

EFFECTIVE REGULATION CASE STUDY: MOROCCO 2001



International Telecommunication Union

Effective regulation

Case study: Morocco



INTERNATIONAL TELECOMMUNICATION UNION

This case study was conducted by Anastassios Gentzoglanis, Nancy Sundberg and Susan Schorr.

The field study enabled us to meet and interview the regulatory agency, government and industry, and to attend various events (for example, the regional telecommunication exposition Telecom Morocco 2000). This study is concerned chiefly with institutional considerations, the structure, the operation, the financing, the responsibilities, and the legitimacy in the marketplace of the National Telecommunication Regulatory Agency of Morocco [Agence nationale de réglementation des télécommunications du Maroc] (ANRT), which is the regulatory agency. This study is intended to be useful not only to the regulatory authorities and the corresponding arms of government but also to everyone concerned with the telecommunication market.

The authors wish to express their sincere appreciation to the ANRT, and wish particularly to thank Mr Mouddani and Ms Belabbes for their invaluable assistance, and as well as everyone in the public and private sectors alike that gave us their time. Without their support, a report such as this could not have been prepared.

The views expressed in this paper are those of the author, and do not necessarily reflect the views of ITU, its members or the Moroccan Government.

This is one of the five case studies on effective regulation, undertaken by ITU. Further information can be found on the web site at: <http://www.itu.int/ITU-D/treg/>

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1 Introduction

The reform of the information and communication technology (ICT) sector has fueled major changes at the regulatory and institutional levels. One of the most striking changes has been the rise of the ICT sector-specific regulatory agency. By the end of 2000, there were 102 such agencies operating separately from telecommunication service providers, and 52 of them operating separately from communications-related ministries.¹ The number of telecommunication regulatory authorities is expected to increase to at least 120 by the end of 2001. Many of these agencies have been created only in the last five years. They mark a true departure from the way countries around the world approach economic regulation, in general, and the regulation of communications industries, specifically.

It is one thing for countries to make a policy decision to create an independent regulatory agency, and quite another to empower the agency to act independently and effectively. Regulatory agencies are not created in vacuums. Inevitably, they are the products of political, social, legal and economic conditions that exist at fixed points in time in each country. Nor are these conditions static; regulatory approaches and policies change, and agencies change with them. There is no textbook for government policy-makers to quote, Chapter and verse, in establishing an independent regulatory agency that will achieve their national goals. Moreover, once regulators are named and take office, there is no blueprint—and often no national precedent—for how they should operate and regulate. Nevertheless, the means by which each country creates, structures and implements its regulatory body is one of the most important factors in the success of its reform process. Increasingly, then, newly appointed and responsible regulators are searching for models and best practices as guideposts for their own actions.

As more and more Member States of the International Telecommunication Union (ITU) ask for references and models in regard to the independence and operation of regulatory agencies, the Sector Reform Unit of the Telecommunica-

tion Development Bureau (BDT) has decided to conduct a number of case studies in this area. Morocco has seemed to us entirely appropriate for a case study focusing on the first stage of the reform process, in view of the success that the country has achieved in this area, and the fact that a number of its practices and procedures can serve as useful reference for others.

Reform of the Moroccan telecommunication sector is a relatively recent process. The country regards the reforms that have been instituted to date as the first stage in an ongoing process which will continue during the years to come.

The reforms may be recent, but the results are convincing nevertheless. Implementation of the initial reforms in the telecommunication sector did not come without effort. The debate that began as from 1984 finally reached a conclusion in 1996 with the adoption of a new law on telecommunications, Law 24-96. Under the aegis of His Late Majesty King Hassan II and senior State officials this initial set of reforms was able to see the light of day. In a country marked by very strong traditions and sharp social and economic contrasts, the early reforms instituted in the telecommunication sector were seen as a test. The results were more than positive (the second GSM licence was sold for USD 1.1 billion, the traditional operator was partially privatized for USD 2.3 billion, the number of mobile subscribers grew rapidly from 116 000 in 1998 to nearly 3 million by the beginning of 2001), and served to reassure anyone who at the outset might have been resistant to change and the need to establish a telecommunication regulatory agency.

The National Telecommunication Regulatory Agency [*Agence nationale de réglementation des télécommunications*] (ANRT) has been given broad powers in comparison with other public institutions in Morocco, although the State does maintain close oversight, particularly in regard to finances. This pragmatic decision in regard to the Agency's powers has to be seen in the context of the times. Nevertheless, now that the Agency has proven itself and demonstrated its competence and credibility, an amendment to the Act to reduce the financial oversight to which ANRT is subject is now being promulgated, so as to give it greater freedom to manage its resources. The State is pulling back so as to allow the ANRT greater financial responsibility and greater freedom in pursuing reforms.

¹ See International Telecommunication Union, *Trends in Telecommunication Reform, 2000-2001*, third edition, page 13.

Now that Morocco has successfully established a regulatory agency that is effective, credible and legitimate in discharging its technical and regulatory functions, the country is about to embark on a critical stage in that agency's development. In this second stage, ANRT will have to demonstrate its effectiveness and ability in regulating and overseeing competition, as basic services are to be opened up to competition in 2002.

The success of this first stage, and the model that has been put in place, have made the government enthusiastic about applying this model to other public sectors such as the Post Office and electricity. This paper will examine this first stage in detail.

2 The present situation: Country profile



2.1 General information about the country

The Kingdom of Morocco is situated on the north-west seaboard of the African continent. It is separated from Spain by the Strait of Gibraltar. Its neighbours are Algeria to the east and Mauritania to the south-east, and it is bounded to the west and north by the Atlantic Ocean and the Mediterranean Sea. Its land area of 710 000 square kilometres (about twice the size of Germany) is divided into 40 provinces and two wilaya, or administrative districts, Casablanca and Rabat-Sale. Casablanca is the

country's main economic and business centre, while Rabat is the capital and administrative centre.

Morocco's population consists of Arabs and Berbers, with a Jewish minority. Of the country's more than 29 million inhabitants, over half are under the age of 20 years, and just 5% are over the age of 65 years. The vast majority of the population is Sunni Muslim (98.7%). There are also Christian and Jewish minorities (1.1% and 0.2% respectively). The official language is Arabic, while French is the second most widely spoken language. Schooling at the primary and secondary levels is in both languages.

The Alaouite dynasty has reigned in Morocco since 1660. The King represents spiritual and temporal authority. His Majesty King Mohammed Ben El Hassan Alaoui, Mohammed VI, acceded to the throne in July 1999 following the death of his late father, his Majesty King Hassan II who reigned for 38 years. King Mohammed Ben El Hassan Alaoui is the eighteenth sovereign of the Alaouite dynasty, and the thirty-sixth descendant of the prophet Mohammed.

2.2 Health and education

Major efforts have been made during the past 30 years to reduce poverty and illiteracy and improve the health system; but much work remains to be done to reduce social, regional, health and gender disparity.² The new sovereign recently announced that it was his wish that the proceeds from the sale of the second GSM licence be directed towards increased spending in the social sectors and on infrastructure. For this purpose, he established the Hassan II Fund.

Despite the significant progress made in recent years, Morocco remains a relatively poor country. In 2000, 75% of the population lived in rural areas where, according to World Bank estimates, only 15% of the women could read and write. Public spending on health and education is roughly equivalent to 12% of the gross domestic product (GDP), compared to 20% for Tunisia and Portugal, for example (see <http://www.dree.org/maroc/francais/eco/>).

² World Bank (<http://www.worldbank.org>).

Table 1 – Social indicators				
	1995	1996	1997	1998
School attendance (primary level) (%)				
Total population	82.90	83.90		
Females	71.0	74.20		
Illiteracy rate (%)				
Total population	56.07	55.10	54.12	53.14
Females	69.52	68.42	67.31	66.21
Infant mortality rate (per thousand)	51.00	49.00	47.00	45.00
Gross mortality rate (per thousand)	5.73	6.61	6.49	6.37
Gross birth rate (per thousand)	25.62	25.06	24.50	23.95
Life expectancy at birth (years)				
Total population	66.64	67.04	67.45	67.85
Males	64.80	65.20	65.60	66.00
Females	68.50	68.90	69.30	69.70
<i>Source:</i> Data compiled by the author from the following sources: World Bank Group (http://wbln0018.worldbank.org/mna/mena.nsf); Strategic-road.com; NewAfrica.com/economy/morocco; Mbendi Bank (http://mbendi.co.za/land/af/mo/); CountryData.com (http://www.countrydata.com); and Penn World Tables (http://cansim.epas.utoronto.ca).				

2.3 Politics

After achieving independence in 1956, Morocco became a constitutional monarchy. The government, consisting of a Prime Minister and 24 ministers, is responsible to the King and Parliament. Members of the government are appointed by the King at the proposal of the Prime Minister. In 1998, His Late Majesty King Hassan II established the principle of an alternation in power.

The Parliament was first bicameral from 1962 to 1970, and then unicameral from 1970 to 1996. Under the new constitution of 1996, it is bicameral once more, consisting of a House of Representatives (with 325 representatives elected to a five-year term) and a House of Councillors (with 270 members serving for a nine-year term, elected indirectly by various electoral colleges – 162 by local councils, and 108 by industrial groups, farmers' groups and labour unions).

There are several political parties – 16, in fact – but these are aligned into two broad coalitions, the Koutla and the Wifak. The Koutla is the coalition that brings together the parties of the former opposition and now forms the government; it holds 102 seats in the House of Representatives. The Wifak is the grouping of right-wing parties, and holds 100 seats in the House of Representatives. The remaining seats

are held by centrist parties, labour unions, the Islamic political movement and the radical left (see the Prime Minister's website at <http://www.pm.gov.ma/fr/>).

For some years, the country has been embarked on a course of increasing political and democratic liberalization. His Majesty King Mohammed VI has reiterated his wish that there be greater political liberalization and enhanced legal transparency, while placing emphasis on projects focused on social reforms, particularly in the area of education.

2.4 The economy

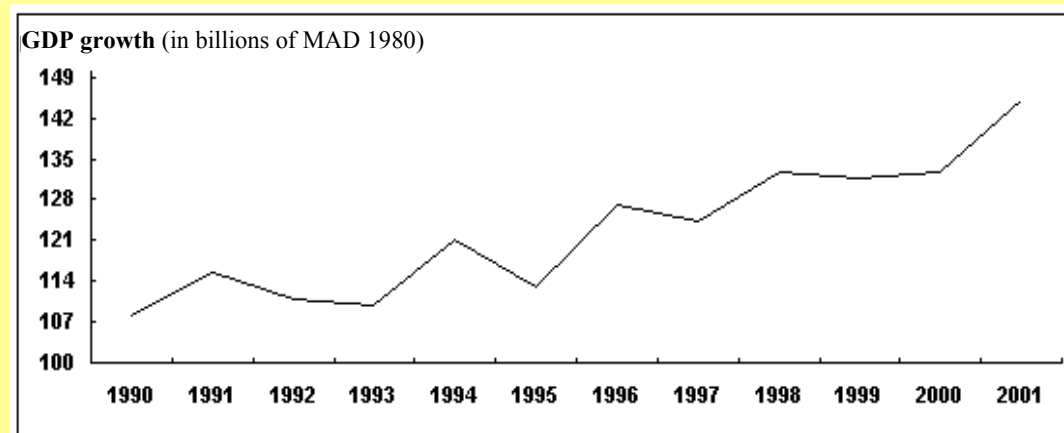
In 1999, the country's GDP was USD 34 billion. Morocco is heavily dependent on agriculture, which contributes 16.6% of its GDP and employs 40% of its labour force, compared to industry which employs 25% and services which employ 35% (1998 figures). Within the industrial sector, the main activities are mining (chiefly the production of phosphates), food processing and textiles, while the main activities making up the services sector are commerce and tourism.

Although the economy is stable, growth is weak and the unemployment rate is nearly 20% in the cities and towns. There is a wide disparity between rural and urban areas. The Moroccan

economy expanded only 0.8% in 2000 as a result of the decline in agricultural GDP due to drought (-16.7%) and the growth of non-agricultural GDP (+3.5%) (<http://www.statistic.gov.ma/comptabilite53.htm>).

Morocco's economy is relatively open, with exports and imports amounting to 65% of GDP. In 1999, imports increased 5.5% while exports rose only 5.1%, thereby worsening the country's trade deficit by 6.7%. In 1998, the trade deficit amounted to 8% of GDP.

Figure 1 – GDP growth



Source: Ministry of Economic Forecasting and Planning [Ministère de la prévision et du planning] (<http://www.statistic.gov.ma/comptabilite53.htm>).

Table 2 – National accounts of Morocco

	1995	1996	1997	1998	1999
GDP (USD million)	3 166.2	35 136.6	32 081.8	33 952.9	33 867.4
GDP growth (%)	-6.6	12.2	-2.3	6.5	0.2
Gross national product (GNP) per inhabitant (USD)	1 120	1 300	1 260	1 250	1 190
Agricultural growth (%)	-43.9	78.0	-26.5	23.6	
Industrial growth (%)	4.5	4.8	5.7	1.8	
Inflation (GDP deflator, %)	8.0	1.0	2.0	0.7	1.0
Investment as a proportion of GDP (%)	20.7	19.6	20.7	22.6	22.8
Private investment as a proportion of GDP (%)	12.5	12.6	13.6	15.9	18.3
Public investment as a proportion of GDP (%)	8.9	6.8	7.1	6.6	

Source: Data compiled by the author from the following sources: World Bank Group (<http://wbi0018.worldbank.org/mna/mena.nsf>); Strategic-road.com; NewAfrica.com/economy/morocco; Mbendi Bank (<http://mbendi.co.za/land/af/mo/>); CountryData.com (<http://www.countrydata.com>); and Penn World Tables (<http://cansim.epas.utoronto.ca>).

	1995	1996	1997	1998
Trade balance (USD million)	2 482.13	-2 193.47	-1 863.94	-2 215.23
Exports	6 871.00	6 886.17	7 039.07	7 253.23
Imports	9 353.14	9 079.64	8 903.02	9 468.46
Overall balance of payments	-1 895.38	-673.05	-988.18	-662.14

Source: Data compiled by the author from the following sources: World Bank Group (<http://wbln0018.worldbank.org/mna/mena.nsf>); Strategic-road.com; NewAfrica.com/economy/morocco; Mbendi Bank (<http://mbendi.co.za/land/af/mo/>); CountryData.com (<http://www.countrydata.com>); and Penn World Tables (<http://cansim.epas.utoronto.ca>).

The government has launched several reforms aimed at attracting foreign investment and developing the private sector. The 1995 Investment Charter [*Charte sur les investissements*] established incentives with respect to administration, taxation and customs. A new Companies Act [*Loi sur les sociétés anonymes*] and a new Commercial Code [*Code du commerce*] have been put in place. Domestic and foreign investment stepped up significantly during the period 1999-2000. Indeed, foreign investment grew nearly fourfold, reaching the unprecedented level of MAD 17.7 billion (USD 1.7 billion), owing in large measure to the record price obtained for the sale of the second GSM licence (more than USD 1 billion). The rate of investment for the period reached 25.3% of GDP.³

The country faces regional competition from Tunisia, Egypt and Algeria, and international competition particularly from the countries of the Far East. The bulk of Morocco's exports go to Europe (63% to the European Union), mainly France and Germany. Morocco's other main export markets outside Europe are Japan (8%), South East Asian countries (7%), Libya (3%) and the United States (3%). The main sources of Morocco's imports are the European Union (57%), the United States (7%), Saudi Arabia (5%) and Brazil (3%) (<http://www.mcinet.gov.ma/mciweb/Ti/rapp12.pdf>).

