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Telecommunications policy in Turkey: Dismantling barriers to growth

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Abstract

Modern telecommunications technology is now widely seen as a critical driver in economic development. However, the issues involved in the rapid deployment of this technology are complex and frequently highly controversial. While some issues are technical, the most difficult ones involve changing an institutional framework originally designed for different times and different technologies. The process of changing this framework necessarily involves disruptive change for existing infrastructure and service providers as well as substantial benefits for the economy at large. This paper, based on an extensive series of interviews in Turkey in 2005 as well as published sources, seeks to discuss these issues in light of Turkey's progress to date in taking advantage of advanced available telecommunications technology and the myriad productivity-enhancing services that are associated with it.

An important element in developing a more competitive and dynamic sector has been Turkey's long-standing desire to become a member of the European Union (EU). This has encouraged changes in the telecommunications regulatory regime following the guidelines set out in Chapter 19 of the EU "acquis" for candidate members. Nonetheless, substantial further efforts are needed to complete and implement the desired regulatory framework, particularly as it affects the former government monopoly carrier, Turk Telekom and the cable companies. A further limiting factor in recent years has been an overall investment climate characterized by a high level of uncertainty for most investors, regardless of size or nationality.

Policy recommendations to help accelerate the deployment of telecommunications technology include a clear reaffirmation of the government's priorities for the sector, a reduction in the level of regulatory uncertainty, strengthening the Board and Staff of the Telecommunications Authority, and reviewing policies to broaden the scope and decrease the cost of telecommunication licenses.

Keywords: Regulation; Economic growth; Turkey; European Union

1. Introduction

Turkey is properly considered to be one of the most important "emerging markets" in the world today. With a population of over 70 million, it is effectively the bridge between Europe and the Middle East, as the two massive suspension bridges over the Bosphorus Straits at Istanbul emphasize so dramatically. After

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several decades of unstable political conditions, high rates of inflation and periodic banking and foreign exchange crises, the current government, in power since late 2002, has brought relative economic, financial and political stability to the country. Real economic growth recently has been close to 10%, while inflation has been brought down to single digits after reaching rates of over 50% in 2000–2001.

In recent years, major—if belated—steps have been taken to encourage the deployment of a modern telecommunications structure. This includes the passage of a telecommunications liberalization law in 2000 which was intended to open up markets to competition and which established an independent regulator for the telecommunications sector. In 2005, after many years of national debate and pressure from international organizations, majority ownership of the state-owned dominant fixed-line carrier, Turk Telekom, was transferred to the private sector.

2. Contribution to economic growth

Before dealing with the specific situation in Turkey it will be helpful to review briefly why modern telecommunications is so important for economic development.[1] Most studies by economists conclude that a modern telecommunications infrastructure has a substantial impact on economic growth. Based on samples of 47 and 124 countries, Norton (1992) concludes that in economic development "a telecommunications infrastructure …must be viewed as at least as important as conventional economic forces such as stable money growth, low inflation and an open economy." Roller and Waverman (2001) found that one-third of the economic growth in a group of 21 OECD countries over the 20-year period 1970–1990 could be attributed to the direct and indirect impact of the telecommunications sector. This author has studied the remarkable economic transformation of Ireland in the 1990s, which owed much of its impetus to timely investment in a modern telecommunications system.[2]

While the government of Turkey has frequently affirmed the importance of developing the country's telecommunications sector, typically in statements by the Ministry of Transportation, the actual priority given to this effort is frequently in question. As will be shown later, too many policy decisions have had the effect of limiting competition, discouraging foreign capital inflows and treating the sector more as a "cash cow" for raising tax revenue than as an engine for economic growth.

3. Turkey and the European Union (EU)

Turkey originally applied in 1959 for association within the European Union's (EU) predecessor, the European Economic Community. In 1970 it was agreed that the long-range objective of the association was a customs union. This objective was realized in January 1996. By 1999, tariffs on industrial products in trade with the EU were reduced to zero. By December 2004, EU members had come to a consensus that sufficient progress had been made on political and economic pre-conditions, so that a start date for full membership negotiations could be set. After complex political negotiations, the formal negotiations commenced on 4 October 2005, but are envisioned to take as many as 10 years to complete as Turkish law and institutions are aligned with EU standards.

