüğü vardır. Ülke gelecekte AB üyesi olmak isteyen Balkan ülkelerine model oluşturmaktadır. Çünkü Yunanistan Balkan ülkeleri arasındaki tek AB üyesi ülkedir ve ekonomik bakımdan bu ülkelere göre çok daha güçlü bir konumdadır. Yunanistan'ın GEMED ülkeleriyle olan tarihi, kültürel ve ekonomik bağları bu ülkenin bölgede bir telekomünikasyon merkezi haline gelme hedefini koylaştırabilecektir.

Bölgede güçlü bir Amerikan yanlısı politika izleyen İsrail ise Türkiye ile olan politik ve ekonomik ilişkilerini daha fazla güçlendirmek ve bu yolla Türkiye üzerinden Orta Asya ülkeleriyle iyi ilişkiler kurmayı hedeflemektedir. İsrail'in temel amacı firmalarının ürettikleri mal ve hizmetler, telekomünikasyon ve bilgi sektöründe faaliyet gösteren firmalar da dahil olmak üzere, için bu ülkelerde yeni pazarlar yaratmak ve böylece bölgedeki izolasyonunu kırmaktır. Türk Silahlı kuvvetleri de İsrail'le ilişkilerin yaklaşmasını destekleyen önemli bir aktördür. Çünkü İsrail elektronik askeri teknolojilerin Türk Silahlı Kuvvetlerine transfer edilmesine izin vermektedir. Ayrıca ABD'de bölgede güçlü bir Amerikan yanlısı askeri işbirliğinin oluşması için Türkiye ve İsrail arasındaki yaklaşmayı desteklemektedir.

1980li yıllara kadar bu üç ülke telekomünikasyon sektörlerinde aynı ortak özellikleri göstermişlerdir. Birinci ortak özellik, bu ülkelerde telekomünikasyon sektöründe güçlü bir devlet müdahalesinin varlığıdır. İkinci ortak özellik, bu ülkelerde Haberleşme Bakanlıklarının hem telekomünikasyon sektörünün yasal düzenlemelerinden hem de ulusal telekomünikasyon kurumunun örgütsel faaliyetlerinden sorumlu olmalarıdır. Üçüncü ortak özellik, Türk, Yunan ve İsrail hükümetlerin kalkınma planlarında telekomünikasyon projelerlerine öncelik vermemiş olmalarıdır. Hükümetler telekomünikasyon kurumlarının elde ettikleri karların önemli bir bölümünü ekonomik olmaktan çok politik nedenlerle belirlenen kalkınma projelerine aktarmışlardır. Bu sistemin bir sonucu olarak bu üç ülkede telekomünikasyon ağlarının modernizasyonu gerçekleştirilememiştir. Dördüncü ortak özellik ise bu ülkelerin telekomünikasyon kurumlarının sağlamış oldukları hizmetler için çapraz-ikame

mekanizmalarına dayalı ve kamu yararı ilkesini göz önüne alan fiyatlandırma politikaları izlemiş olmalarıdır.

Türkiye’ de telekomünikasyon sektöründe meydana gelen köklü değişimler, IMF ile 24 Ocak 1980 tarihinde imzalanan serbest piyasa ekonomisine geçilmesini, KİT’lerin özelleştirilmesini ve hükümet harcamalarının kısıtlanmasıyla devletin ekonomideki rolünün azıtılmasını ve Türkiye’nin küresel ekonomi ile bütünleşmesinin sağlanmasını öneren destekleme programı ile başlamıştır. Bu programın bir sonucu olarak, Türkiye iş kesiminin iletişim gereksinimlerini karşılamak amacıyla hızlı, güvenilir, esnek ve düşük maliyetli telekomünikasyon sistemlerinin oluşturulması için önemli bir çaba göstermiş ve 1980li yılların başından itibaren iş kesimi odaklı politikaları benimsemeye başlamıştır.