The signing of the association agreement with the European Union represented a step towards European and international integration. Under

³ These are the key points contained in an address given by Mr Fath Allah Oualalou, Minister of Economic Affairs, Finance, Tourism and Privatization in the House of Representatives upon tabling the financial affairs bill for 2001 (23 October 2000) (http://www.mfie.gov.ma/db/lf2001/index_ds.htm).

that agreement, a free-trade zone has been set up between the two parties. The agreement entered into force in March 2000, and will be a driving force throughout the country's economy pressing for the reforms to be extended to other areas of economic activity, particularly those sectors that are becoming increasingly exposed to international competition. The reforms begun in the telecommunication sector have already borne fruit as can be seen from the massive investments made and the growing participation by the private sector. Modernization of the legislation and the regulatory framework has made it possible for the private sector to undertake economic activities hitherto reserved for the apparatus of the State. The first wave of privatization has seen the transfer of 112 companies to the private sector since 1993, and the privatization of public utilities is continuing, particularly in the areas of water distribution, electricity and sanitation. However, despite the considerable number of privatizations that have taken place, public enterprises still account for a substantial proportion of the national economy. In 1997, private enterprises contributed 13% of GDP and accounted for 22% of Moroccan investment overall (<http://www.pm.gov.ma/fr/>). Without a doubt, telecommunication is the sector that has experienced the most far-reaching reforms, with the opening up of certain services to competition in 1998, the privatization of the incumbent operator, Maroc Télécom, in 2000, and the complete opening up of the fixed-services market planned for 2002.

Despite its strong traditions and great social and economic contrasts, Morocco has decided to adopt market liberalization models. And even so, during these past three years it has successfully taken up the immense challenge of modernizing and developing its telecommunication sector.

3 Telecommunication sector reforms

Morocco has a modern Post Office and Telecommunication Act [*Loi sur la poste et les télécommunications*], a new Competition Act [*Loi sur la concurrence*] (which entered into force in July 2001) and a national strategy to make Morocco a player in the information and knowledge society. It has not been an easy road, however. Only in 1997, following seven years of deliberations was the final text of the current Post Office and Telecommunication Act finally adopted by the Parliament [Dahir 1-97-162 of 2 Rabi II 1418 (7 August 1997)] (see Box 1).

Under the aegis of His Late Majesty King Hassan II, Morocco decided to make the telecommunication sector one of its national priorities. In the Speech from the Throne on 3 March 1997, he recalled that, “In the area of telecommunications, reform of the institutional framework governing the telecommunication sector is imperative in view of the demands imposed as a result of the growing liberalization of the world economy and the rapid evolution of technology”.

“Indeed”, he continued, “in order to be able to integrate Morocco into the world economy, there is a need for access to highly advanced networks which require investments beyond the capacity of the State to provide. Accordingly, it is imperative that the way be opened for private initiatives which can take over the efforts of the public sector and continue on, whilst, to be sure, providing for the activities of licensed private operators to be subject to the regulatory power of government authority.” (<http://www.septi.gov.ma/planq/rappel.htm>).

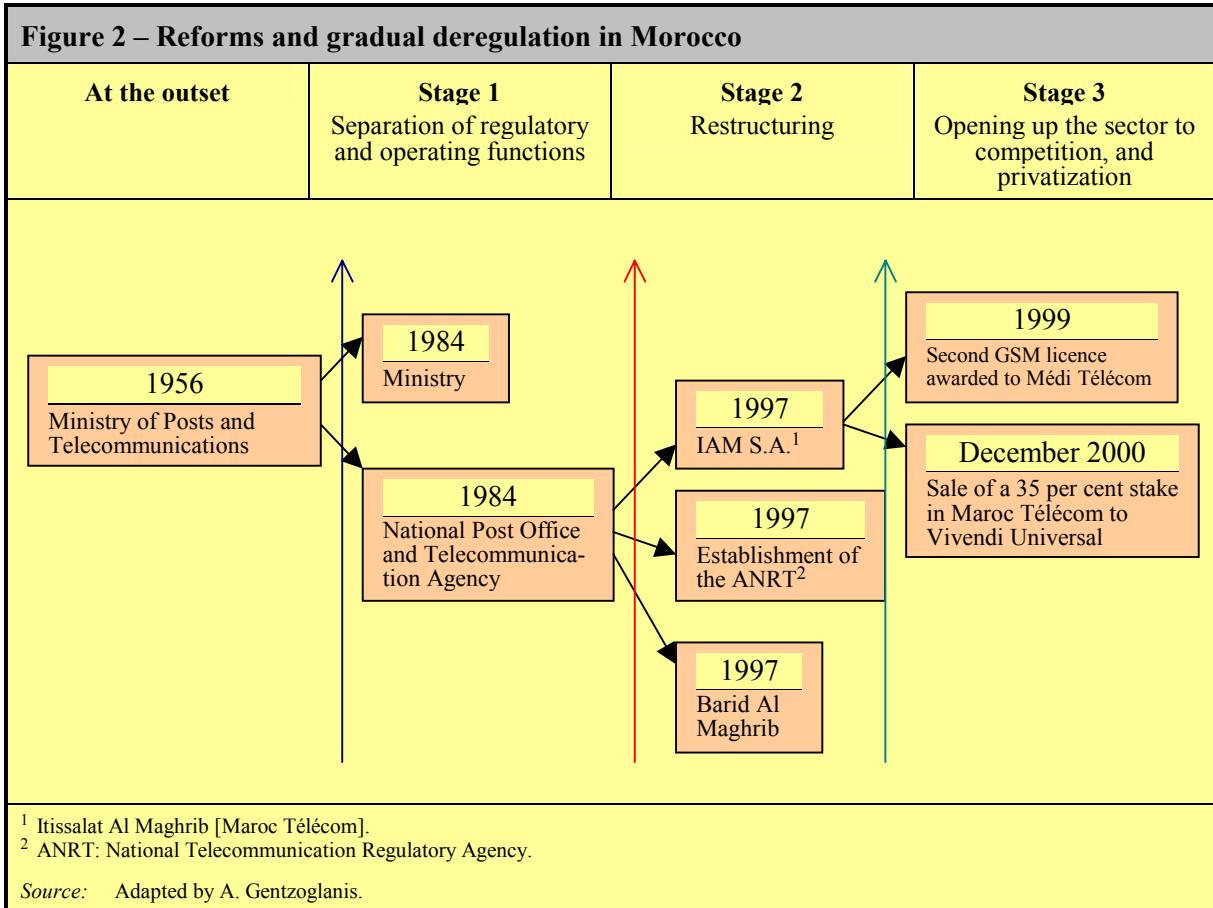
The reforms pursuant to Law 24-96 were undertaken with a view to the following main objectives:

- “To provide the telecommunication sector with an effective and transparent regulatory

framework that will promote fair competition, to the benefit of the users of telecommunication networks and services.

- To pursue the development of telecommunication networks and services by fostering initiatives aimed at adapting them to new developments in technology and new scientific advances.
- To provide a public service throughout the whole of the Kingdom’s territory and at every level of society, within the framework of the economic and social development plan.
- To provide the national economy with communication services based on continually evolving technology, so as to increase the opening up of the national economy and its integration into the world economy.
- To invigorate the postal sector by introducing competition in international express mail services.
- To promote the creation of jobs directly or indirectly linked to the sector.”

To accomplish this, a sweeping restructuring of the sector has been carried out. It has consisted essentially of splitting the National Post Office and Telecommunication Agency [*Office National des Postes et des Télécommunications*] (ONPT) into two separate entities – a telecommunication entity called Maroc Télécom [*Itissalat Al Magrib S.A.*] and a postal-services entity called Postes Maroc [*Barid Al Magrib*] – and establishing an independent regulatory body, the National Telecommunication Regulatory Agency [*Agence nationale de réglementation des télécommunications*] (ANRT). Under this new legislation, ANRT has thus far been responsible for implementing telecommunication policy, administering the application of laws and regulations with respect to all those involved in the telecommunication sector, and resolving disputes.



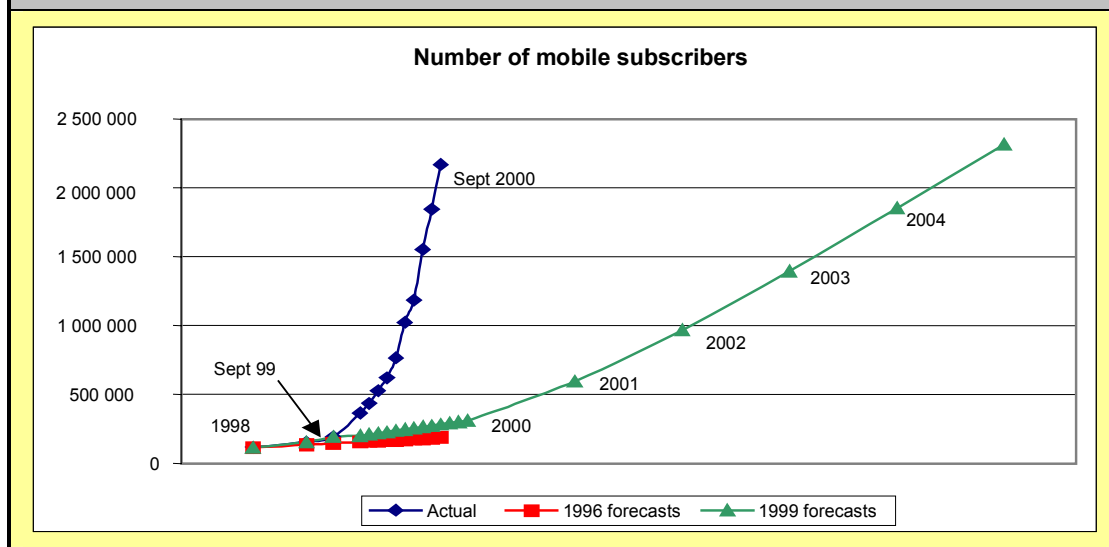
The reforms are currently moving ahead swiftly, and will extend to all sectors of public infrastructure (energy, postal services, transport, etc.). These reforms, backed by the political will that has been evident in regard to their implementation and monitoring at the government level, have enabled Morocco to take its place on the international stage and gain a reputation as a stable country with clear rules and a high level of confidence. At the economic level, this has manifested itself in the form of major investments by foreign firms in Morocco's telecommunication market. Vivendi Universal has paid MAD 23 billion (USD 2.3 billion) for a 35% equity stake in Maroc Télécom. The Médi Télécom consortium has paid USD 1.1 billion to obtain the second GSM licence in Morocco. This success surpasses the previous record set in 1998 in Egypt, where foreign operators paid USD 516 million to obtain the second GSM

licence there.⁴ As for Morocco's VSAT licences, they brought in USD 10 million.

The liberalization and partial privatization of the telecommunication sector has had positive results in several areas. Whereas the telephone density was barely 5% prior to liberalization, Morocco has swiftly progressed to 8% density for fixed telephone service and 15% density for mobile telephone service. The mobile telephone network now reaches more than 85% of the population. The number of subscribers quadrupled during the six-month period up to May 2000, and since then has more than doubled again, to 3 million subscribers between the two operators. These figures exceed all public- and private-sector estimates at the time the second GSM licence was being awarded (see Figure 3).

⁴ *Middle East Business Weekly* (MEED), Volume 43, No. 29, 23 July 1999.

Figure 3 – Estimates done at the time the second GSM licence was awarded



The economic models used to evaluate the impact of the liberalization and privatization of telecommunication services in Morocco show that activities associated with the telecommunication sector may be expected to produce 3% growth in GDP in the coming years, and have a major impact on investment levels, job creation, productivity and inflation.⁵

Morocco hopes to establish itself as a telecommunication centre in the region.

Morocco's desire to move forward into an era of new information technology is being realized by means of its national strategy, which is directed by the Office of the Secretary of State to the Prime Minister responsible for Postal Services and Telecommunication and Information Technologies [*Secrétariat d'État auprès du Premier Ministre chargé de la poste et des technologies des télécommunications et de l'information*] (SEPTI), and which aims to bring the whole of Moroccan economy into the information society.

The SEPTI, which in 1998 replaced the Ministry of Posts and Telecommunication [*Ministère des postes et des télécommunications*], plays a key role within the government. It is the administrative unit of the government that is responsible for developing and implementing policies pertaining to new information technologies. It par-

ticipates in the design of the general lines of government policy in regard to technologies relating to information systems, telecommunications, postal services and the development of networks. In addition, it participates alongside ANRT on the Standing Committee on Radio-communications [*Comité permanent des radio-communications*]. The SEPTI organizes conferences and prepares the government's action plans in the aforementioned areas. The government's five-year plan for the period 1999-2003 was conceived and drawn up by the SEPTI.⁶

The SEPTI's strategy is centred around the following development objectives:

- Drafting legislation that is able to respond to current problems (protection of commercial domain names, protection of personal information, electronic commerce, etc.).
- Bringing a new focus and impetus to education (with emphasis on literacy, bringing information tools and the Internet into the schools, etc.).
- Seeking to bridge the digital divide by means of policies that promote the deployment of new technologies in the regions and amongst the neediest segments of the population.

⁵ *New Tech Magazine*, No. 2, February 2001.

⁶ <http://www.septi.gov.ma/planq/planq.htm>.

- Financing the establishment of enterprises that form part of the new knowledge economy (risk capital, start-up loans for technology firms, etc.).

So that its objectives may be achieved quickly, the National Strategy Committee [*Comité national stratégique*] responsible for proposing solutions for the development of this sector has grouped the objectives according to three deadlines: a short-term deadline of 2002, a medium-term deadline of 2005 and a long-term deadline of 2010. In the short term – that is, by 2002 – the first priority is to establish a regulatory framework, and the State representatives have been focusing their efforts on this area. The authorities are now turning their attention to medium- and long-term policies and strategies.

An area devoted to enterprises engaged in the field of new information technology (i.e. a high-tech centre) has been set up through the joint effort of the Ministry of Finance [*Ministère des Finances*], the SEPTI, and the Association of Information Technology Professionals [*Association des Professionnels des Technologies de l'Information*] (APEBI). In addition, one of the SEPTI's strategic objectives is to get all the universities and schools in the country connected to the Internet. This project is being financed by the Hassan II Fund. Work in this area is currently under way and is expected to be finished in 2004-2005, by which time all universities, colleges and schools will be connected to the Internet. At present, seven university campuses are connected. As well, all 500 high schools in the country have a multimedia room equipped with a computer and an Internet connection.

Box 1: New legislation

Law 24-96 provides for a sweeping reorganization of the telecommunication sector in Morocco, and in particular:

- The splitting of the National Post Office and Telecommunication Agency [*Office National des Postes et des Télécommunications*] (ONPT) into two independent public enterprises: Itissalat Al Maghrib [*Maroc Télécom*] and Barid Al Maghrib [*Postes Maroc*].
- The setting up of an independent regulatory body for the telecommunication sector.
- The establishment of private networks if the incumbent operator is not able to provide public switched network services.
- The establishment of a second private mobile cellular telephone network, to compete with the GSM services provided by the incumbent operator (opening to competition).

Subsidiary provisions implementing Law 24-96:

Decree 2-97-813 of 27 Shawwal 1418 (25 February 1998), respecting the implementation of the provisions of Law 24-96 respecting postal and telecommunication services with particular regard to the National Telecommunication Regulatory Agency.

Decree 2-98-158 of 27 Shawwal 1418 (25 February 1998), respecting the appointment of members of the Board of Directors of the National Telecommunication Regulatory Agency.

Decree 2-97-814 of 27 Shawwal 1418 (25 February 1998), respecting the implementation of the provisions of Law 24-96 respecting postal and telecommunication services with particular regard to Barid Al Maghrib [*Postes Maroc*].

Decree 2-97-1024 of 27 Shawwal 1418 (25 February 1998), respecting the establishment of the list of value-added services.

Decree 2-97-1025 of 27 Shawwal 1418 (25 February 1998), respecting the interconnection of telecommunication networks.

Decree 2-97-1026 of 27 Shawwal 1418 (25 February 1998), respecting general conditions with regard to the operation of public telecommunication networks.

Decree 2-97-1027 of 27 Shawwal 1418 (25 February 1998), respecting conditions with regard to equipment for an open telecommunication network.

Decree 2-97-1028 of 27 Shawwal 1418 (25 February 1998), respecting the approval of terms of reference of Itissalat Al Maghrib [*Maroc Télécom*].

Decree 2-97-156 of 27 Shawwal 1418 (25 February 1998), respecting the implementation of Articles 96 and 97 of Law 24-96 respecting postal and telecommunication services.

Decree 2-97-157 of 27 Shawwal 1418 (25 February 1998), respecting the delegation of powers with regard to the setting of licence fees for the assignment of radio frequencies.