3.1. Membership requirements

In order for Turkey to be accepted into the EU, the country must meet the broadly stated membership requirements that it has "a functioning market economy" and that it has "the capacity to cope with competitive pressure and market forces within the Union."[3] The determinations that it has (or has not) met these requirements and aligned its law and institutions with the EU are carried out within the framework of

[1]The European Commission recently noted "the vital role the electronic communications sector plays in nearly all other economic activities, and … as a potent driver of labour productivity" (2004b, p. 2).

[2]Burnham (2003).

[3]These are in addition to a set of political membership requirements covering such areas as the rule of law, human rights and the protection of minorities.

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roughly 30 acquis chapters, most of which deal with economic conditions, policies and institutions. These chapters cover such subjects as free movement of capital, company law, agricultural policy, telecommunications and organization of the energy sector.

Turkey's recent economic performance has earned it conditional certification as "a functioning market economy" in the EU's 2005 progress review.[4] However, the institutional and administrative challenges that remain are not immaterial, as the EU's reviews of Turkey's progress have made clear. A major concern is lack of "clarity, transparency and legal certainty" of the Turkish judicial system and its impact on the business sector, particularly foreign investment.[5] Another concern is with competition policy and state aid to firms. The acquis looks for the establishment of an independent body with the power to formulate and enforce anti-trust law and another body to monitor state aid for business. In Turkey's case, an independent Competition Authority was established in 1997, but the 2004 review noted that there was "no alignment" with the EC Treaty rules on state aid, and that the role of the Competition Authority in economic policymaking needed to be strengthened considerably.[6]

3.2. Telecommunications acquis

Turkey's telecommunications regulatory framework will have to conform to guidelines laid down in Chapter 19 of the EU acquis for candidate members. The principles underlying Chapter 19 are driven by the EU's Lisbon Strategy of March 2000, which sought to make the EU "the most competitive and dynamic knowledge-driven economy by 2010." To accomplish this objective, the strategy stresses that "businesses and citizens must have access to an inexpensive, world-class communications infrastructure."[7] To implement strategy in the telecommunications sector, the European Commission issued a set of directives, which became effective in July 2003.

These directives cover a wide range of subjects, including the elimination of restrictions on competition, simplification of licensing criteria, access to service, personal data protection, and the organization, staffing and powers of the telecommunications regulatory authority. The EU approach emphasizes that governments should follow a policy of "technical neutrality," e.g. to avoid favoring one particular telecommunications "pipeline" over another in the delivery of services, such as voice telephony, data transmission and internet access.

The 2004 EU report on Turkey's progress in meeting Chapter 19 accession requirements noted that substantial further efforts were needed to complete the regulatory framework, as well as more evidence of effective implementation and enforcement of the Commission's rules.[8] An earlier OECD (2002) report had similar recommendations, as well as specific suggestions for simplifying the licensing process.[9]

A particular concern for both the OECD and the EU is the Turkish Telecommunications Authority's (TA) tendency to restrict entry into telecommunications services that do not involve the allocation of scarce resources, such as radio frequencies or satellite positions. This is accomplished via restrictive licensing. The preferred alternative, as called for in EU directives is that "electronic communications services or networks should be provided on the basis of a general authorization and not on the basis of a license."[10]

4. Telecommunications: infrastructure vs. services

In a country like Turkey, few sectors of the economy offer greater challenges for policymakers interested in facilitating economic growth than telecommunications. The legacy of a state monopoly and highly intrusive regulation remain very much alive. At the same time, rapidly changing technology creates considerable threats

[4]Commission (2005).
[5]Commission (2004a), p. 119.
[6]Commission (2004a), p. 93.
[7]Commission (2005).
[8]Commission (2004a), p. 128. The paper by Jordana, Levi-Faur, and Imma (2005) Jordana et al (2005) provides a succinct summary of the evolution of the EU telecommunication regulatory regime.
[9]OECD (2002), p. 23.
[10]Commission (2002b),p. 9.

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to existing service and infrastructure providers as well as uncertainties as to which technology offers greater long-term public benefits.