1984 yılında hükümet, aynı yıl çıkarılan ITU-Maitland Raporu’nun önerilerinden esinlenerek yeni bir telekomünikasyon planı ortaya atmıştır. 1984 tarihli Plan ekonomik kalkınma ve modernizasyon hamlelerinde telekomünikasyonun rolünün önemini vurgulamıştır. Plan telekomünikasyon donanımı sektörünün özelleştirilmesini hedeflemiştir. Böylece bu sektörün özelleştirme yoluyla ticarileştirilmesi süreci başlamıştır. Bu ticarileştirme politikası telekomünikasyon alanında faaliyet gösteren yabancı firmaların belli başlı Türk sanayici gruplarıyla birleşmeler yapması sürecini hızlandırmıştır.

1980li yıllardaki olumsuz ekonomik koşullar Ulaştırma ve haberleşme Bakanlığı ile PTT’nin kapsamlı bir telekomünikasyon altyapısı oluşturmak için yapmış oldukları planların finansmanının yeniden gözden geçirilmesini gerektirmiştir. Bu kurumlar üç aşamalı yeni bir finansman stratejisi belirlemişlerdir. Birinci aşama PTT’nin uluslararası firmaların koşula bağlı fonlarını ve fonlarını kabul etmesine yol açan çok-taraflı fon mekanizmasından yararlanmasıdır. İkinci aşama telekomünikasyon pazarının belli bölümlerinde özel sermaye yatırımlarına izin verilmesidir. Üçüncü aşama ise PTT’nin üç adımda özelleştirilmesini öngörmektedir. Birinci adım posta hizmetlerinin telekomünikasyon hizmetlerinden ayrılmasıdır. İkinci adım telekomünikasyon kurumunun Türk Telekom AŞ’nin (TTAŞ) oluşturularak şirketleştirilmesidir. Üçüncü adım ise PTT nin hisselerinin özel sektör yatırımcılarına satılmasıdır.

1980lerde iki önemli olay Yunanistan'ın telekomünikasyon politikalarını önemli ölçüde etkilemiştir. Bunlardan ilki bu ülkenin 1981 yılında EEC üyesi olmasıdır. Bu üyelik Yunanistan'ın telekomünikasyon politikalarının EEC' ninkilerle uyumlaştırılması zorunluluğunu doğurmuştur. İkinci önemli olay ise Yunan telekomünikasyon sektörünün dünya çapındaki telekomünikasyon serbestleştirilmesi ve özelleştirilmesi politikalarından etkilenmeye başlamasıdır. Bu iki faktör Yunan hükümetlerini rekabetçi koşullar altında özel telekomünikasyon şirketlerinin faaliyet göstermesine izin verecek yeni telekomünikasyon yasaları çıkarmaya zorlamıştır.

Reagan yönetiminin telekomünikasyon da dahil olmak üzere ekonominin tüm sektörlerinde serbestleştirmeyi ve rekabeti teşvik eden politikaları ve 1984 ITU Maitand Raporunun önerileri 1980li yıllarda İsrail'in ulusal telekomünikasyon politikalarını önemli ölçüde etkilemiştir. İsrail'de telekomünikasyon serbestleştirilmesine ilişkin ilk adımlar 1984 Telekomünikasyon Yasasının çıkarılmasıyla atılmıştır. Bu yasa ile bir Posta İdaresi Kurumu oluşturulmuş ve telekomünikasyon sektörünün yasal düzenlemelerine ilişkin faaliyetlerle işletilmesine ilişkin faaliyetler birbirinden ayrılmıştır. Yasal düzenlemelerle ilgili konular Haberleşme Bakanlığının sorumluluğuna, telekomünikasyonla ilgili faaliyetler ise Bezeq'in sorumluluğuna verilmiştir.