Order 3-9-98 by the Prime Minister, of 27 Shawwal 1418 (25 February 1998), respecting the appointment of the members of the commission charged with dividing the assets of the National Post Office and Telecommunication Agency between the National Telecommunication Regulatory Agency and Barid Al Maghrib [*Postes Maroc*].

Order 310-98 by the Minister of Telecommunications, of 27 Shawwal 1418 (25 February 1998), respecting the setting of licence fees for the assignment of radio frequencies.

Joint Order 341-98 by the Minister of Telecommunication and the Minister of Finance, Commerce, Industry and Craft Industry, of 27 Shawwal 1418 (25 February 1998), respecting the approval of the inventory of assets transferred to Itissalat Al Maghrib [*Maroc Télécom*].

Joint Order 342-98 by the Minister of Telecommunication and the Minister of Finance, Commerce, Industry and Craft Industry, of 27 Shawwal 1418 (25 February 1998), respecting the approval of the inventory of assets transferred to Barid Al Maghrib [*Postes Maroc*].

Joint Order 343-98 by the Minister of Telecommunication and the Minister of Finance, Commerce, Industry and Craft Industry, of 27 Shawwal 1418 (25 February 1998), respecting the approval of the inventory of assets transferred to the National Telecommunication Regulatory Agency.

Order 310-98 by the Minister of Telecommunications, of 27 Shawwal 1418 (25 February 1998), respecting the setting of licence fees for the assignment of radio frequencies (annexes).

Source: SEPTI (<http://www.septi.ma>) and ANRT (<http://www.anrt.net.ma>).

3.1 Commitments undertaken pursuant to the WTO agreement on telecommunications

The reform process being carried out at the national level is backed up by commitments made at the international level. In 1997, Morocco undertook commitments in respect of telecommunication sector reform vis-à-vis the World Trade Organization (WTO), pursuant to the agreement on basic telecommunications, by submitting a fixed timetable of reforms that the country would be bound to institute in regard to the telecommunication sector. In addition, Morocco has signed a commitment accepting the Reference Paper on regulatory principles.⁷ These reforms have to do principally with the regulatory body,

⁷ In 1997, Morocco signed a partial commitment with respect to the Reference Paper, in regard to regulatory principles. In 2000, Morocco adopted the Reference Paper in full.

interconnection, the licensing regime, operators' authorization and safeguards against anti-competitive practices. So far, Morocco has fulfilled the commitments it has undertaken. The following table summarizes the current status of the commitments in question.

3.2 Results of the reforms

Once the reform process was begun, the telecommunication landscape was swiftly transformed, and its effects were very soon felt throughout the country.

At the institutional level, the reforms undertaken to date are as follows:

- The establishment in 1997 of the National Telecommunication Regulatory Agency as the governing and regulatory body for the telecommunication sector.

Table 4 – Principles with respect to regulation, foreign ownership and market access

Regulatory principles	Foreign ownership restrictions	Commitments undertaken with regard to market access	
		Commitment	Fulfilled
Adopted in full	Limits may be placed on the proportion of foreign ownership (the level has not yet been specified)	<ul style="list-style-type: none"> • Telephone service using fixed infrastructure, telex, and the integrated services digital network (ISDN) remain a monopoly until December 2001 • Access to the market is open for packet-switched data transmission and frame relay • Operating licences for various kinds of mobile services will be awarded through public tender 	<ul style="list-style-type: none"> • yes • yes • yes

Source: World Trade Organization, adapted by A. Gentzoglani.

- The establishment of Itissalat al Maghrib [*Maroc Télécom*] as a corporation with public equity.
- The opening up of certain parts of the telecommunication sector to competition: mobile telephony in 1999, GMPCS in November 1999 and VSAT in 2000.
- Full liberalization of value-added services (opening up of the market to Internet access and service providers (ISPs)).
- The opening up of Maroc Télécom’s ownership structure in December 2000 so as to permit foreign firms to take equity stakes.

In terms of tangible effects having a direct impact on the population, the reforms have thus far brought about the following:

- Virtually complete digitization of Morocco’s transmission network.
- Soaring growth in the number of fixed and mobile subscribers (134% from 1998 to 2000).
- In the case of mobile telephony, a choice between two operators at competitive prices.
- A vast range of value-added mobile services (radio messaging, MSS, etc.).
- A wide selection of Internet access providers.
- Satellite services (GMPCS, VSAT).
- More firms that market services.

- A local presence on the part of foreign telecommunication equipment manufacturers.
- Major investments in telecommunication and in new information technologies.
- Growth in GDP.

4 The telecommunication market in Morocco

Different legal regimes with respect to participation in the telecommunication sector were established under Law 24-96. Depending on the various services and the legal regime to which they are subject, operators enjoy different rights and obligations.

- The licensing regime applies to public networks that make use of the public domain or utilize the radio spectrum. Licences are granted by government decree.
- Independent networks receive their authorization to operate from the ANRT.
- The certification regime applies to radio installations, terminal equipment and testing and measurement laboratories. Certification is issued by the ANRT.
- Value-added services require the filing of a declaration with the ANRT.
- Internal networks and low-power radio are installations that may be established without restriction.

Any foreign company wishing to provide telecommunication services or infrastructure must establish a subsidiary incorporated in Morocco for this purpose.

Pursuant to Law 24-96, the implementing provisions established under that law, and the applicable terms of reference, licence-holders are bound by the following obligations:

- Fair competition.
- The obligation to keep independent financial accounts for each network and service operated.
- Confidentiality and neutrality of service with respect to the messages transmitted.
- Requirements laid down in connection with national defence and public security, and the prerogative of judicial authority.
- Means of supporting the overall responsibilities of the State, particularly in regard to universal service, national and regional development, and environmental protection.
- Conditions with respect to providing the information necessary for the preparation of an annual directory of subscribers.
- The obligation to comply with international agreements ratified by the Kingdom of Morocco.
- The obligation to connect emergency calls free of charge.
- Support for research, training and standardization in the area of telecommunications.

In addition, in each call for proposals that is conducted for the purpose of establishing or operating a given telecommunication network or service, the government includes the following among the terms of reference:

- 1) Conditions with respect to the establishment of the network.
- 2) Conditions with respect to the provision of the service.
- 3) The coverage area for the service in question, and the completion timetable.
- 4) The radio frequencies and blocks of numbers assigned, as well as conditions with respect to access to high points that are in the public domain.

- 5) Minimum requirements as to professional and technical qualifications, and the financial guarantees demanded of applicants.
- 6) Operating conditions for the service, and particularly conditions with respect to the provision of universal service and the principle of respect for equality of treatment amongst users.
- 7) Means of payment of the licensing fee established pursuant to Article 9, paragraph 2, of the law.
- 8) The term of the licence, and conditions with respect to its renewal.
- 9) Means of payment of counterpart financing.

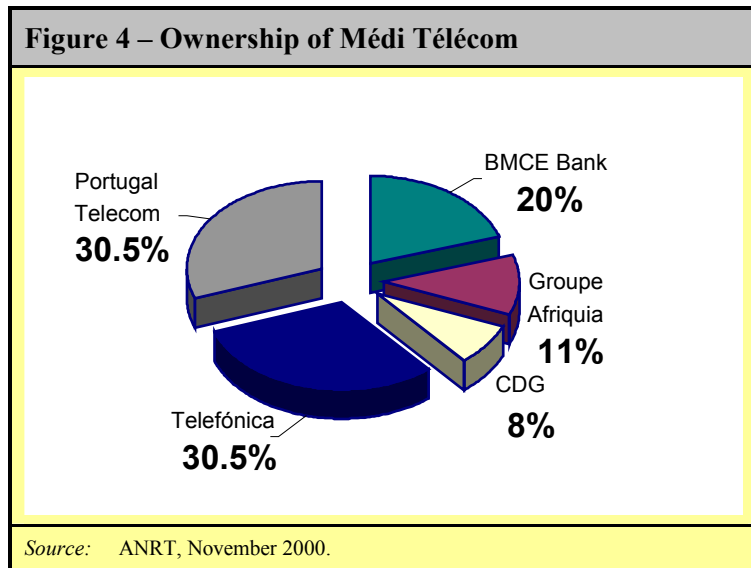
The call for proposals lays out the conditions for access to and interconnection with public telecommunication networks, and may if applicable, specify the terms and conditions for leasing any components of those networks that may be necessary in order to establish the new network or provide the service in question. In such cases, the award of a licence automatically includes any access to interconnection or leasing that may be required.

4.1 Main operators

Basic telecommunication services are provided exclusively by Maroc Télécom, which is the incumbent operator. Maroc Télécom also provides GSM and value-added services. It is owned by Vivendi Universal, a French conglomerate which holds 35% of the equity, and by the State, which holds 65%. Its privatization, which took place in December 2000, is regarded as the most successful such privatization in a developing country to date. The privatization brought in MAD 23 billion, or USD 2.3 billion.⁸

Maroc Télécom holds a general licence, and its fixed transmission network is 100% digital.

⁸ *New Tech Magazine*, No. 1, January 2001.



Médi Télécom was awarded the second GSM licence in August 1999, following an official call for proposals in which seven telecommunication firms took part. Both domestic firms (BMCE Bank, Groupe Afriquia, *Caisse de Dépôts et de Gestion* [Deposit and Management Fund – CDG]) and foreign firms have equity stakes in Médi Télécom (see Figure 4).

Since launching commercial services in the spring of 2000, this second mobile operator has managed to carve for itself a significant position in the GSM market. It has doubled its capacity, and continues to develop its infrastructure. In August 2000, with the deployment of the Méditel network, it was able to extend its reach to include 60% of the Moroccan population. According to the company's estimates, there were by March 2001 approximately one million subscribers, of whom 90% were in the prepaid-card market. The company expects to have five million subscribers by 2003.

The advent of competition has been beneficial for the market, and not only for operators but also for consumers. According to the latest data from Maroc Télécom, that firm's fixed and mobile subscribers now total 3 767 000, and the annual rate of growth is 105%.

In 2000, as can be seen in Figure 5, the number of Maroc Télécom's mobile subscribers exceeded the number of its fixed subscribers. With a staff of approximately 14 500, it has an average productivity of 131 lines per employee. The

teledensity (number of fixed and mobile lines per 100 inhabitants) grew sharply following the sale of the second licence, rising from 6.5% to 15.2% in the space of one year (see Figure 6). This growth comes as a result of the government's efforts in pursuing reforms and the role played by the ANRT in opening up the market.

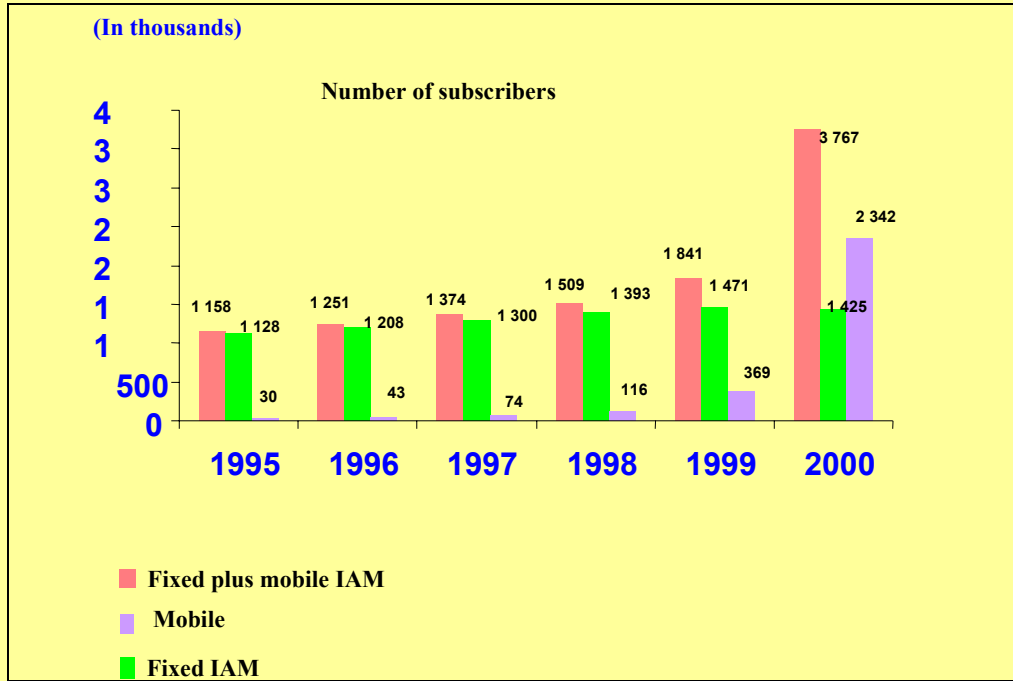
Three VSAT licences were awarded in 2000⁹, to SpaceCom (whose shareholders are Wafa Investment, the *Fonds Méditerranéen pour l'investissement*, and the Bureau Yves Houssin et Bayard Participations); Gulf Sat Maghreb (Gulfsat International, a partnership between the Ministry of Communications of Kuwait and Hughes Systems of the United States), and Argos (in association with the Norwegian company TELNOR) for the provision of closed commercial services that do not make use of the public network.

Two GMPCS licences were awarded in 2000¹⁰ to the company Orbcomm Maghreb (whose main shareholders are MIFA, ORBCOMM of the United States, ASMA Invest (a Morocco-Saudi company), and the Moroccan bank WAFABANK) and to Global Star TESAM for the provision of satellite services.

⁹ Financial shareholdings, ANRT.

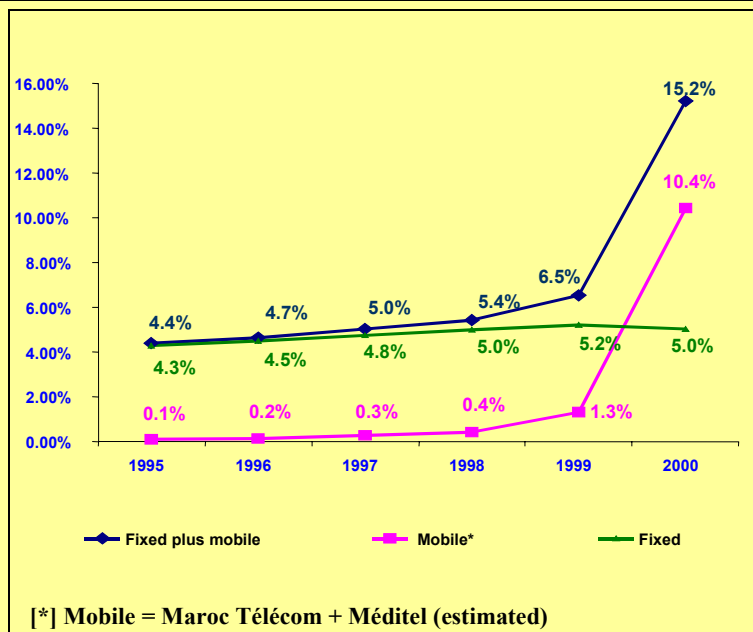
¹⁰ Idem.

Figure 5 – Number of subscribers for Maroc Télécom’s fixed and mobile services (in thousands)



Source: Maroc Télécom, 2001.

Figure 6 – Number of lines per 100 inhabitants



Source: Maroc Télécom, 2001.

Internet access providers are not considered operators. They are not subject to the licensing regime, but simply must file a declaration with ANRT. However, this does not in any way lessen the fact that they are subject to the general obligations set forth in Law 24-96 and to the terms of their declaration. It is the declaration that sets out the terms and conditions under which services are to be provided, pursuant to Article 17 of Law 24-96, which states that the commercial operation of value-added services such as voice messaging services (the list of such services being established by regulation), may be provided without restriction by any natural or juristic person after a declaration of intent to commence such a service has been filed with ANRT. The declaration must contain the following information:

- Particulars as to the launching of the service.
- The geographical coverage.
- The conditions of access.
- The nature of the services to be provided.
- The tariffs to be charged to users.

ANRT forwards a copy of the declaration to the appropriate government authorities.

The Internet access service must, under a leasing agreement, use the linkage facilities of one or more of the existing public telecommunication networks unless the Internet access provider holds a licence itself and wishes to use the linkage facilities of the network covered by that licence.