In analyzing the situation in Turkey, as elsewhere, it is helpful to distinguish between the telecommunications infrastructure alternatives and the types of services (voice telephony, text and email, data, video, internet, etc.), which are delivered by that infrastructure. The infrastructure can be roughly classified by type of network.

4.1. Fixed line networks

These include Public Switched Telephone Networks (PSTN), the traditional copper wire analog telephone circuits and switches, as well as newer fixed lines systems that encompass digital transmission, optical fiber cable and similar advances. Cable companies originally established for the delivery of television are part of this group. In the future, this category may well include the electric power grid, where the basic infrastructure is already in place.[11] With the exception of microwave transmission systems, these types of networks do not require publicly supervised allocation of through-the-air bandwidth. However, they do require extensive "rights of way" to build the requisite transmission infrastructure.

4.2. Wireless networks

These networks are distinguished by their heavy reliance on through-the-air bandwidth for terrestrial-based transmission of analog and digital signals containing the various services mentioned earlier. Many wireless networks also rely heavily on fixed networks for some portion of their transmission chain, since they interconnect with them. Mobile telephony is the most visible type of wireless network. However, broadband services transmitted at local "fixed wireless" points, such as shopping centers or university campuses, are increasingly common in many countries. The right to use specific transmission frequencies is typically controlled or auctioned off by governments.

4.3. Satellite-based networks

Once thought to be the future of international telecommunications, satellite networks now are largely used for television broadcasting and for military and niche commercial applications, such as vehicle positioning information. Satellites can also be used for internet services, usually in conjunction with fixed line facilities (needed for "uploads" from the user). Here, too, transmission frequencies must be allocated through some government-supervised process.

The three different types of infrastructure (as well as alternative types of delivery technology within each basic type) can be thought of as competing "pipelines" for delivering telecommunications services. At the same time, continuing rapid advances in telecommunications technology threaten to make past and current investment obsolete. The regulatory challenge in Turkey, as elsewhere, is to permit the various competitors to deploy their systems as rapidly as possible, letting the telecommunications users—rather than the omniscience of the regulator—shape the resulting outcome.[12]

5. The current status of telecommunications deployment in Turkey

5.1. Overview

Taking a snapshot of where Turkey stands in deploying telecommunications technology as of 2006 is hampered by the lack of timely data, an accelerating program of regulatory liberalization and uncertainties regarding behavior of the recently privatized *de facto* monopoly fixed line carrier, Turk Telekom. However,

[11]Demonstration projects for broadband over powerlines (BPL) are already underway in San Diego, CA and Manassas, VA (Wallace, 2005).

[12]This is clearly the central principle behind the basic EU Directive on competition in telecommunications (Commission, 2002a).

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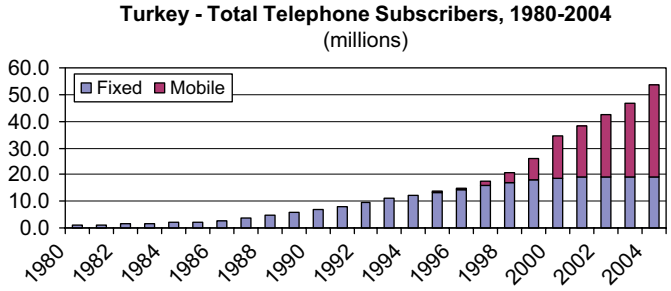

Fig. 1. Turkey-total telephone subscribers, 1980–2004. *Source*: ITU database.

based on a review of the available data and a series of interviews and discussions with industry participants, customers and regulators, the following conclusions have been drawn:

1. The basic physical framework for the principal competing infrastructure "pipelines" is present, although not fully developed, especially in terms of its ability to deliver broadband services. Infrastructure in the eastern part of the country is spotty. Satellite-based services are available. Cable companies operate—to a limited extent—in the principal cities of the country. While personal computer (PC) penetration is low, an increasing percentage of mobile phones have some internet access.
2. At the present time the development and deployment of new services and additional infrastructure is being severely hampered by lengthy regulatory delays, difficulties associated with the policies of Turk Telekom and issues arising out of its privatization and loss of monopoly over fixed line telephony.
3. Despite the impediments cited in (2), the liberalization program has attracted some new entrepreneurial investment and management into the telecommunication sector. More is probable if uncertainties regarding the regulatory regime are promptly resolved, and if Turk Telekom's willingness to abide by telecommunications Authority decisions becomes evident.
4. The advent of limited competition in Turkey has helped to reduce the cost of many telecommunications services, although they still remain high, relative to most other OECD countries. This is particularly the case when taxes on the sector and its customers are factored in.
5. A problem that affects most economic sectors in Turkey, but which has particular relevance for telecommunications, is an investment climate that poses special hurdles for "outsiders"—large or small, domestic or foreign. This includes the lack of a well-functioning capital market, a banking system with limited expertise in working with technologically oriented firms, and a relatively opaque regulatory process that tends to favor existing enterprises, particularly if they are part of family-controlled holding companies.

5.2. *Infrastructure systems*

As has happened in many other countries over the past two decades, Turkey's telecommunications sector has shown significant growth. Fig. 1 shows the growth of telephone subscribers in Turkey, 1980–2004. Three important trends stand out. First, it was not until the late 1980s that extremely low levels of penetration began to be overcome. This was not a question of lack of demand: in 1987 the backlog of requests for main line telephone service exceeded two million would-be subscribers. The backlog did not drop below one million until 1994. A second important trend has been the rapid growth of mobile phone subscribers beginning, effectively, in the late 1990s. The third trend, which is closely related (and evident in many other countries) is the stagnation in the number of fixed line subscribers. By 2004, the number of mobile subscribers exceeded those with fixed lines by 15 million.[13]

While progress has been impressive in deploying wireless telephony, an equally relevant perspective is how Turkey compares to other countries. Fig. 2 provides a comparison in total telephone subscribers against four other countries and the European average as at 2003.

[13]For an excellent overview of the mobile phone sector as of 2004, see Evci, Ciliz, Anarim, and Sankur (2004) Evci et al. (2004).

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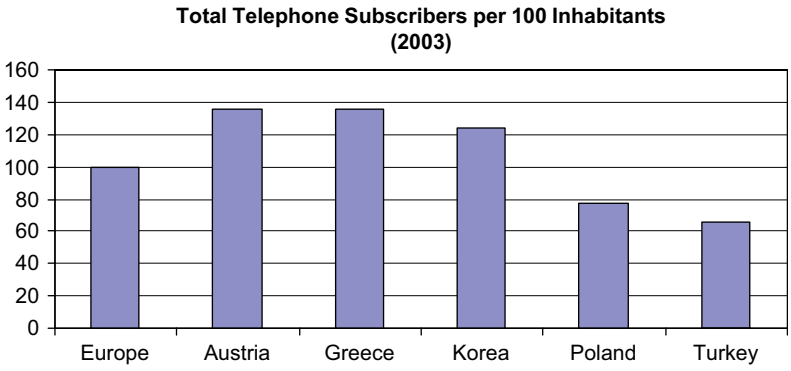

Fig. 2. Total telephone subscribers per 100 inhabitants (2003). *Source*: International Telecommunications Union.

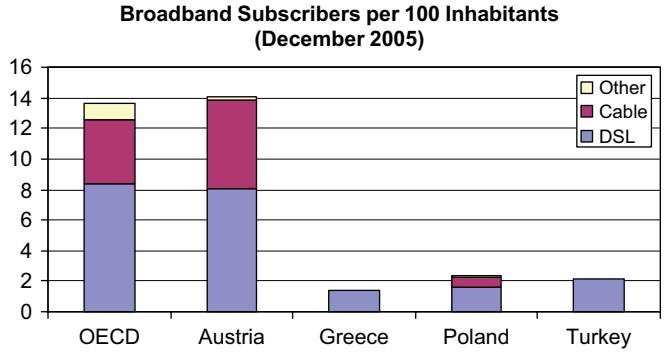

Fig. 3. Broadband subscribers per 100 inhabitants (December 2005). *Source*: OECD (www.oecd.org/sti/ict/broadband).