1994 yılında Türk Parlamentosu Türk PTT'sinin Posta İdaresi ve Telekomünikasyon İdaresi, TTAŞ, olarak ayrılmasına izin veren yeni bir telekomünikasyon yasasını onaylamıştır. Bu yeni yasa ile özelleştirme politikaları önemli bir ivme kazanmıştır. Türk Telekom'un özelleştirilmesi için Mart 1997 tarihinde telekomünikasyon sektörü için genel kuralların belirlenmesi, bir satış stratejisinin geliştirilmesi ve Türk Telekom hisselerinin değerlemesinin yapılması için Goldman Sachs firmasının yardımlarıyla bir Değer Taktiri Komitesi kurulmuştur.

1997 yılında Türkiye DTÖ'nün BTS anlaşmasını imzalamış ve sabit-hatlı telefon hizmetleri piyasasının 2006 tarihine kadar tamamen serbestleştirilmesini taahhüt etmiştir. Bu amaçla Parlamento Ocak 2000 tarihinde önceden Ulaştırma Bakanlığına ait olan sorumlulukların bağımsız bir kurum olan Telekomünikasyon Kurumuna devredilmesini öngören bir telekomünikasyon yasası çıkarmıştır. Telekomünikasyon Kurumu'nun kurulmasından sonra Parlamento Mayıs 2000 tarihinde Türk Telekom'un

hisselerinin yüzde 1'lik "altın hisse" haricinde tamamen satılabilesine olanak sađlayan yeni bir telekomünikasyon yasası ıkarmıştır.

Bu arada 2001 yılında IMF ve Dünya Bankası destekli olarak uygulamaya konulan ekonomik programın bir geređi olarak Türk Telekom'un yüzde 55'lik payının özelleştirilmesi amaçlanmıştır. Bu özelleştirmeyi gerçekleştirmek için 2004 yılı Kasım ayında Özelleştirme İdaresi süreci başlatmıştır. Haziran 2005 tarihinde Suudi Arabistan firması olan Oger Telecom özelleştirme ihalesini kazanmıştır. Böylece Türkiye telekomünikasyon sektöründeki serbestleştirme, telekomünikasyon politikalarını belirleyen bağımsız bir kurumun oluşturulması, şirketleşme ve özelleştirme den oluşan dört aşamalı neo-liberal deđişimleri tamamlamıştır.

1990lı yıllarda Avrupa Komisyonu telekomünikasyon sektörünün altyapı gelişimini sađlamak amacıyla ERDF, Star, Telematique ve Crash politikaları aracılığıyla Yunanistan'a önemli mali destek sađlamıştır. Bu programlar Yunanistan'ın telekomünikasyon politikalarının yeniden düzenlenmesine önemli ölçüde katkıda bulunmuştur. Telekomünikasyon sektörünü yeniden düzenlemek için Yunanistan çabalarını birbiriyle bağlantılı üç süreç üzerinde yoğunlaştırmıştır. Birinci süreç telekomünikasyon ağlarının modernizasyonu için büyük miktarlardaki kaynağın bu sektöre tahsis edilmesidir. İkinci süreç Yunan telekomünikasyon sisteminin EU yasal düzenlemeleriyle uyumlaştırılması için gerekli kurumsal deđişikliklerin yapılmasıdır. Üçüncü süreç Yunan telekomünikasyon piyasasında daha fazla serbestleştirmenin sađlanabilmesi için OTE'nin özelleştirilmesidir. Bu hedefleri gerçekleştirmek için Yunanistan Parlamentosu 31 Temmuz 1992 tarihinde yeni bir Telekomünikasyon Yasası ıkarmıştır. Yasa telekomünikasyon alanıyla ilgili Avrupa Komisyonu tarafından belirlenen kuralların Yunan ulusal telekomünikasyon yasalarına aktarılmasıdır. Yasa telekomünikasyon sektöründeki farklı kurumlar için sorumlulukların ayrılmasını da onaylamıştır. 1992 tarihli yasa ile özelleştirme süreci hız kazanmıştır. 1994 yılında PASOK hükümeti Çok-Uluslu Şirketlerin yatırımlarını Yunanistan piyasasına çekmek ve Yunan firmaları ile büyük Çok-Uluslu Şirketler arasındaki işbirliği anlaşmalarını teşvik etmek ve OTE ile özel sektör arasındaki işbirliğini güçlendirmek için 1992 yılında ıkarılan telekomünikasyon yasasını revize etmiştir.