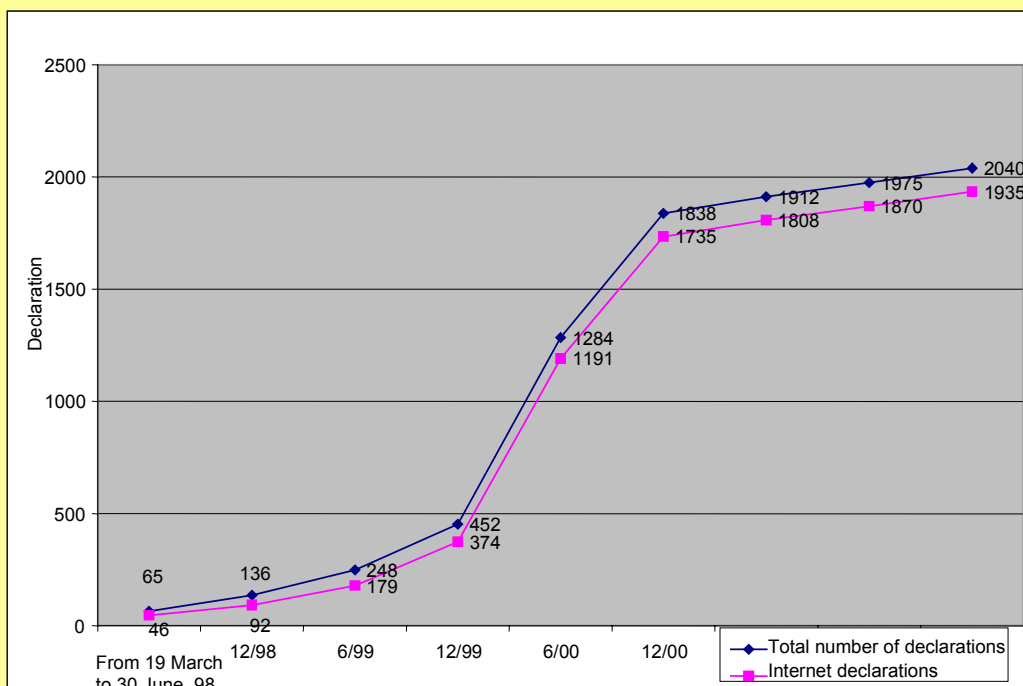
Thus, beyond the obligation to abide by the law in general, service providers are bound by the terms of their declaration. However, service providers have indicated that a number of problems have arisen, particularly in situations where they are in competition with the incumbent operator (see section 16), and they hope that ANRT will take greater account of their interests.

It should be noted that, since 1998, value-added service providers have experienced immense growth, both in the number of providers and in the volume of activity (see Figure 7).

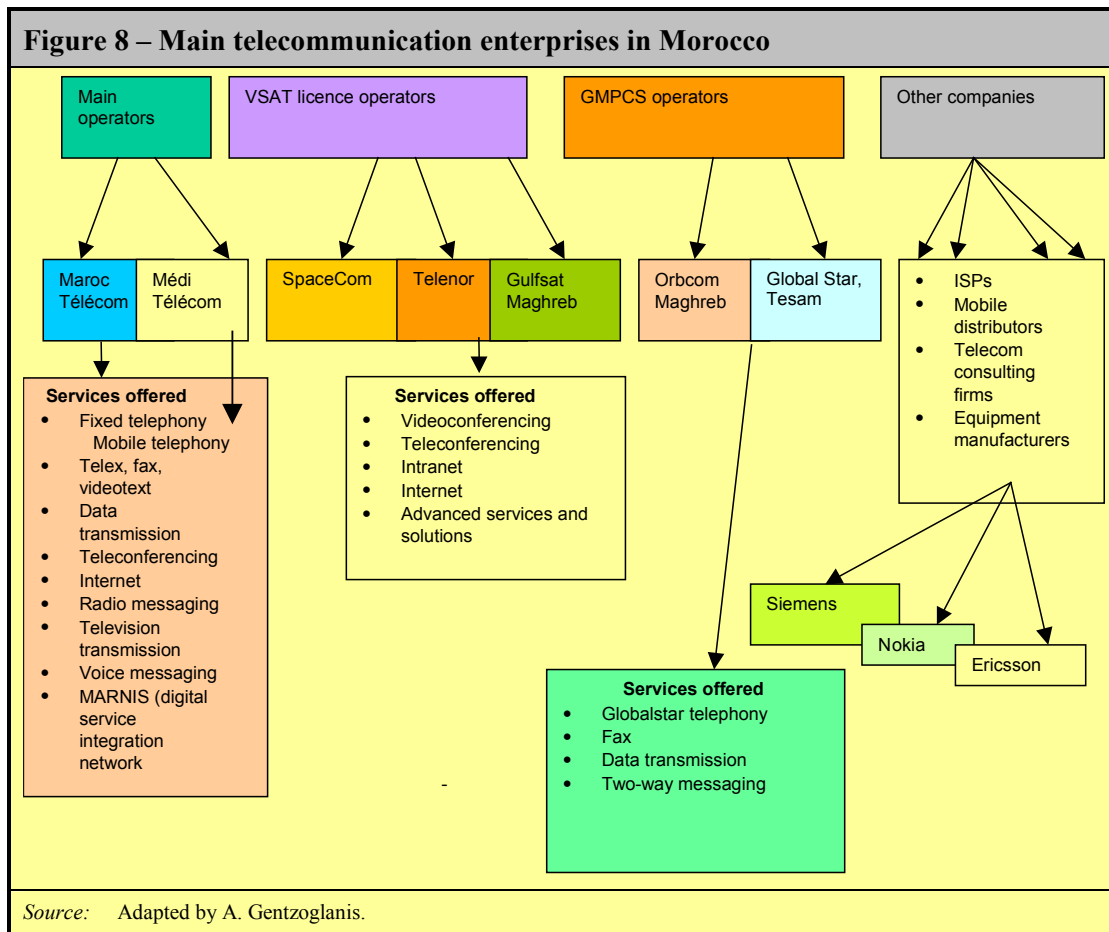
There are now approximately 500 000 users.

Figure 8 shows the structure of the Moroccan telecommunication market and the main services offered by each company.

Figure 7 – Growth in the number of value-added service providers



Source: ANRT.



4.2 Future developments

The main operators are now deploying new technologies and new services in order to position themselves within an increasingly competitive market. Indeed, ANRT is now preparing to:

- Grant radio network licences involving shared resources (3RP) by the end of 2001.
- Grant wireless local loop (WLL) operating licences by the end of 2001.
- Grant a network licence (backbone) by the end of 2001.
- Liberalize domestic and long-distance services in 2002.
- Liberalize international services in 2003.
- Grant a third GSM licence, in 2003 or sooner, if existing operators are ready to give up their exclusive licences.

Operators that obtain local loop licences will have 12 to 18 months to deploy their infrastructure, and will initially be permitted to offer data services only, inasmuch as domestic and

long-distance telephone service will remain a monopoly until the end of 2001. However, the new operators will increase competition in this market and in every region of the country after that date. The services offered by operators holding local loop licences will be similar to those offered by means of wired links to the incumbent operator. Combined voice, video, fax and data-transmission services will be offered using local wireless service distribution terminals at each local base station (BSS).¹¹

Operators' investments in local loop licences will be less than those required in fixed telephony because voice and Internet services can be provided by radio links. After December 2001, these services will be offered both to individual subscribers and to companies, given the low teledensity in this area.¹²

¹¹ *New Tech Magazine*, No. 3, April 2001.

¹² *Idem*.

Table 5 – Plans for liberalizing the telecommunication market, and outlook for the future			
Liberalization plans	Timetable	Present situation (2001)	Outlook for the future
Radio networks involving shared resources (3RP)	End of 2001	<i>Mobile telephony:</i> Duopoly (Maroc Télécom and Médi Télécom) <i>Fixed telephony:</i> Monopoly (Maroc Télécom)	By 2003, all basic and value-added services, provided through both mobile telephony and fixed telephony, will be operating in a competitive market
Local and long-distance network	End of 2001		
Extension of the fixed network	End of 2001		
Local loop	2002		
International network and third GSM licence	2003		
<i>Source:</i> ANRT, adaptd by A. Gentzoglanis.			

In its efforts to deploy quickly the infrastructure necessary in order for Morocco to be able to enter the digital age and the era of new information technologies, ANRT plans to grant local network operating licences in the very near future. These licences will make it possible to put in place an infrastructure of interurban and international communication services that will provide international connections for interurban operators' subscribers. The new operators will invest in infrastructure and in the construction of information highways so that Morocco can narrow the gap that separates it from the industrialized countries. As well, ANRT's requirements in regard to service quality are being kept very high. The Agency will require that every new operator must provide every client with a pass-band of a minimum of 2 megabits per second.

5 Institutional structure of the ANRT

5.1 Legislation establishing and governing the ANRT

The overall framework of the reorganization of the telecommunication sector was out in the new law on postal services and telecommunications, Law 24-96 (Dahir 1-97 of 2 Rabi II (7 August 1997)). This law also provided for the establishment of the National Telecommunication Regulatory Agency (ANRT), which came into being in 1997. The law gives ANRT a wide range of responsibilities with regard to the regu-

lation and operation of the telecommunication sector.

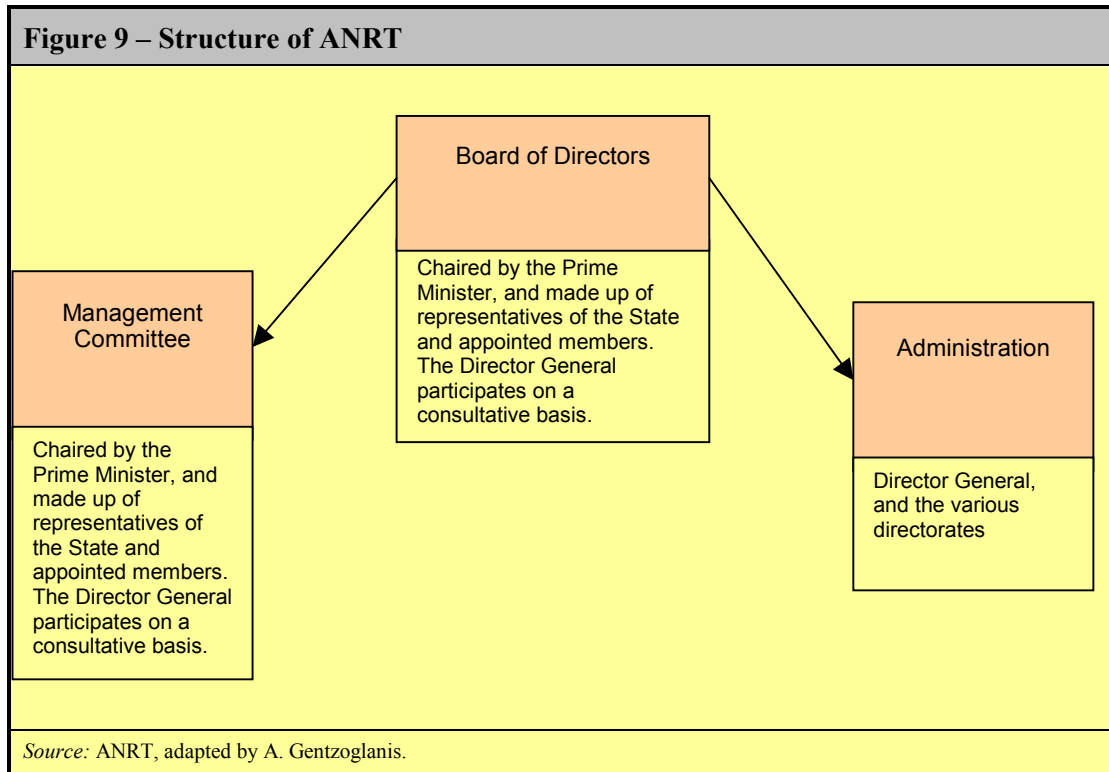
Among the implementing provisions established pursuant to the law are the following:

- Decree 2-97-813, respecting the management structure and responsibilities of ANRT:
 - The Board of Directors (see paragraph 5.2.1.1).
 - The Management Committee (see paragraph 5.2.2).
 - The Director General (see paragraph 5.2.4).
- Decree 2-98-158, respecting the appointment of members of ANRT's Board of Directors.

The National Telecommunication Regulatory Agency is a public entity that has its own legal status as a juristic person and is financially autonomous. It reports to the Prime Minister and is subject to the financial oversight of the State. The principal organs of ANRT are:

- The Board of Directors.
- The Management Committee.
- The Administration (the Director General, and subordinate services).

The Board of Directors is responsible for making decisions as to the make-up, functioning and role of the Management Committee, and the powers delegated to the Director General.



By decision of 1 March 2000, provisions were established with respect to the organization and operation of the Management Committee and the structure, operation and role of the Board of Directors. The structure of ANRT is illustrated in Figure 9.

5.2 Organizational structure of ANRT

5.2.1 Organs

5.2.1.1 Board of Directors

The Board of Directors consists of representatives of the State, individuals from the public and private sectors appointed in their own right by Prime Ministerial decree for a five-year term, and the Director General of the Agency. The Board is chaired by the Prime Minister or other government official delegated by him for that purpose. The representatives of the State are:

- The minister responsible for the interior.
- The minister responsible for finance.
- The minister responsible for higher education, professional training and scientific research.
- The minister responsible for commerce and industry.
- The Secretary General of the government.

- The minister responsible for economic development and privatization.
- The minister responsible for telecommunications.
- The minister responsible for communications.
- The government official responsible for national defence.
- In the absence of any government official, the general secretary of each department or an official having the rank of director may act as a representative in his stead.

The five appointed members are selected on the basis of their technical, legal and economic expertise in the field of information technology and telecommunications. No one may serve as one of these appointed members if he has any personal interest in the field of information technology and telecommunications. The current members of the Board of Directors were appointed by Decree 2-97-158 of 27 Shawwal 1418 (25 February 1998).

The Director General of ANRT has several different functions within the Board of Directors:

- He attends meetings of the Board of Directors and the Management Committee on a consultative basis, and serves as their rapporteur.

- He is responsible for overseeing technical preparations and administering the executive secretariat for meetings of the Board of Directors.
- He implements the decisions of the Board of Directors.
- Powers may be delegated to him by Board of Directors for dealing with certain matters involving technical issues or urgency such that a swift and technically appropriate response is required.

Each year, the Director General proposes a liberalization plan to the Board of Directors, and once it is approved it is implemented by ANRT. This plan encompasses the liberalization programme and projects for the following year, and is made available to the public.

The Director General serves as a channel of communication between the Board of Directors and the Management Committee on the one hand, and ANRT's Administration on the other. He may be assisted by other officials at his discretion.

5.2.1.2 Meetings of the Board of Directors

Major decisions are taken at meetings of the Board of Directors. The Board may meet as often as circumstances require, but is required by law to meet at least twice a year as follows:

- Before 31 May, in order to approve the financial statements for the previous financial year.
- Before 31 October, in order to approve the budget for the following financial year.

For a meeting of the Board to be properly constituted, there must be a quorum present consisting of at least two thirds of the Board's members; and in order for a decision to be approved, a majority of the votes of Board members present or represented must be cast in its favour (Law 24-96, Article 34).

Prior to each meeting of the Board, ANRT prepares all the relevant documents (reports, budgets, action plans) and distributes them to all Board members so that they can familiarize themselves with them and will be able to discuss them at the meeting. The minutes of Board meetings, as signed by the Prime Minister and the Director General, serve as the framework for

ANRT's activities. The minutes are also made available to the public. Thus far, the Board of Directors has been meeting only once a year.

5.2.1.3 Powers of the Board of Directors

According to Article 34 of Law 24-96, ANRT's Board of Directors exercises all the powers and carries out all the actions necessary to accomplish the Agency's mission. It is up to the Board, in all the matters that come before it, to determine what powers will be delegated to the Management Committee and to the Director General in respect of the preparation and/or implementation of its decisions.