By this measure, Turkey is close to Poland's penetration rate, but well below Greece and the European average.[14] Data on the number of business leased lines is not available (but see the discussion below on leased line pricing).

The rapid growth of mobile telephony in Turkey in recent years has been led by the independent operator, Turkcell, with 27.9 million subscribers at the end of 2005 and a market share of 65%.[15] The acceleration in mobile phone subscribers after 1998 was stimulated by increased competition following the termination of Turk Telekom's control over mobile phone tariffs and the issuance of 25-year licenses to the two independent companies, Turkcell and Telsim. Turk Telekom did not enter the mobile phone sector until 2001, along with a fourth entrant.[16]

While Turkey's telephone system in terms of its penetration rate appears to be relatively satisfactory, given the country's income level, the same cannot be said for its development of cable systems and broadband delivery. This is bothersome, especially in view of the fact that cable franchises have been awarded for 20 cities that together cover roughly 80% of the Turkish market. The Istanbul metropolitan area alone contains roughly 12 million of Turkey's 70 million people. According to industry sources, as of 2004, cable systems had about 1.3 million subscribers with an existing infrastructure capable of reaching 2.6 million households.

The International Telecommunications Union estimates that there were six million internet users (including dial-up PSTN users) in 2003. However, broadband penetration rates are a fraction of the OECD average, although they fare somewhat better against comparisons with Poland and Greece, as Fig. 3 demonstrates. Part

[14]If the data are expressed as phones per household, Turkey's relative position would undoubtedly improve, given the significantly higher average household size. However, individuals with subscriptions to more than one mobile phone operator appear to be fairly common, as they take advantage of differences in tariff schedules (e.g. discounts for own-network calls).

[15]Turkcell press release, 17 January 2006.

[16]Atiyas, p. 24.

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of the explanation undoubtedly lies with the low level of PC ownership (4.31 per 100 inhabitants in 2003 vs. the 22.43 average for Europe). A more important factor may have been the relatively high cost of ADSL until August 2004, when the dominant provider, Turk Telekom, cut its charges by well over 80% for most services and launched a major program to provide additional ADSL ports. Subscribers by year-end 2005 are estimated by the OECD to be 1.5 million, up from 455,000 at the end of 2004.[17]

Broadband penetration would be even higher for Turkey (and other countries) if recognition was given to the fact that an increasing number of mobile phones are internet capable. According to one industry source, 6–7 million of Turkey's 35 million mobile phone subscribers in 2005 have access to the internet via their devices. An additional element in under-reporting broadband access is the existence of internet cafes, which are common in most Turkish urban areas, and which provide access at relatively low cost.

Internet access for educational institutions is uneven. At the university level, it appears that nearly all institutions have broadband access with fairly high degrees of reliability. At the primary and secondary level, the Ministry of Education, working with Turk Telekom, intends to provide all 40,000 schools in the country with ADSL. According to Turk Telekom sources, as of mid-2005, 20,000 schools had been connected. The most difficult connections will be at 3000–4000 relatively remote locations, mostly in the eastern part of the country.

5.3. Service availability

While the basic "pipelines" for the delivery of telecommunications services are present in most major markets within Turkey, the development of new products and the "bundling" of products has been retarded by several factors. First, Turk Telekom historically has been slow to introduce new services in fixed line telephony. In recent years, when liberalization of the telecommunications market made it clear that new competitors were going to gain entry, product development and marketing have assumed a higher priority. A second reason has been the licensing process by the recently established TA. Long delays in the issuance of licenses, their cost and their narrow scope[18] have frustrated would-be entrants into the market, as well as the few already-established firms.

In the case of the cable system operators, licenses for new services approved by the TA have required final approval by the Ministry of Transportation, which has been slow in forthcoming. (Legislation under consideration in the parliament as of mid-2006 may address this issue.)