1997 yılında imzalanan DTÖ'nün BTS anlaşması Yunanistan ulusal telekomünikasyon piyasasında OTE'nin tekeli pozisyonunun ortadan kaldırılmasını sağlamıştır. Telekomünikasyon sektörünün tamamen serbestleştirilmesi çerçevesinde Aralık 2000 tarihinde Yunan hükümeti gözden geçirilen 1994 yasasında bir takım değişiklikler yapmıştır. Değiştirilen 2000 tarihli Yasa ile EETT'nin bağımsız bir kurum olarak kurulmasını ve Haberleşme Bakanlığının yetkilerinin bu kuruma devredilmesi sağlanmıştır. Aralık 2001 tarihinde AB çapında telekomünikasyon sektörünün tamamen serbestleştirilmesinin sağlanması amacıyla yeni bir AB yasal çerçevesi 25 Temmuz 2003 tarihinde yürürlüğe girmek üzere hazırlanmıştır. Yunanistan bu çerçeve planında yer alan beş önemli Direktif'in dört tanesinin Ocak 2006 tarihinde kendi yasal mevzuatına aktarılması işlemini tamamlamıştır. Direktiflerin yasal mevzuata aktarılmasından sonra Yunan hükümeti Aralık 2006 tarihinde OTE'nin özelleştirilmesi sürecini başlatmıştır. Böylece Yunanistan telekomünikasyon sektöründeki serbestleştirme, telekomünikasyon politikalarını belirleyen bağımsız bir kurumun oluşturulması, şirketleşme ile dört aşamadan oluşan dört aşamalı neo-liberal değişimlerin üçünü tamamlamıştır.

1990lı yıllarda İsrail'de telekomünikasyon sektörünün özelleştirilmesi çabaları yoğunluk kazanmıştır. Haberleşme Bakanlığı telekomünikasyon gelişmesi için önerilerde bulunmak üzere bazı komiteler atamıştır. Bu komisyonların önerileri Knesset tarafından Ocak 1993 tarihinde onaylanmıştır. 1994 tarihinde Bezeq'in yan şirketlerinin, Pelephone (mobil iletişim hizmetleri için), Bezeq-Bit ulusal ve küçük ölçekli iş piyasasına müşteri hizmetleri ve terminal ekipmanı sağlamak için), Bezeq-Kol (büyük ölçekli işletmelere telekomünikasyon hizmetleri ve müşteri odaklı telekomünikasyon hizmetleri sağlamak için) ve Bezeq International Projects (Avrupa ve Asya'daki telekomünikasyon projelerine katılmak ve uluslar arası yatırım faaliyetleri için), kurulmasıyla telekomünikasyon alanında daha kapsamlı bir serbestleştirme yapılması sürecine gidilmiştir.

İsrail'de ikinci aşama neo-liberal telekomünikasyon değişiklikleri 1998 yılında başlatılmıştır. Amerikan yatırım bankası olan First Boston Corporation hükümet tarafından Bezeq'in özelleştirilmesinde danışmanlık yapması için seçilmiştir. Bezeq'in özelleştirilmesi süreci Ağustos 2000 tarihinde başlatılmıştır. Bu amaçla hükümet Haziran 2002 tarihinde telekomünikasyon yasasını yeniden gözden geçirmiştir.

Özelleştirme süreci Ağustos 2004 sonunda başlatılmıştır. Bezeq'ın özelleştirilmesi 23 Mayıs 2005 tarihinde sonuçlanmıştır. Apax-Saban-Arkin Grubu ihaleyi kazanmıştır. Böylece İsrail telekomünikasyon sektöründeki serbestleştirme, şirketleşme ve özelleştirme ile dört aşamadan oluşan neo-liberal değişimlerin üçünü tamamlamıştır. Bağımsız bir telekomünikasyon kurumunun kurulabilmesi için çalışmalar 2004 tarihinden beri devam etmektedir.