The Board of Directors takes up a wide range of topics and issues relating to the accomplishment of the Agency's mission. In particular, it considers the following:

- The general orientation of ANRT's activities.
- ANRT's yearly work programme.
- Regulatory issues relating to the accomplishment of the Agency's mission.
- The Agency's internal workings, and decisions with respect to:
 - Personnel matters.
 - ANRT's budget and its implementation.
 - Operating and capital expenses of the National Institute for Postal and Telecommunication Studies [*Institut National des Postes et Télécommunications*] (INPT).¹³
 - Agreements concluded pursuant to Article 107 of the law on telecommunications.

The powers of the Board of Directors are very broad. It can decide to set up any committee, and determine:

- Who is to serve on it; and
- how it will function.

The Board may also delegate some of its powers to the committee it sets up. It reviews the report on the work of ANRT submitted to it by the Director General.

¹³ The INPT is a training institute affiliated to the ANRT.

The Board of Directors also has an oversight role. It reviews and confirms the regulatory decisions submitted by the Director General. Thanks to the presence of several ministers among the Board's members and the fact that the Board is chaired by the Prime Minister, operators recognize that the liberalization programme and the decisions of the Board have backing at the highest level.

5.2.2 The Management Committee

The function of the Management Committee is to assist the Board of Directors. By delegation from the Board of Directors, the Management Committee is charged with settling any disputes between operators that may be filed with ANRT, particularly in regard to interconnection.

The members of the Management Committee are appointed by the Board of Directors to a five-year term, and they may be reappointed to serve further terms. The Management Committee is chaired by the Prime Minister and consists of representatives of the State as listed below plus five appointed members:

- The Minister of the Interior.
- The Minister of Economic Affairs and Finance.
- The Secretary General of the government.
- The minister designated by the Prime Minister as having responsibility for national defence.

The other five members of the Management Committee are individuals, appointed in their own right. They may not have any personal interests in telecommunication companies.

The Director General or his representative attends meetings of the Management Committee on a consultative basis and serves as its rapporteur. The Regulatory Directorate of ANRT is responsible for technical preparations and executive secretariat services to support the work of the Management Committee.

5.2.2.1 Meetings of the Management Committee

The Management Committee meets as often as needed during the interval between meetings of the Board of Directors. The meetings are convened at the initiative of the Chairman or at the request of the Director General of ANRT, and

are chaired by the Prime Minister. The meetings are not open, and the minutes are not made available to the public. If necessary, the Committee may ask the parties involved in any issue to be present to state their case.

For a meeting of the Management Committee to be properly constituted, there must be a quorum present consisting of at least two thirds of the Committee's members; and in order for a decision to be approved, it must be supported by a majority of the members present. Decisions are implemented by the Director General of ANRT.

The members of the Management Committee were appointed in March 2000. Since then, the Committee has only had to meet once, in order to consider the dispute between Médi Télécom and Maroc Télécom concerning the interconnection tariffs charged by the latter. ANRT prepared a proposal which it submitted to the members of the Committee two weeks before the meeting. At the meeting, it was discussed and adopted.

5.2.3 The Administration of ANRT

The Administration of ANRT consists of the Director General and seven directorates. Each directorate is responsible for a particular area in connection with the regulatory process, technical standards, economic affairs or training. Six of the directorates are as follows:

- The Technical Directorate.
- The Regulatory Directorate.
- The Information Technology Directorate.
- The Evaluation and Competition Directorate.
- The Administrative and Financial Affairs Directorate.
- The Management Control and Internal Audit Directorate (reporting to the Director General).

The National Institute for Postal and Telecommunication Studies (INPT), a training institute attached to ANRT when the Agency was established, is counted as the seventh directorate. ANRT also has divisions responsible for management oversight, information systems, public relations and marketing.

One of the factors that underpins the credibility and legitimacy of ANRT is the fact that appointed members of the Management Commit-

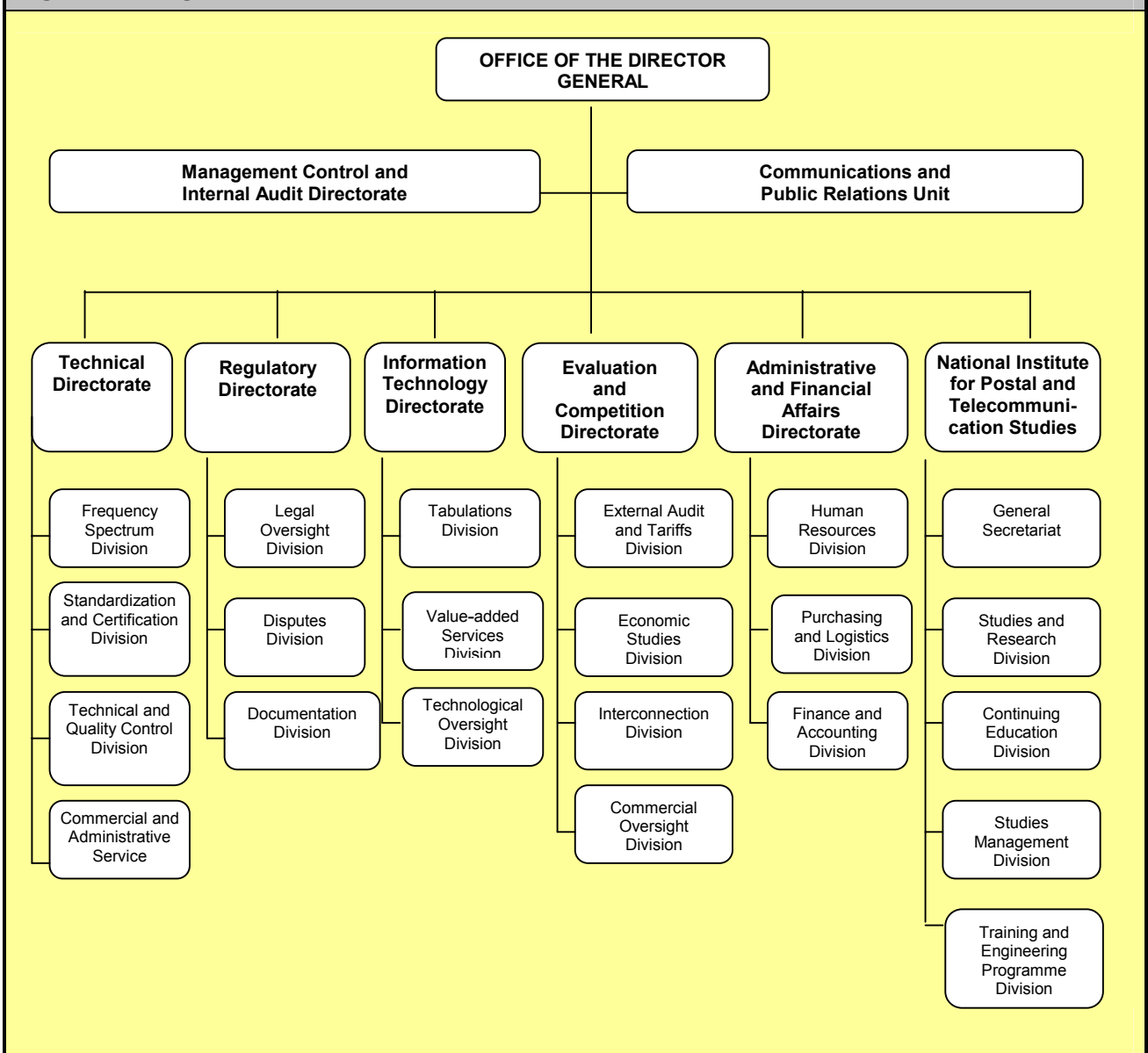
tee are prohibited from holding any interests in telecommunication companies. Furthermore, ANRT’s staff is subject to general rules applying to all public entity employees preventing them from having any financial or professional interest in a company operating in their area of activity, and which also requires them to conduct themselves in the manner which preserves the good name of the Agency.

It should be noted that, apart from this formal hierarchical structure, under the staff rules of ANRT the Director General has the power to appoint individuals to staff positions directly

reporting to his office, either as advisers with the rank of director or *chargé de mission* or as project heads, for a fixed term.

As well, the way in which work is organized within ANRT is innovative. Indeed, although in theory ANRT has an organization chart that is hierarchical and structured (see Figure 10), the Agency’s working methods are in fact based on a matrix (i.e., horizontal links). Work is organized in groups, around specific projects. For each project, a multidisciplinary team is set up which brings together people from several different divisions or units, under the direction

Figure 10 – Organization chart



of one or more project heads. The documents prepared are discussed, submitted to the Director General, and presented to all interested persons within the Agency by means of seminars.

Thus, staff competences are continually being reinforced and interdisciplinary capabilities are swiftly being developed, something that is difficult to achieve by other means. By adopting this practice, ANRT has been able to broaden the capabilities of its staff and manage them more effectively. The Agency's central belief is that its human resources must be developed in such a way that their knowledge is not only highly specialized but also wide-ranging. Moreover, the Agency is able to respond quickly when it needs to draw different kinds of expertise from its own staff without being constrained by slow, cumbersome hierarchical procedures that would keep it from taking timely action.

5.2.4 The Director General

The Director General of ANRT is appointed by His Majesty the King by *dahir* [royal decree], in accordance with the regulations in force governing the appointment of officials to high office; and while he holds office he is forbidden to hold any other post. His term of office is not fixed, and he does not have an employment contract. His appointment takes effect at the moment the *dahir* naming him is issued, and he can only be removed from office by a further *dahir*. There is no provision either under the law or in tradition that the Director General should resign upon a change of government. Indeed, the fact that the Director General is appointed by the King gives him a certain measure of independence vis-à-vis the government and the Prime Minister.

The Director General's remit is quite broad. He possesses all the powers necessary in order to administer ANRT, particularly in regard to:

- The recruitment and appointment of staff.
- The undertaking of spending commitments by directive, contract or direct purchase.
- The keeping of accounts with respect to all expenditure commitments.
- The settlement and recording of the Agency's receipts and disbursements.
- The handing over to the accounting officer of the corresponding payment orders and

documentation in respect of monies received.

In addition, the Director General:

- Is charged with carrying out or authorizing all activities and operations relating to the Agency's objectives, pursuant to decisions by the Board of Directors or the Management Committee.
- Represents the Agency and acts in its name in all dealings with the State, public entities and third parties.
- Represents the Agency before the courts, and may undertake any legal action for the purpose of defending the Agency's interests (with the requirement nevertheless that he immediately advise the Chairman of the Board of Directors).
- By 31 May of each year, prepares a report on the work of the Agency during the previous year.
- With reference to certain specific issues, may delegate some of his powers to senior ANRT officials.

With regard to the qualifications that a person should possess in order to be named Director General, none is mentioned in Law 24-96 or in the corresponding decrees. In 1998, Sir Mostafa Terrab was appointed Director General of ANRT by His Majesty King Hassan II. He holds an engineering degree from a leading French university, and a doctorate in operational research from the Massachusetts Institute of Technology (MIT). He has gained extensive professional experience, first as a professor at the Rensselaer Polytechnic Institute of New York, then as *chargé de mission* for the Royal Cabinet where he followed the process of telecommunication sector reform from a distance, and then at the North African and Middle Eastern Economic Summit held in 1997 where he served as Secretary General. The fact that he had had no involvement with telecommunication prior to his appointment to ANRT and that he was unknown within the telecommunication community meant that he possessed greater credibility and legitimacy in the eyes of those involved in the telecommunication market, a fact that was borne out in the course of interviews with representatives of the public and private sectors alike.

5.3 Remit and mission of ANRT

ANRT's remit is very broad, and the law gives the Agency powers that no other entity of this kind in the country possesses.

ANRT possesses the following regulatory powers:

- Legal
- Technical
- Economic

Each of these powers is discussed below.

5.3.1 ANRT's powers

In the legal sphere, ANRT is charged with the following:

- Taking part in the establishment of standards and the drafting of laws and regulations with respect to the telecommunication industry.
- Preparing draft legislation, decrees and ministerial orders with respect to the legal regime within which telecommunication operators carry on their activities.
- Preparing and keeping up to date the terms of reference setting out the rights and obligations of network operators.
- Establishing the procedure to be followed for the submission of disputes in regard to interconnection.
- Establishing rules governing the management and oversight of the radio frequency spectrum.
- Issuing its opinion with respect to applications for the awarding of licences.
- Receiving declarations that are filed, expressing the intent to offer value-added services on a commercial basis.
- Setting the conditions for undertaking investigations.
- Issuing authorizations to establish and operate independent networks.

ANRT may propose legislation either at its own initiative or at the request of the competent government authority. Its proposals aim to adapt the legal, economic and security framework within which telecommunication activities are carried on.

With respect to the interconnection of independent networks to the public network, ANRT is charged with establishing the interconnection terms and conditions on a case-by-case basis and establishing conditions for the issuance of authorizations to establish and operate independent networks, as well as prior acceptance criteria for terminal equipment. ANRT is responsible for drafting technical standards for the use of networks and installations.

In so far as its technical regulatory powers are concerned, ANRT is charged with:

- Establishing the technical and administrative specifications for the acceptance of terminal equipment.
- Granting certifications for the manufacture, import, offering for sale and distribution of terminal equipment, and for its connection to a public telecommunication network.
- Certifying telecommunication equipment testing and measuring laboratories which may be authorized to issue permits.
- Establishing categories and technical conditions with respect to the use of radio networks and installations consisting of low-power and low-range equipment.

In regard to its economic regulatory powers, ANRT is charged with:

- Proposing the maximum rates that may be charged for components of universal service.
- Establishing licensing fees and other fees relating to the granting and renewal of licences with respect to radio frequency assignments.

ANRT is also charged with developing a legal framework, and participating in it, with a view to ensuring that free competition prevails, and to protect providers and users alike from illegal behaviour. It is also ANRT's responsibility to ensure that all users receive equal treatment in regard to the rates charged, and to ensure that rates are free of geographical bias.

The law on telecommunication also specifies the responsibilities of ANRT and its power to enforce:

- The guarantee that communications will be secure.
- The guarantee that information will be held in confidence.

- The guarantee that operators will support regional and national development, and environmental protection.
- The guarantee that operators will support the aims and obligations of universal service.
- The installation of telephone booths alongside public roads.
- The guarantee that the needs of national defence and public security will be met.

5.3.2 ANRT's oversight and supervision role

ANRT has various powers at its disposal for investigating matters for the purpose of controlling regulations. It is responsible for overseeing compliance with the law and monitoring regulations. It ensures that service providers and network operators will abide by the terms of the licences, authorizations and permits issued in the telecommunication sector. It is also responsible for assuring compliance with provisions relating to the terms and conditions established for interconnection and provisions relating to the settlement of disputes.

So that it can carry out these diverse roles, ANRT has powers of investigation and oversight. Its power of investigation is exercised through inquiries, including on-site inspections and the requesting of any necessary information or documents that will enable the Agency to verify that companies operating networks or telecommunication services are acting in compliance with their obligations and terms of reference. During our mission, one of the operators we interviewed confirmed ANRT engineers make frequent visits to their rooftop to check their equipment and verify information regarding the technology used.

Insofar as its power of oversight is concerned, ANRT works to root out illegal operations on the part of network operators and to prevent such infractions from occurring. With a view to preventing anti-competitive activity, ANRT may:

- a) adopt specific measures with regard to the parties concerned;
- b) publish information about the operators in question; or
- c) suspend the operator's licence or permit.

The Agency's employees have the power to enter the premises of any company acting improperly and to seize any documents that will support its case against the accused. As well, ANRT is empowered to press charges through its own duly sworn and commissioned officers, through officers of the judicial police, and through officers of the public forces. Charges are set forth in a written statement and forwarded to the Royal Prosecutor within five days. The statement of charges is taken as confirmation of wrongdoing until proven false.

5.3.3 ANRT's enforcement and penalty role

The enforcement and penalty power is the strongest weapon that ANRT has at its disposal to halt or even prevent practices by network operators that it deems anti-competitive. ANRT is equipped with the power to enjoin, the power to compel, and the power to launch public action.

The power to enjoin allows ANRT to put on notice any licence-holder that fails to abide by the requirements imposed as a condition of the licence.