5.4. Pricing of telecommunications services

An important indicator of competition is the degree of price competition. Obtaining an overview of pricing in any country's telecommunications market today is difficult, given the desirability of constructing a basket of rates charged to a representative user and the need to evaluate tariff rates against other countries' structures. However, based on the most recent available OECD (2004) survey of member countries' pricing structures Turkey continues to be a relatively high-cost country for most services, with the notable exception of domestic leased lines, an important business service (Table 1). An important element in the cost to users is taxes, which in Turkey's case are substantial: 55–60% in the case of mobile phone calls.[19] In Europe, taxes generally range from 7% to 20%.[20] Table 1 provides selected tariffs for 2002 and 2004 for several telecommunications services.[21]

With the exception of leased line charges, Turkish rates tend to be substantially higher than the OECD average. As the table shows, the August 2004 tariff reductions by Turk Telekom were especially large for international rates (probably in response to increasing competition from VOIP providers), but they still remain measurably greater than the OECD average.

[17] www.oecd.org/sti/ict/broadband.

[18] For example, there are three different types of licenses for long distance voice service.

[19] OECD (2004), p. 31.

[20] McKinsey Global Institute, p. 1

[21] The table is based on raw data found in tables in the OECD's *Communications Outlook*, *2003*. Data for 2004 are preliminary. PPP adjusts exchange rates to reflect "purchasing power parity."

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Table 1
Turkish telecommunication relative service charge indices OECD average = 100

Service	8/2002	8/2004
Composite basket of residential charges[a]	148	164
Composite basket of business telephone charges[a]	179	153
Basket of international business charges[a]	262	121
Basket of national leased line charges	96	80
Basket of high user mobile phone charges, including VAT	183	160

Source: Calculated from price tables in OECD Communications Outlook (2003, 2005).
Domestic currency charges converted at $US purchasing parity exchange rates
[a]Inclusive of tax.

The relatively low leased line charges may well reflect the ability of larger business users to use competitive satellite services in place of Turk Telekom landlines. Although they are widely deployed, mobile phone charges are substantially in excess of the OECD average, no doubt due largely to the heavy tax burden.

6. Turk Telekom issues

Perhaps because of a long history of state involvement in the economy, Turkey has been extremely late in recognizing the desirability of privatizing its state-owned monopoly fixed line provider, Turk Telekom. It has been hard for advisors to the government (most notably, the IMF) to convince it of the linkages between telecommunications privatization, increased competition and economic development.[22]

After two prior unsuccessful efforts to initiate the privatization process, a third effort in 2005 was successful in selling a controlling 55% interest to foreign investors. For the company, the likely reduction of political interference in staffing and supplier relationships will be welcomed, although such issues are unlikely to disappear totally given its dominance in most sectors of the industry. Perhaps the primary public benefit from a successful privatization of Turk Telekom will be a more level playing field for the company's competitors, thus helping to accelerate the deployment of new technology and services.

Although the sale has been completed, a difficult transition period is likely to take place as employees, government ministries, the parliament and the regulatory agencies adjust to a new era. While a largely privatized Turk Telekom may compete more vigorously than in the past, it will lose much of its standing as a state-owned company (a matter of no small importance in Turkey) in regulatory proceedings before government agencies, such as the TA. The TA is less likely to be sympathetic to Turk Telekom's explanations for its reluctance to provide competitors with access to its facilities and rights of way (as is generally required by the liberalization program).[23] Turk Telekom appeals and noncompliance with TA decisions (as has happened frequently) are likely to be less favorably viewed by the courts.

An unfortunate byproduct of the Turk Telekom privatization process has been the impact on cable system investment. The original cable companies were established as joint ventures between Turk Telekom and private operators, with the private operators putting up the bulk of new investment. As part of the liberalization/privatization process, Turk Telekom was required to transfer its cable assets to the government entity responsible for communications satellites. However, this is envisioned only as an interim solution and there is some ambiguity as to the ownership claims of the private operators. Thus, the uncertainties surrounding the ownership structure (and ability to deliver new services) of a critical telecommunications pipeline are undoubtedly holding back further investment. This is especially bothersome because it comes at a time when Turk Telekom, the overwhelmingly dominant DSL broadband operator, should be facing stronger competition.

[22]Turkish Letters of Intent to the IMF included promises to "move speedily" in privatizing the telecommunications sector since at least 1999.

[23]Disputes over interconnection charges for long distance and Turk Telekom's refusal to recognize reference rates set by the Telecommunications Authority are a long-standing issue. See, for example, Turkcell press release *2005 Operating Results*, (27 February 2006).