Sonuç olarak, ulusal telekomünikasyon sektörlerinin serbestleştirilmesini, telekomünikasyon alanındaki kısıtlayıcı yasaların kaldırılmasını (veya daha doğru bir ifadeyle telekomünikasyon sektörüne esnek bir yapı kazandırmak amacıyla telekomünikasyon yasalarının yeniden düzenlenmesini), şirketleştirilmesini ve özelleştirilmesini savunan neo-liberal politikaların Türkiye, Yunanistan ve İsrail'de iletişim kaynaklarının giderek artan bir biçimde çok az sayıdaki şirketin elinde toplanmasına yol açan bir bilgi ve iletişim piyasasının ortaya çıkmaya başladığını ileri sürmek mümkündür. Ortaya çıkan bu durum, devletin egemenliğinin önemli göstergelerinden biri olan devletin bilgi ve iletişim kaynakları üzerindeki kontrol ve düzenleyici yetkisini gelecekte büyük bir olasılıkla tamamen ortadan kaldıracaktır.

Neo-liberal politikalar bir yandan devletleri merkez Batı ülkelerinde üretilen ICT mal ve hizmetleri satın almaya teşvik ederken, diğer yandan Türkiye ve Yunanistan'da AR-GE politikalarının geliştirilmesi çabalarını önlemektedir. Bu ülkelerde yeni nesil ağlara dayalı teknolojilerin üretimini teşvik edecek kapsamlı AR-GE politikalarının olmaması Türkiye ve Yunanistan'ın giderek Batı teknolojisine bağımlı hale ülkeler haline dönüşmeleri sürecini güçlendirecektir. İsrail'de ise daha değişik bir durum söz konusudur. Amerikan sermayesinin İsrail'deki bilgi teknolojileri alanında faaliyet gösteren firmalara aktarılması, bu firmaların kendi iç pazarlarının gereksinimlerini göz ardı ederek Amerikan pazarlarına yönelik üretim stratejilerine yönelmelerine yol açmıştır çünkü İsrail'in bu kadar büyük AR-GE yatırımlarının ürettiği ICT teknolojilerini talep edecek yeterli kapasitesi yoktur. Bu durum İsraili firmaların gözünde kendi iç piyasalarını daha önemsiz hale getirmektedir. Neo-liberal ICT politikaları büyük bir olasılıkla ulusal İsrail piyasasının gereksinimlerini göz ardı ederek İsrail ve Amerikan bilgi teknolojisi firmaları arasında daha yakın ilişkilerin doğmasına hizmet edecektir.

Neo-liberal ICT politikaları Türkiye, Yunanistan ve İsrail'deki farklı sosyo-ekonomik gruplar arasındaki bilgi ve iletişim açığını bilgi teknolojilerine sahip olanlar ve olmayanlar şeklinde iki katmanlı bir toplum yaratarak arttırmıştır. Bilgi ve iletişim politikalarının sosyal yönlerini göz ardı eden ve şirket odaklı politikaları ön plana çıkaran neo-liberal ICT politikaları büyük bir olasılıkla bu ülkelerdeki farklı sosyo-ekonomik gruplar arasındaki dijital bölünmeyi daha da derinleştirecektir.

Esas olarak bankacılık ve finans alanlarında faaliyet gösteren şirketlerin tamamen serbestleştirilmiş telekomünikasyon piyasalarına girmeleri ileride Wilson Dizard'ın "ekonomik egemenliğin aşınması" olarak adlandırdığı süreci hızlandıracaktır. Çünkü bu şirketler mali işlemlerini devletin kontrolünü devre dışı bırakan gelişmiş iletişim sistemlerinden faydalanarak hızlı, esnek, güvenilir ve düşük maliyetli bir biçimde gerçekleştirmeyi amaçlamaktadırlar. Gelişmiş iletişim teknolojileri ile birlikte mali piyasaların kontrolünü ortadan kaldıran küresel düzenlemeler zaten ekonomik egemenliğin aşınması sürecini başlatmıştır ve bu süreç gelecekte Türkiye, Yunanistan ve İsrail'de devletin ekonomik alandaki egemenlik haklarını tamamen ortadan kaldırıncaya kadar devam edecektir.