The power to compel allows ANRT to suspend the licence and seize the equipment of anyone committing an offence.¹⁴ The same power allows it to take the necessary measures to assure the continuity of the service and protect the interests of users.¹⁵ If the accused is found guilty, the court may order the telecommunication network confiscated or destroyed at ANRT's request.

Clearly, these penalties are very harsh and difficult to apply, and all the more so given that some services are provided under a monopoly, in which case penalties of this sort against a sole operator would deprive the country of an essential service, with all the negative repercussions

¹⁴ ANRT has prosecuted several operators for illegally carrying voice communications. Internet telephony is illegal in Morocco. Indeed, fixed telephony remains the monopoly of Maroc Télécom (until the end of 2001), and the use of its fixed equipment and the Internet for carrying voice communications is illegal. Offenders risk a fine of up to MAD 200 000 and up to two years' imprisonment.

¹⁵ ANRT has used this power in the recent dispute between Médi Télécom and Maroc Télécom concerning Maroc Télécom's proposal of a rate plan for its own customers, excluding the customers of Médi Télécom (see Section 16).

that would have for the country's economy. Despite the restrictive nature of the power to compel, it remains true that the simple fact of publicizing offences may to some degree serve to dissuade offenders and change their attitude.

It has become very clear that the law has to be amended to permit ANRT to impose mid-range economic and financial penalties, so that it can appear more credible in its enforcement role vis-à-vis operators, and particularly the incumbent operator.

5.3.4 Telecommunication technology monitoring and development

In regard to the development of telecommunication technology, ANRT has the following functions:

- To keep abreast of the development of information technology, on behalf of the State.
- At the end of each financial year, to draw up a report on the Agency's work during the year. This report also reviews the situation of information technology as a whole in Morocco, from the standpoint of the application of existing laws and regulations. The report is transmitted to the Prime Minister, made public, and published in the Official Gazette [*Bulletin Officiel*].
- To participate, together with the government official responsible for telecommunications, in the work of the Standing Committee on Radiocommunications established by Royal Decree 675-66 of 6 Ramadan 1386 (19 December 1966).
- To participate in international meetings concerned with the management of the radio frequency spectrum and the regulation of telecommunications.
- To participate in the work of domestic and foreign agencies whose aim is to study and improve telecommunication regulation and management.
- To train telecommunication professionals through the National Institute for Postal and Telecommunication Studies (INPT).

5.4 Human resource management

The law on telecommunication reform in Morocco contains a number of provisions relating

to the training and management of the ANRT's human resources, and the human resources of the knowledge economy in general. To provide a sound footing for the restructuring, Law 24-96 provided that incumbent staff within the Ministry of Postal and Telecommunication Services and within the National Post Office and Telecommunication Agency (ONPT), working in areas whose duties and responsibilities would be taken over by the ANRT would be transferred to the new Agency, particularly staff engaged in the certification of telecommunication equipment and the administration of radio stations.

Beyond these automatic transfers at the outset, it is interesting to see how the Agency's recruitment policy has worked since then. The method adopted by Mr Terrab, the Director General, has been to select directors on the basis of their expertise in a variety of fields. All but one have been drawn from academe, and therefore had no prior connection either to the incumbent operator or to the former Ministry of Postal and Telecommunication Services; and indeed, some are even continuing to teach. All of them hold doctorates, many in engineering or law. Officials have been recruited in accordance with the regulations in force on the basis of their academic credentials, their competence and their motivation, in part from amongst the top students of each year's graduating class. This has reinforced ANRT's image of independence, integrity and respectability, which was clearly indicated by people in private-sector telecommunication enterprises.

At present, ANRT has a staff of 389, including 200 employed at the training institute (the INPT). Women account for 33.2% of the staff.¹⁶ Out of the total number of employees, 3.34% are professionals previously employed by the Ministry of Communications, 5.9% are professionals previously employed by other State agencies, 14% are professionals previously

¹⁶ So far no women hold posts at the director level, but women are well represented in senior professional posts (two are *chargées de mission*, one is a project head, one is a division chief, and nine are heads of services). During our investigation in the field, we saw that there was a willingness to promote women's participation in professional-level posts. At an internal seminar on IP telephony organized by ANRT, all the participants but one were women. Moreover, the Moroccan delegation that attended the recent World Telecommunication Policy Forum organized under the aegis of ITU was composed entirely of women.

employed by the incumbent operator, and 9.8% came from the private sector. Overall, 93.8% are career staff, 5.4% are staff seconded for short periods, and fewer than 1% are contractual staff.

ANRT employees a large number of specialists. Engineers form the largest group, representing 18.5% of professional staff, followed by technicians (7.2%), commerce specialists (6%), and lawyers and economists (5.4% each). ANRT recognizes that it suffers from a shortage of financial, economics and technical personnel, owing to the scarcity of high-calibre specialists in those fields and the fact that the salaries it offers are not sufficiently attractive.

The ANRT's staff are very young. On average, senior professionals are between 42 and 50 years of age, while middle-level professionals are between 25 and 30. Many professional staff received their training at the INPT, which is now affiliated to ANRT. Communication within the Agency is very good, and information flows well, mainly because the hierarchical structure between senior professionals and other officials is not rigid. The main communication tool is the Agency's intranet, which makes for efficient communications and provides easy access to all information relating to the Agency's projects.

ANRT has established an original structure for recruiting and strengthening its personnel. The Agency classifies its personnel on the basis of their increasing qualifications and experience, and particularly the obtaining of academic credentials. New staff are recruited from amongst applicants who submit their curricula vitae and are subsequently invited to participate in selection competitions and write examinations. The Agency favours external recruitment (73% of its present complement of staff) as opposed to recruitment from within (approximately 23%). In order to motivate its staff, ANRT also uses promotion and career advancement. For example, in September 1999, 43 staff members on probationary status were given regular appointments, and 245 staff members received a step increase.

In order to distinguish itself from more traditional structures in the Moroccan public service, ANRT has adopted a set of staff regulations that offers very attractive fringe benefits (housing loans, group and disability insurance, medical coverage, holiday camp, pilgrimage benefits, public transport) and salaries that are generally

higher than those paid for comparable posts in the public service. Overall, the remuneration level of professional staff is lower than in the private sector. On average, professionals in the private sector are paid a monthly salary of about USD 800, or 25% more than ANRT professionals.

This goes a long way towards explaining the major hurdle facing the ANRT in its efforts to recruit telecommunication engineers. If they do not choose the private sector from the outset, they may well be tempted away later. ANRT cannot offer higher salaries than those permitted by virtue of its status as a public institution; it must abide by the regulations in force and submit such issues to the Ministry of Finance.

At present, the Agency cannot make decisions in regard to hiring, spending commitments or salaries without the approval of the Ministry of Finance, and this poses a problem. Fortunately, the situation is about to change. The Ministry of Finance has recognized how cumbersome this arrangement is for the workings of the Agency, and has decided to change the mechanics of its oversight function so that it reviews such matters after the fact rather than before. Once the draft legislation initiated by ANRT in this regard has been approved and promulgated, the Agency will enjoy broader autonomy (see section 8). Nevertheless, the annual rate of staff turnover is very low – 0.1% a year.

Last year, ANRT moved to very modern premises in a brand-new building, acquired at a cost of MAD 60 million (USD 6 million). These new premises provide staff with a pleasant work environment.

5.4.1 In-house training

The Director General is a strong believer in ongoing education and training. Accordingly, ANRT – in cooperation with the INPT, the Administrative and Financial Affairs Directorate, universities in Morocco and abroad, and other international agencies and institutions – has developed a variety of short- and long-term training programmes for its officials. A significant number of staff are taking advantage of these programmes.

Beyond that, ANRT holds weekly in-house seminars on timely topics in the field of telecommunications, which staff may attend on a voluntary basis. The purpose of these seminars

is to ensure that everyone is kept properly informed about the projects that ANRT has under way, and about current thinking and practice around the world in regard to regulatory and technical issues. The in-house seminars are organized either by multidisciplinary teams (for which each member is chosen on the basis of his or her background and expertise) or by individuals. The project head is not necessarily a director. At the end of each seminar, time is allowed for discussion, which creates an interesting dynamic. The seminars are open to all, and the Director General and directors are frequently in attendance. As well, outside speakers are sometimes invited to take part. The professional staff see all these seminars as forming part of their ongoing education, and as confirming the value of their work. All papers presented are made available to all Agency staff via the intranet.

Staff are also invited to take language courses, particularly English courses, which are given by INPT teachers outside normal working hours.

The Agency encourages its professional staff to participate in training programmes leading to a degree or diploma at educational institutions in Morocco, or even abroad, so that they may acquire new expertise.

In addition, in order to raise the awareness of the various players in Morocco's telecommunication industry regarding changes currently under way or soon to come, ANRT invites them to attend certain seminars, as was recently the case with a seminar on fixed network licences. Seminars are also organized by experts, external consultants and international agencies.

This overall approach – a matrix-based working arrangement, combined with in-house training – is innovative, particularly given that the telecommunication sector is on the threshold of major changes. This approach makes it possible for all staff to stay informed, to keep their knowledge up to date and to acquire new skills relatively fast. It makes it possible for those working on a project to be in contact with other specialists, and by working together to learn more not only about their own job, their own role and their own directorate, but also about their skills and the skills they need in order to manage such-and-such a project or meet such-and-such a challenge. The fact that these training activities are considered highly worthwhile is demonstrated by the fact that so many

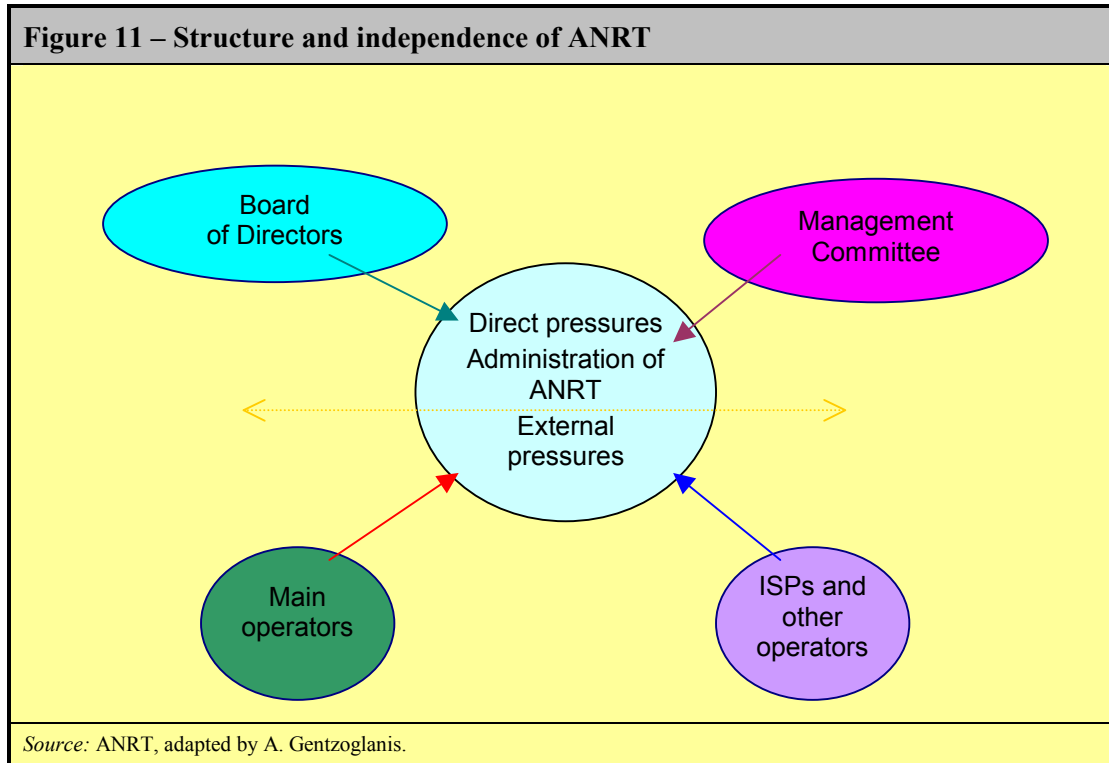
staff take part. However, even more training will be needed as the market is opened to competition.

6 Structural (institutional) independence

It is worth underscoring once again the fact that representatives of the State serve on both ANRT's Board of Directors and its Management Committee, and that two of them also sit on the Board of Directors of Maroc Télécom. Moreover, the State still owns 65% of Maroc Télécom, which is the incumbent operator. With the Agency's Board of Directors and Management Committee being structured in this way, it is difficult to see ANRT as being entirely independent. The risk of interference is present, and there is the potential for a major conflict of interest.

The reasons why representatives of the State sit on ANRT's Board of Directors and Management Committee are rooted in the political context of the years prior to reform. At that time, when the proposed Agency's structure was being discussed, certain representatives of the State were wary of the powers and degree of independence that the Agency would have if its highest authorities were independent commissioners. So as not to hold up the process and have to make institutional changes, they decided on a pragmatic course which, although it may not have been the best in terms of institutional independence, was nonetheless the most acceptable at that time and allowed initial reforms to proceed in the telecommunication sector.

Still, this situation does not seem to have compromised ANRT's credibility thus far. According to Mr Terrab, although the present make-up of the Board of Directors and the Management Committee may be less than optimal from the standpoint of ANRT's autonomy, it is nevertheless the best arrangement in the circumstances. The fact that the Prime Minister, other government ministers, Supreme Court justices, economists and other leading figures sit on the Board of Directors or the Management Committee inspires confidence on the part of operators and imbues the regulatory process for the telecommunication sector with a certain degree of credibility, authority (given the quasi-official nature of decisions), and balance.



As Mr Terrab points out, the telecommunication regulatory and governing process may have been less than perfect at the beginning, given the fact that the reforms which were instituted required a number of fundamental changes in the country's legislation. Nevertheless, the fact that certain members of the Board of Directors and the Management Committee wear two hats, as they also sit on the Supervisory Board [*Conseil de surveillance*] of the incumbent operator, cannot continue indefinitely. This is an issue that needs to be revisited to ensure that ANRT is truly independent in its decision-making. Some private operators have expressed their concern at this situation as well. We believe that, when the market is opened to full competition in 2002, this situation will no longer be acceptable to investors, and that new legislation will be needed to alter the make-up of the Board of Directors.

There seems to be a consensus in both the public and private sectors that the existing regulations need to be overhauled. As mentioned earlier, Law 24-96 was drafted five years ago: the marketplace has changed since that time, and the legislation now needs to keep up.

6.1 To whom does ANRT report?

All regulatory agencies are required to report on their activities, but in practice how they do so

differs greatly from one country to another. In some countries the requirements are very stringent, in others they are less so.

In Morocco, the Director General of ANRT is required at the end of each fiscal year to transmit to the Prime Minister a report on the work done by the Agency during that year. The purpose of the report is to make all the Agency's activities public and to ensure that regulatory functions are performed with a certain degree of transparency. The report is published in the Official Gazette [*Bulletin Officiel*] (pursuant to Article 37 of Law 24-96).

7 Method of financing

A regulatory agency cannot be independent unless it has an adequate budget with which to carry out its work.

During its initial years of operation, part of ANRT's budget was subsidized out of the public treasury. That practice is to cease this year. For 2001, ANRT's budget is MAD 150 million (USD 15 million). The breakdown of the Agency's revenues and expenditures is specified in the law on telecommunication as follows:

7.1 ANRT's budget

ANRT's budget is set by the Board of Directors. It consists of the following:

Revenues:

- The proceeds from fees charged for reviewing applications and granting or renewing licences with respect to assignments of radio frequencies and certifications of terminal equipment, and, more generally, the proceeds from any fees charged in connection with ANRT's areas of responsibility.
- A percentage of the proceeds of the financial counterpart payable in respect of licences pursuant to Article 10 of Law 24-96. The amount of this percentage is set by the law on finance, according to ANRT's actual needs.
- Any revenues derived from real estate holdings and other assets.
- Monies received from operators of public telecommunication networks as contributions towards research and training.
- Repayable advances received from the Treasury or from public or private entities, and borrowings authorized in accordance with the applicable legislation.
- Subsidies, donations, bequests and any other monies received in connection with its activities.
- Monies owed to ANRT are collected in accordance with legislation governing the collection of monies owed to the State.