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A further concern is the manner in which the privatization of Turk Telekom has been carried out. The terms of the sale of Turk Telekom give the new owners only a 21-year concession agreement, at the end of which all plant and equipment would revert to the government, an arrangement inconsistent with EU guidelines. Furthermore, although transfer of control to the new majority shareholder, the Saudi Oger Group, has been effected, challenges to the concession agreement are still pending in the courts.

7. The regulatory environment

Turkey has had an independent telecommunications regulator only since 2000. Before that time telecommunications issues (outside radio/TV broadcasting content) were handled by the Ministry of Transportation. Consequently the Turkish TA, at both board member and staff levels, is still in the process of gaining experience and issuing basic regulations regarding such areas as infrastructure competition, market definitions, and quality of service standards. Several important decisions have been challenged in court by Turk Telekom.[24] With one exception, board members are chosen from career civil servants who may have little background in current technology and market issues. Recruitment of qualified staff is hampered by civil service salary caps.

The Ministry of Transportation remains responsible for overall government telecommunications policy, proposes names for TA board members to the Cabinet, and exercises approval power over changes in license fees proposed by the TA. It also oversees Turksat, the government operator of Turkey's three communications satellites and presently the holder of Turk Telekom's former cable company assets. A prompt and pro-competitive transfer of these assets to the private sector should be a high priority for the Ministry.

Effective 1 January 2004, the legal monopoly of Turk Telekom over fixed line telephony was abolished. However, in the absence of implementing regulations from the TA no alternative fixed line suppliers have emerged to date. However, new firms have entered the telecommunications sector as resellers of Turk Telekom capacity (calling card and long distance services, for example) or as suppliers of corporate communications services. Interviews with industry sources emphasized the increasingly competitive conditions in these areas (see Appendix A).

The Turkish Competition Authority, functioning since 1997, performs functions similar to that of the Federal Trade Commission or the Antitrust Division of the Department of Justice in the United States. It has been involved in several important issues within the telecommunications sector, such as requiring Turk Telekom's disposal of its cable company interests. At times, friction between the Competition and Telecommunications authorities has been a problem, contributing to delays in regulatory decisions.

Despite the problems discussed above, there is no doubt that the EU, along with the OECD and the IMF, has played an important role in encouraging Turkey to liberalize its telecommunications sector. The EU "roadmap" for telecommunications regulatory reform, plus financial and technical assistance[25] to help implement it, have been particularly helpful. Emerging competitors to Turk Telekom, organized as the Turkish Telco Operators Association, make sure that EU officials are kept up-to-date on problems in implementing market liberalization measures.[26]

8. The overall investment climate

The rapid deployment of telecommunications technology within a country depends mainly on the environment for investment and risk taking. Easy entry by investors into the sector is not only a function of the regulatory regime, but of the overall investment climate. In this respect, Turkey has earned a rather mixed reputation. In addition to substantial telecommunications-specific "regulatory uncertainty," in recent years

[24]See footnote 22.

[25]For example, its support of conferences aimed at training regulatory staff in EU policies and experiences in EU countries in implementing them.

[26]See the Association's monthly bulletin on progress in implementing the regulatory agenda at www.telkoder.org.

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Turkey's overall investment climate has had high levels of uncertainty, particularly with respect to the legal system. This affects all investors, large or small, foreign or domestic.

In The World Bank's "Doing Business" comparative evaluation system, as of 2004, Turkey was rated a lowly "1" and "2", respectively (out of a possible 10) in the Bank's "Legal Certainty" and 'Disclosure" evaluation systems.[27] In the Global Economic Forum's 2005 Global Competitiveness rankings, Turkey ranked 66th out of 117 countries. A long-running, bitter, multibillion dollar lawsuit involving the mobile phone company, Telsim and its Turkish partner and two foreign investor–suppliers has not helped the attractiveness of Turkey's climate for foreign investors.