Bu ülkelerde medya sektörü üzerinde devletin kısıtlayıcı yasalarının ortadan kaldırılması yazılı ve görsel medya kaynaklarının çok az sayıda medya şirketinin elinde toplandığı bir medya yapısı ortaya çıkarmıştır. Bu durum ileride büyük bir olasılıkla demokrasi üzerinde yıkıcı etkilere yol açabilecektir. Çünkü medya kaynaklarının giderek artan bir biçimde çok az sayıdaki şirketin elinde toplanması süreci, büyük medya kuruluşları tarafından kamuoyunun kontrol edilmesi ve yönlendirilmesi tehlikesini ortaya çıkarabilecektir. Bu durumun ileride kültür erozyonuna ve bu ülkelerdeki dil, kültür, inanç ve değerlerin yozlaşmasına da yol açması da mümkün olabilecektir. Uydu televizyon sistemleri, kablo sistemleri, IPTV, DDTV gibi gelişmiş yayın teknolojilerini kullanan ve hemen tüm medya kaynaklarını bünyesinde toplayan çok az sayıdaki medya şirketi reklamlar aracılığıyla Türkiye, Yunanistan ve İsrail'de tüketime yönelik bir yaşam tarzının ortaya çıkmasına yol açabilecektir.

Yüksek maliyetli yeni nesil ağlara dayalı teknolojiler kaçınılmaz olarak firmalar arası birleşmelerin artan bir biçimde ortaya çıkmasına neden olacaktır. Bu durum, Türkiye, Yunanistan ve İsrail iletişim piyasalarında iletişim kaynaklarının çok az

sayıdaki şirketin elinde toplanması sürecini hızlandıracaktır. Bu sürecin devam etmesi yakın bir gelecekte iki önemli sonucun ortaya çıkaracaktır. Bunlardan birincisi, devletin telekomünikasyonla ilgili yasal düzenlemeler çıkarma ve bu alandaki kontrol yetkisinin tamamen ortadan kaybolması olacaktır. İkinci önemli sonuç ise iletişim kaynaklarının gittikçe artan bir biçimde az sayıdaki büyük şirketlerin elinde toplanmasının gelecekte telekomünikasyon sektöründe tekelleşme sürecini hızlandıracak olmasıdır. Buna bağlı olarak ve belki de telekomünikasyon sektörün artık devlet tarafından kontrol edilmeyen ve kurallarının üç ya da dört telekomünikasyon devinin birleşmesiyle oluşturulan güçlü bir tekel tarafından belirlendiği doğal tekel konumuna dönmesi söz konusu olabilecektir.

Neo-liberal politikaların olumsuz etkileriyle mücadele etmek için Türkiye ve Yunanistan'ın çabalarını neo-liberal politikaların dayatmalarından bağımsız yeni yasal düzenlemeler çıkararak AR-GE politikalarının teşvik edilmesi üzerinde yoğunlaştırmaları gerekmektedir. İsrail ise iç piyahasının bilgi teknolojisi alanındaki ihtiyaçlarına birinci derecede önem veren yeni yasal düzenlemeler hazırlamalıdır. Buna ek olarak, Türkiye, Yunanistan ve İsrail çabalarını ICT politikalarının sosyal yanlarını da dikkate alarak derhal ve yoğun bir biçimde kitlelerin yaygın olarak ICT sistemlerini kullanmalarını sağlayacak ve bu teknolojilerin farklı sosyo-ekonomik gruplar arasında daha eşit bir biçimde dağılmalarına yol açacak yeni ve kapsamlı ICT politikaları geliştirmeye yoğunlaştırmaları gerekmektedir.

APPENDIX B

CURRICULUM VITAE

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