Expenditures:

- Operating and capital expenses.
- Repayment of advances and loans.
- Any other expenditure in connection with its objectives.

ANRT is financed out of the revenues listed above, with fees relating to the frequency spectrum accounting for 80% of the total. Spectrum management fees are set by the Minister of Finance at the initiative of ANRT. A study is currently under way to determine whether the rates being charged are indeed sufficient to cover the Agency's costs and are consistent with the scarcity of the asset. The law requires all operators each year to allocate a specific percentage of their gross turnover during the previous year as a contribution towards training

and development. These funds are used to finance the INPT and ANRT's training and research activities.

It should be noted that Law 24-96 also provides that ANRT is to receive a percentage of the proceeds of the financial counterpart payable in respect of licences, in an amount set by the law on finance according to ANRT's actual needs. To date, the Ministry of Finance has refused to set this percentage, preferring instead to provide subsidies to make up any shortfalls.

At present, Article 28 of Law 24-96 provides that "ANRT is subject to the financial control of the State, in accordance with the applicable legislation". The Ministry of Finance exercises financial control at three levels: strategic, financial and *a priori*. It approves and authorizes ANRT's budget and expenditures. This arrangement applies to all public institutions and means that the Ministry of Finance wields a great deal of power. As mentioned above, this situation will be changing soon, once Parliament approves legislation changing the Ministry of Finance's financial oversight role to an *a posteriori* function rather than an *a priori* one, and providing for an internal audit mechanism under which audits are conducted every six months. This change will lessen bureaucracy and make the administration of ANRT less cumbersome. It will allow greater flexibility and make the Agency more responsive, whilst giving it a greater level of responsibility. ANRT will be able to carry out transactions and allocate funds to high-priority areas very quickly, without having to wait for the Ministry's approval in order to make any sort of expenditure commitments. This change has become urgently necessary so that ANRT can act within tight time frames and respond to situations as they arise, particularly in regard to expenditures relating to logistics, human resources and training. At present, any travel authorization request, for instance, must be approved by the Ministry of Finance.

According to a representative of the Ministry of Finance, because ANRT was the first public institution of its kind (having broad powers) in Morocco, the government preferred initially to maintain strict control so that it could follow the Agency's progress during its initial phase of operation. The initial fears turned out not to be warranted. Although the Agency still needs to make further progress in the area of manage

Table 6 – ANRT’s budget			
Revenues	Expenditures	Oversight	Mechanisms
<ul style="list-style-type: none"> • Fees • Licences • Contributions • Real estate and other assets • Repayable advances from the Treasury • Gifts, bequests, etc. • Recoveries 	<ul style="list-style-type: none"> • Operating expenses • Capital expenses • Repayments • Refunds of fees • Loan repayments • Other 	<ul style="list-style-type: none"> • Ministry of Finance 	<ul style="list-style-type: none"> • <i>A priori</i> oversight up to April 2001 • <i>A posteriori</i> oversight after April 2001
<p>Source: Law 24-96, adapted by A. Gentzoglani.</p>			

ment, the Ministry of Finance recognized that the tight controls were cumbersome for the Agency’s operations: hence the amendment proposed to the legislation in this regard.

From 2004, ANRT will be responsible for administering, on behalf of the State, the universal service fund to which all operators will be required to contribute 4% of their annual turnover.

8 Awarding of licences

As we mentioned earlier, the awarding of the second GSM licence represented an enormous success in terms of ANRT’s credibility and le-

gitimacy. Moreover, part of the money taken in is being used by the government to pursue its strategy of universal Internet access. All the people from the private sector that we interviewed acknowledged and praised the work done by ANRT in preparation for this sale, and said that they would be willing to consider taking part in future competitions for licences if they were conducted according to procedures that were as clear and transparent as the last one (which earned Morocco more than USD 1 billion). Accordingly, it is worthwhile to examine the procedure in detail.

Box 2 – Procedures followed by ANRT in awarding the second GSM licence in Morocco

Licences for the establishment and operation of public telecommunication networks

Law 24-96 set out the legal framework for the new landscape on which the telecommunication sector was to take shape in Morocco, with particular reference to telecommunication networks operated by the private sector. The legislation provided that the establishment and operation of such networks, if they made use of the public domain or the frequency spectrum, would be subject to a licensing regime.

Accordingly, the Board of Directors of ANRT, at its meeting held on 12 June 1998, requested that three types of licences be instituted:

- A second licence for GSM-type cellular telephony.
- Licences for GMPCS global telecommunication systems, for messaging and positioning.
- Licences for VSAT-type satellite telecommunication systems not including public telephony.

At the instruction of the Prime Minister, acting in his capacity as Chairman of the Board of Directors, GMPCS licences for telephone services were also instituted.

Licences for the establishment and operation of a mobile public telephone network according to the GSM standard

ANRT initiated the process for awarding a second licence for the establishment and operation of a mobile public telephone network according to the GSM standard (Global System for Mobile communications). In 1998, a GSM-2 Project Team was

set up within ANRT, and an invitation for expressions of interest was issued. The procedure was completed in 1999 when the licence was awarded. The steps whereby the process was carried through to its conclusion were as follows:

- Establishment of a specific organizational unit to administer the project.
- Issuing of an invitation for expressions of interest.
- Selection of a bank to advise on the procedure.
- Pre-qualification process.
- Finalization of the terms of reference.
- Issuing of the call for bids.
- Publication of the notice ranking the bids.

A – Establishment of a specific organizational unit to administer the project

To maximize the project's chances of success, the Agency set up a multidisciplinary team responsible for administering the project, namely the GSM-2 Project Team. GSM subgroups responsible for different aspects of the project were also set up, as was a steering committee charged with reviewing the work of the various groups involved.

B – Issuing of an invitation for expressions of interest

On 16 November 1998, an invitation was issued soliciting expressions of interest for the purpose of identifying interested operators, assessing their level of interest and obtaining their views with regard to a number of items to be included in the final terms of reference. This invitation was disseminated in the form of a questionnaire posted on ANRT's website (<http://www.anrt.net.ma>).

As of 4 December 1998, which was the deadline for submitting expressions of interest, 15 international operators had made submissions: Deutsche Telecom, France Télécom, GTE, CGSAT, Telecel, SBC, Stet, Telecom Portugal, Telefónica, Telia, MTN, Rumeli, Investcom Holding, TIM and Vodafone

C – Selection of a bank to advise on the procedure

An international call for bids was issued to recruit an advisory bank and a law firm to advise ANRT regarding the market, strategies, and the drafting of the terms of reference. Rothschild & Cie (Paris), N M Rothschild & Sons (London) and the law firm Gide Loyrette Nouel (Paris) were selected.

D – Pre-qualification process

At the initiative of ANRT, it was decided on 9 February 1999, at a ministerial meeting chaired by the Prime Minister, to conduct a pre-qualification stage. At the same meeting, it was also decided that an Administration Committee would be established, which would be chaired by ANRT and be responsible for approving the terms of reference in accordance with Article 11 of Law 24-96.

The pre-qualification criteria proposed by Agency and its advisers were discussed and finalized on 17 February 1999. They had to do in particular with the professional and financial qualifications of potential candidates. One of the requirements was that local Moroccan partners had to be included among the investors in each consortium, and that the companies had to be incorporated under Moroccan law. The call for pre-qualification submissions was issued on 26 February 1999.

As of 22 March 1999, eight operators had made submissions. These were examined, and seven submissions were retained. The eighth was rejected for reasons of non-compliance. The seven consortia in question were invited to provide information as to their definitive shareholding structure by 16 April 1999, and to collect the formal bid package on 20 April 1999.

E – Finalization of the terms of reference

The terms of reference were drawn up in accordance with the provisions of Law 24-96. They were prepared taking into account the experiences gained in other countries in this field, as well as the specific characteristics of Morocco's telecommunication sector.

The key provisions set forth in the terms of reference lay in the following areas:

- The duration of the licence, which was fixed at 15 years.
- Terms and conditions for the establishment and operation of the network, *inter alia*:
 - The possibility of the successful bidder constructing its own transmission network.
 - Authorization to provide subscribers with direct international access from 1 January 2002.
 - A period of exclusive operation, which was fixed at four years.
- Mechanisms for contributing towards the general objectives of the State.
- Mechanisms for paying financial counterpart funds and the various fees.
- Itemization of the various responsibilities of the successful bidder.

Once the terms of reference had been drawn up, they were submitted to the Interministerial Committee for approval.

F – Issuing of the call for bids

The formal bid packages were collected by representatives of the seven pre-qualified groups on 20 April 1999. The deadline for the submission of bids was fixed as 22 June 1999.

- In addition to the terms of reference, the bid packages contained two other documents:
- A document concerning investment considerations.
 - A copy of the regulations governing the call for bids.

G – Provisional selection of the successful bidder

1 – Analysis of the bids: Organization and methodology

The work of evaluating the bids was organized very carefully by ANRT, so as to ensure that the information provided by the bidders would be held in the strictest confidence and that all proposals would be considered impartially.

a) Establishment of evaluation committees

To evaluate the bids, a Steering Committee and specific evaluation committees were set up:

- The Steering Committee, chaired by the Director General of ANRT, was responsible for coordinating the work of the other committees, ensuring that procedures were properly followed, compiling the results produced by the various committees, and determining the final ranking of the bids.
- The committee responsible for opening and evaluating the financial bids was made up of the director General of ANRT and the Associate Manager of the advising bank.
- The legal committee was responsible for verifying that the submission was in due and proper form, in accordance with the applicable regulations.
- The technical committee was made up of three subcommittees responsible for analysing the submissions with respect to:
 - Coverage and quality of service.
 - Rates offered.
 - The coherence of the bid.

b) Use of evaluation models

Impartiality in the consideration of the bids was assured by the fact that different aspects were evaluated separately and by the use of evaluation models. In addition, computer software was used to automate the assessment of the technical aspects of each bid.

2 – Results

The following table summarizes the main results brought forth as a result of the evaluation of the bids:

Rank	Bidding consortium	Total technical rating	Financial offer (in MAD)	Financial rating	Overall rating
1	Médi Télécom	32.6	10 836 000 000	60.0	92.6
2	Badil Communication	28.0	8 700 055 000	46.2	74.2
3	Telecom Italia Mobile Maroc	28.8	6 030 000 000	32.0	60.8
4	Orange Communications Maroc	33.2	5 030 000 000	26.7	59.9
5	Marphone	28.3	5 000 000 000	26.5	54.8
6	Vodafone Maroc	26.9	4 190 520 000	22.2	49.1
7	Maghreb Cell	18.6	2 811 340 000	14.9	33.5

Based on this final ranking, ANRT recommended the firm Médi Télécom as the provisional successful bidder for the second GSM licence.

This consortium is made up of the Spanish company Telefónica and the Portuguese company Telecom Portugal (each with a 30.5% stake), and the Moroccan companies BMCE (20%), Afriquia Group (11%) and CDG (8%).

The combination of technical and financial ratings shows clearly that the bid by Médi Télécom, which scored 92.6 points overall (or 18.4 points more than its closest rival, the bid submitted by Badil Communication), is unquestionably the best of the bids received.

Moreover, Médi Télécom's bid includes all the guarantees that may reasonably be asked for in terms of coverage, speed of deployment of the network, quality of service, comprehensiveness and financial soundness. As well, it is the bid that offers the most attractive rates for consumers. In short, it is the bid that anticipates and provides for the greatest development in Morocco's mobile telephone sector.

Accepting ANRT's recommendation, the government issued the licence to Médi Télécom by decree in August 1999.

Source: ANRT. Report on the Agency's work, 1998-99.

The procedures put in place for awarding the second GSM licence has been followed for the awarding of all other licences since then. They will also be used for awarding licences for the local loop, the backbone network and the shared radio networks (3RP). Indeed, an invitation for expressions of interest was issued in April 2001 to assist in finalizing the terms of reference. Both Moroccan and foreign companies are invited to respond.¹⁷ The definitive calls for bids will be issued in September so that licences can be awarded by the end of 2001. The criteria for participation and the number of local loop licences have not yet been clearly defined. It appears that the conditions will be more flexible than they were for the second GSM licence, particularly in regard to the coverage area. Some of the key criteria taken into account will be the development of the sector, employment opportunities and the participation of Moroccan enterprises, rather than the price of entry, which will count for fewer than 30 points in the overall assessment.

Early on in the process, in order to promote Moroccan small and medium-sized enterprises (SMEs) and assist them, ANRT organized meetings in December 2000 to provide them with all the necessary information and explanations regarding the licensing timetable and requirements in regard to infrastructure. The Agency has even advanced the possibility of putting Moroccan SMEs in touch with financial agencies. Equipment manufacturers such as Nokia, Alcatel, Ericsson and Motorola were present at the meetings.

Subsequently, the Agency would like to make similar presentations with respect to these future

licences to foreign operators, particularly those that already hold local loop licences in other countries, in order to create synergies with Moroccan SMEs.

ANRT is thus becoming more active, more confident and surer of the role that it can play in the developing the telecommunication sector, and more broadly the country as a whole. This can be interpreted as a sign of the Agency's independence and determination to pursue the government's objectives according to its own best judgement.

9 Frequency allocation

In Morocco, by virtue of Article 9 of Law 24-96, the frequency spectrum forms part of the State's public domain and ANRT is responsible for allocating frequencies. The Agency, acting on behalf of the State, manages and oversees the radio frequency spectrum. It is also responsible for enforcing restrictions with regard to any encoding of information exchanged. Its work in this area consists of:

- The allocation of frequencies to the various users.
- Spectrum planning.
- Coordination at the international level.

ANRT has already allocated frequencies for:

- Independent radio networks (197 authorizations issued for the establishment of private and public networks in 1999).
- Public entities.
- Government ministries and diplomatic missions.
- Security agencies.
- Operators of public telecommunication networks (Médi Télécom, Maroc Télécom).

¹⁷ The questionnaire was posted on the ANRT's website (<http://www.anrt.net.ma>), and enterprises had until 3 p.m. on 17 April 2001 to respond.

Table 7 – Responsibilities in regard to spectrum allocation			
Spectrum planning	Spectrum allocation	Allocation methods	Remarks
<p>ANRT has sole responsibility</p> <p>In conjunction with other government bodies, the SEPTI develops the government's general policy on telecommunications and new information technologies</p>	<ul style="list-style-type: none"> ANRT has sole responsibility 	<ul style="list-style-type: none"> By assignment 	<ul style="list-style-type: none"> Neither the ministry nor any other government body is involved in the process
<p>Source: Law 24-96, adapted by A. Gentzoglani.</p>			

Table 8 – Responsibilities in regard to numbering in Morocco		
Planning	Number allocation	Remarks
ANRT has sole responsibility	ANRT has sole responsibility	ANRT has already altered the numbering plan so as to place competitors on an equal footing
<p>Source: Law 24-96, adapted by A. Gentzoglani.</p>		

10 Numbering

The administration of numbers and number portability are very important considerations in order for competition to be able to develop. Morocco's numbering plan was changed when the second GSM operator entered the market-place. Under Article 21 of Decree 2-97-1028 of 25 February 1998, whereby the terms of reference of Maroc Télécom were approved, when ANRT plans major changes in regard to numbering, it must do so in cooperation with Maroc Télécom and other operators of public telecommunication networks at least two years before the effective date of the changes. Accordingly, ANRT has established a committee, together with Maroc Télécom and Médi Télécom, responsible for implementing procedures with respect to changes in the national numbering plan. The committee's objectives are:

- To plan changes to the numbering plan in such a way that it can be expanded so as to make use of available numbers without further changes for a sufficiently long time (at least 10 years).

- To devise interim solutions to meet the urgent needs of the operators (Maroc Télécom and Médi Télécom).

The new numbering plan for fixed and mobile telephone service was put in place by ANRT effective 13 October 2000. It is based on dividing the country into four geographic regions rather than eight.

11 Price regulation

By and large, there is less need to regulate prices as competition increases in the marketplace. In the initial phases of the reform process, however, competition is not yet fully developed and an asymmetry exists in regard to market power between the incumbent operator and new entrants. In these circumstances, the regulation of prices may be justified. Asymmetrical regulation – i.e., regulation applied only with respect to the main operator – will help to hold the prices for basic services to a reasonable level.