Foreign investors, particularly when considering controlling investments in existing, high-profile Turkish-controlled firms in sensitive industries, may face substantial opposition from Turkish nationalists and labor unions. It was openly stated to be the reason for the Turkish partner in Turkcell (the dominant cell phone provider) to renege on an agreement to sell its stake to the Nordic telecommunications provider TeliaSonera in May 2005. Offsetting these developments has been strong renewed interest and investment in the Turkish banking sector by major foreign banking institutions.

A very "thin" capital market, a lack of venture capital and a commercial banking system with little experience in innovative lending are further deterrents to start-up entrants in the telecommunications sector. The high rates of inflation and extremely volatile financial markets of the recent past were important factors in creating this climate. What new investment did take place tended to be by existing firms, typically units of large holding companies. Recent indications that inflation has been brought under control—and that healthy, sustained economic growth is now in prospect—raise the possibility that the financial system will evolve in a healthier direction.

Despite the deterrents to investment discussed above, a number of start-up companies, encouraged by the liberalization program, have recently entered the telecommunications sector. In most cases they are headed by Turkish entrepreneurs with experience in the sector gained working in either the United States or Europe. In several cases they have obtained backing from foreign investors—either venture capital funds or telecommunications companies.

9. Conclusions

Turkey has made major progress in recent years towards bringing its telecommunications infrastructure and policymaking institutions up to North American and European standards. Nonetheless, much remains to be done, particularly in making the regulatory process more technically competent, efficient and transparent. Given the findings and analysis above, and assuming that the government of Turkey wishes to see the speedy deployment of telecommunications technology and services as an important contributor in stimulating economic growth, several concluding policy suggestions emerge:

1. There is a need for a clear re-affirmation of overall policy at the highest level of government. Such a statement could give direction to the various ministries and agencies involved in the telecommunication sector, in much the same manner as the Clinton Administration's 1997 White House statement, "The Framework for Global Electronic Commerce," did for the extraordinary expansion of internet commerce in the United States.
2. Reduce the level of ownership/regulatory uncertainty. The extended history of attempts to privatize Turk Telekom and the current "limbo" involving control of cable company assets have contributed to increased investment-deterring uncertainty and slowed the expansion of telecommunications services. Delays on the part of the TA and the Ministry of Transportation in issuing regulations and licenses have had a similar impact, as have disputes with the Competition Authority.
3. Strengthen the TA board and staff. A stronger Authority will have greater respect and credibility and be less likely to have its decisions appealed. Specific steps to accomplish this would be the appointment of individuals with more background in the industry and upward adjustment of staff salary caps.
4. Encourage greater cooperation and information sharing between the two major regulatory agencies, the Competition Authority and the TA.

[27]See the web site, http://rru.worldbank.org/DoingBusiness/.

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5. Restructure the scope and fee structure of licenses, and the process for their issuance, as specifically recommended by the EU and the OECD. If the intent is to encourage experimentation and investment in new services, licenses should be as general as possible. The fees associated with them should be designed to do no more than cover the expenses of the TA. (This recommendation may be addressed in a new Telecommunications Law under discussion in 2006.)
6. Redouble efforts to improve the overall investment climate, with particular attention to the legal system in light of its importance for the telecommunications sector.

Substantial progress in implementing these recommendations would be likely to increase investment in the telecommunications sector, particularly by new entrants with new technologies and offering new services, as well as providing existing services at lower cost to users. The history of the mobile phone market in Turkey itself is strong testimony to the power of a more competitive marketplace to deploy modern technology—and the contribution it can make in dismantling the barriers to economic growth.

Appendix A. Interviews in Turkey

In addition to many individual consultants and lawyers, individuals in the following organizations were extremely helpful in assisting the author:

American Business Forum in Turkey
Avaya
Bank of New York
Competition Authority of Turkey
CSP-Mobile GmbH
DigiTurk Telekom
Eser Telecom
Güvercin
IBS Research & Consultancy
ING Bank
Microsoft
Motorola
NetOne Telekom
SATKO
SuperOnline
Telecommunications Authority of Turkey
Telkoder
Topaz Telekomunikasyon
TopTel Telekomuikasyo
Turk Telekom Telekom
Turk Telekomcell
Unitel Telekomunikasyon
US Department of Commerce
YASED (Foreign Investors Association)

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