Table 9 – Regulation of tariffs		
Applicability	Entity responsible	Remarks
Incumbent only	ANRT has sole responsibility	<p>Basic service: ANRT imposes price limits</p> <p>Services opened to competition: There are no limits, but ANRT monitors the situation</p>
Source: Law 24-96, adapted by A. Gentzoglanis.		

ANRT has been particularly concerned about abuse of a dominant position in the marketplace and predatory pricing for mobile and Internet services.

The Agency regularly reviews changes in the tariffs charged by Maroc Télécom (GSM, GSM package, prepaid card, etc.), and particularly when they relate to access to universal service. Accordingly, the Agency issues its opinion on proposals relating to changes in the tariffs for fixed telephone service as they arise. As an example, the Agency issued an opinion in November 1998 to Maroc Télécom, in regard to changes in a rebalancing of tariffs that it was planning. The proposal centred on:

- Raising tariffs for fixed telephone service by five dirhams for residential lines and MAD 10 for business lines, before tax.
- Reducing international tariffs by 25%.
- Restructuring the time periods when reduced tariffs apply to domestic calls, and increasing discounts from 40% to 50%.
- Reducing the discounts applicable to international calls from 40% to 20%, and restructuring the time periods when such reduced tariffs are applicable.

12 Universal service

The concept of universal service was first introduced into Morocco in Law 24-96, which de-

fines it as “the making available to everyone of a minimum service consisting of a telephone service of specified quality at an affordable price, together with the connection of emergency calls, the provision of an information service and a directory of subscribers, either in printed or in electronic form, and the provision throughout the country of telephone booths installed in public places, all in keeping with the principles of equality, continuity, universality and flexibility”.

Under Article 40, the incumbent (Maroc Télécom) is charged with providing universal service together with other operators. The cost of universal service, however, is shared amongst all telecommunication operators. All operators of public networks are required to make a contribution towards universal service equivalent to 4% of their turnover before taxes. The net cost attributable to universal service obligations is the total net cost determined by adding together the following main components:

- Net local line costs.
- Subscription costs.
- The cost of telephone booths installed alongside public roads.
- The cost of information services.
- The cost of publishing the directory of subscribers.

Table 10 – Regulation of universal service

Existence of a framework for universal service	Existence of a fund to finance universal service	Determination of costs	Attribution of costs	Remarks
<p>Yes</p> <ul style="list-style-type: none"> ANRT is charged with implementing the framework The incumbent operator is charged with providing universal service, together with other operators A proposal is being developed for initiating universal service licences 	<ul style="list-style-type: none"> In the planning stage 	<ul style="list-style-type: none"> ANRT uses the overall net cost approach (the sum of local line costs, subscription costs, the cost of telephone booths, the cost of providing information services, and the cost of publishing the directory of subscribers) 	<ul style="list-style-type: none"> ANRT requires that the cost of the service be shared among all operators Each operator's contribution is set at the equivalent of 4% of its turnover 	<ul style="list-style-type: none"> The complexity of separating out the various components of the cost of universal service is delaying the application of the principles of universal service The incumbent operator is complaining about its obligation to provide universal service, and the financing percentage it is required to provide
<p><i>Source: Law 24-96, adapted by A. Gentzoglanis.</i></p>				

With a view to implementing its policy with respect to universal service, ANRT:

- Has drafted terms of reference for putting universal service mechanisms in place.
- Has drafted terms of reference for selecting a firm of auditors to prepare a detailed opinion, with appropriate explanations where applicable, with regard to the separation of accounts done by Maroc Télécom for each service (interconnection, universal service, leased connections, Internet access, etc.) and each network (fixed network, mobile network). The auditors must verify whether the accounts for the overall net cost of supplying universal service are true and accurate, and whether the costs for the components of universal service are appropriate, in particular:
 - The local line cost.
 - Subscription costs.
 - The cost of publishing the directory of subscribers.
 - The cost of the information service.

- The cost, for each community, of the telephone booths installed alongside public roads.

On the basis of the foregoing, ANRT has finalized the proposed texts of a law and a decree for putting in place a comprehensive and responsive system of universal service founded on the principle that universal service must be able to adapt and that operators must contribute towards the funding of activities undertaken in order to pursue the State's aims in this area. The draft decree will specify the mechanisms for collecting contributions and allocating funds to the universal service account. It will also contain provisions with regard to the organization and functions of the committee responsible for managing the universal telecommunication service, and the mechanisms for managing the universal service account.

13 Regulation of quality of service

Price and quality of service are the two factors uppermost in the consumer's mind when choosing a provider. Differences in price often go hand in hand with differences in quality.

Pursuant to Article 29, paragraph 10, of Law 24-96, ANRT is required to oversee the various telecommunication networks installed in the country, and to monitor the consistency and quality of service offered by different telecommunication operators, particularly with regard to services offered to the general public. In this context, a study is now being conducted in collaboration with the research firm ICEA regarding procedures for carrying out oversight activities of this kind.

With the granting of new licences (GSM, VSAT, GMPCS), the number of new services has increased substantially. The quality of service may become a major factor, particularly where there are several operators. Taken together, interconnection and competition may bring about a decline in prices and a deterioration in quality simultaneously. To determine whether Maroc Télécom and Médi Télécom have fulfilled their commitments with respect to the quality of their mobile services, ANRT issued a public call for bids in September 2000 to select a consulting firm to conduct a survey on the quality of communications provided by the two Moroccan operators. This became necessary as a result of the burgeoning growth of mobile telephony in Morocco. ANRT realized that there was a problem with the quality of service, but felt that its main priority in the beginning was to ensure that the service became as widely available as possible.

ANRT established service quality standards in the terms of reference and has the right to review the standard contracts used between subscribers and operators. ANRT conducts technical inspections both on operators' premises and on its own premises. It also engages the services of external experts to assist it in this work, so that it is better able to fulfil this function of policing service quality. The Agency also conducts user and operator surveys. Using the data collected, it assesses whether telecommunication operators are abiding by their terms of reference regarding service quality. ANRT has already conducted one quality survey with regard to all services (in 1999), and it currently has a survey of mobile services under way.

ANRT conducts checks from time to time of users of the various types of stations and of private telecommunication networks. It also measures and corrects disturbances affecting the frequency spectrum. As a rule, it acts in response to complaints from spectrum users. For this purpose, ANRT has a National Centre for Monitoring Radio Transmissions [*Centre National de Contrôle des Émissions Radioélectriques*] (CNCER). Through its technical monitoring activities, the Agency endeavours to locate and identify the source of any problems affecting network quality.

Table 11 – Regulation of quality of service, and associated responsibilities		
Regulation of quality	Methods used	Remarks
ANRT alone is responsible for monitoring service quality	<ul style="list-style-type: none"> • May use outside experts • Conducts its own technical inspections • Uses information provided by operators and users 	ANRT has engaged the services of a consulting firm to carry out a study of service quality in Morocco
<i>Source: ANRT, adapted by A. Gentzoglanis.</i>		

14 Interconnection

Law 24-96 and Decree 2-97-1025 respecting the interconnection of telecommunication networks give ANRT broad responsibilities in regard to the technical regulation of interconnection. In particular, the main responsibilities of ANRT in regard to interconnection are as follows:

- Approving the technical and tariff quotations offered by operators, and particularly by Maroc Télécom.
- Revising interconnection agreements if ANRT considers this necessary.
- Settling disputes in regard to interconnection, pursuant to Article 8 of Law 24-96, if the Agency is asked to do so by one of the parties to the agreement.

The concept of interconnection refers mainly to two kinds of services:

- Reciprocal services offered by operators of networks that are open to the public, which allow all users to communicate freely with one another, regardless of the network to which they are attached or the services that they use.
- Services offered by the operator of a network that is open to the public to a provider of telephone service that is open to the public.

In the latter case, ANRT lets the parties negotiate interconnection charges freely, in accordance with their terms of reference. However, for reasons of adaptability and standardization, the interconnection agreement must include a certain number of technical, administrative and financial conditions. Where a given operator has more than 20% of the market, it is mandatory that that operator offer a technical and tariff quotation, which must receive prior approval from ANRT (dominant operators must maintain separate accounts for their interconnection activities).

Where the incumbent operator has more than 20% of the market, it is required to provide ANRT with a technical and tariff quotation for interconnection. The interconnection listing

proposed by Maroc Télécom covers two kinds of interconnection:

- Direct interconnection.
- Indirect interconnection.¹⁸

The incumbent operator also includes a quotation for leased connections, so as to enable other public network operators holding an operating licence to link the various nodes of their networks. In June 1998, ANRT approved the technical and tariff quotation for interconnection that Maroc Télécom had submitted to it, but invited Maroc Télécom to review its tariffs so as to tailor them better to the type of interconnection in question (direct or indirect). The Agency asked Maroc Télécom to adopt a different methodology for calculating interconnection costs. In the listing submitted to the Agency for approval, the methodology adopted was based on historic integrated costs, a method which fails to take into account the increase in economic efficiency over the long term and which does not allow for an equitable contribution according to the principles of proportionality.

To prepare the terms of reference for the second GSM operator, ANRT prepared a model for calculating the cost of switched traffic from Médi Télécom, which permitted simulations to be carried out based on the interconnection tariffs set forth in Maroc Télécom's technical and tariff quotation. As well, on 30 November 1998, the Agency organized an all-day seminar on interconnection experiences in foreign countries, with particular reference to the average marginal long-term cost method, in collaboration with DEVOTECH, a research firm.

When a dispute arises, ANRT becomes involved only when negotiations between operators have failed and one of the parties has requested ANRT's intervention.

¹⁸ Direct interconnection is defined as the case where Maroc Télécom handles traffic originating with a customer of a Public Telecommunication Network Operator [*Exploitant de Réseau Public de Télécommunications*] (ERPT) to a Maroc Télécom subscriber. Indirect interconnection is defined as the case where a Maroc Télécom subscriber chooses an ERPT to handle his call.

Table 12 – Responsibilities of ANRT in regard to interconnection			
Approval of fixed-to-fixed interconnection tariffs	Approval of fixed-to-mobile interconnection tariffs	Settlement of disputes	Remarks
Set by ANRT in advance	<ul style="list-style-type: none"> Negotiated Referred to ANRT in case of disagreement 	ANRT has sole responsibility in the settlement of disputes. This function is performed by the Management Committee	Only ANRT has the power to set interconnection charges and serve as an arbitrator
Source: ANRT, adapted by A. Gentzoglanis.			

15 Settlement of disputes

A number of disputes have already been referred to ANRT concerning the issues of interconnection and abuse of dominant position.

In an early dispute between Médi Télécom and Maroc Télécom in regard to interconnection tariffs, ANRT’s Management Committee adopted a decision that was regarded, on the whole, as being fair to both parties.

After an initial period of consultation, the parties were still in disagreement; and so ANRT had 30 days to hear the dispute and issue its decision. During that 30-day period, ANRT:

- Set up an internal interconnection committee.
- Called upon two international experts, as well as its own internal experts – all of whom presented reports arriving at the same conclusions.
- Submitted its opinion to the members of the Management Committee in the form of a report containing, *inter alia*, a study of international benchmarks, a financial model and copies of the experts’ reports.

At the end of the 30-day period, the Management Committee met to discuss the report that ANRT Administration had prepared. With certain amendments, the report was approved and the opinion published. Sensitive data pertaining to the dispute have not been released.

The same procedure will be followed in resolving the second dispute which has arisen between the same two parties, this time in regard to the billing method (by the minute versus by the second). The hearing stage began in April.

In other cases, ANRT has had to look at the issue of abuse of a dominant position. The high

tariffs that the incumbent operator has established for its competitors, whether they are operators or Internet service providers (ISPs), prevents them from establishing tariffs that are attractive to their own customers, thereby placing them at a disadvantage vis-à-vis the Main operator. ANRT has had to resolve disputes over unfair competition.

In 2000, an Internet access provider made a complaint to ANRT regarding behaviour constituting abuse of a dominant position on the part of the incumbent operator. The latter had used its list of fixed network subscribers to circulate advertising about its own Internet services. Although ANRT was not required under Law 24-96 to take up this complaint, it did so. Indeed, only operators that are licence holders are authorized to refer issues to ANRT. The Internet access provider was not pleased that this legal lacuna with respect to Internet access existed. Although it was satisfied with the action taken by ANRT, it was not pleased that it did not have access to all the correspondence between ANRT and the incumbent operator, or to the text of ANRT’s decision.

ANRT has been involved in another dispute between Médi Télécom and Maroc Télécom. Briefly, at the beginning of 2001, Maroc Télécom decided to offer a 10% discount to all its customers calling from a fixed station to a Maroc Télécom mobile station. Médi Télécom viewed this as anti-competitive. It alleged that the same discount should apply to all calls in either direction between fixed and mobile stations for its customers as well. Médi Télécom was being harmed by this situation because it was paying interconnection fees to Maroc Télécom for each call from a Médi Télécom mobile station to a Maroc Télécom fixed station and vice versa (Médi Télécom received interconnection fees for each call from a fixed station to a

mobile station). Because there was more traffic from fixed stations to mobile stations than vice versa, Médi Télécom was at a relative disadvantage.

The Agency reviewed the case at the request of Médi Télécom, and decided that the application of discounts for Maroc Télécom customers only was discriminatory and constituted an abuse of Maroc Télécom's dominant position with respect to the fixed network (given that Maroc Télécom holds a monopoly on the fixed service until 2002). An initial injunction was therefore issued at the end of February 2001, in which ANRT reviewed the facts of the case and instructed Maroc Télécom to adhere strictly to the conditions set out in its terms of reference. Since Maroc Télécom did not respond within the allotted 30-day period for doing so, ANRT placed Maroc Télécom on notice, giving it 30 days to remedy the situation, inasmuch as, in the Agency's view, the tariff reduction created a serious situation in so far as unfair competition was concerned.

During the week of 25 April 2001, which was the deadline for Maroc Télécom to respond, it finally announced, "[...] Pursuant to a decision by ANRT which considers it discriminatory to reduce rates only on calls to its own mobile subscribers, Maroc Télécom will suspend the 10% discount effective 1 May 2001." Maroc Télécom waited until the very last day allowed by the Agency to announce its decision. It was testing the law, and the Agency's ability to enforce the regulations.

This dispute represented a test of ANRT's credibility, and the outcome of the case was impatiently awaited by everyone involved. For the first time, the Agency found itself in a situation where the law on telecommunications, Law 24-96, did not allow it any other option than to invoke Article 30, which states that if a licence holder fails to abide by the conditions laid down, ANRT can put that licence holder on notice and give it 30 days to comply. If the licence holder fails to comply during that 30-day period, the appropriate government authority may, at the proposal of the Director General of the Agency, impose upon the licence holder any of the following penalties: total or partial suspension of the licence for 30 days; temporary suspension of the licence for up to one year; or permanent withdrawal of the licence.

This is why ANRT has been working to get the law amended, so that it can impose mid-range economic and financial penalties.

Even if the State is simultaneously a shareholder, a supervisory authority and an arbitrator, it is important that penalties be imposed on offenders to assure the credibility of the process. It is the only way to demonstrate that ANRT enjoys significant independence vis-à-vis the State and the incumbent operator, and that it has the authority to perform its regulatory functions effectively.

Because ANRT's decisions are administrative measures, operators and service providers may appeal them before an administrative judge, who has the power to rescind them but not amend them. Disputes may be resolved either through the courts or out of court. A maximum period of two months is established for settling disputes, during which time the regulatory decision remains in force. Although this dispute-settlement mechanism exists, we could find no evidence that it had ever been used. This is no doubt attributable to the fact that government ministers sit on the Board of Directors and that the Board is chaired by the Prime Minister, which imparts a quasi-official character to ANRT's decisions.

16 Public consultation

ANRT is striving to be an open and democratic agency. It tries to balance the inequalities between different participants in the marketplace, and to take everyone's views into account. In doing so, the Agency employs various means:

- Private consultations.
- Public consultations.
- Consultations with specific groups of industry players.
- Negotiation.
- The seeking of opinions from companies specializing in telecommunications.
- Organization of seminars and conferences.

All of these means are effective, at least so far as we were able to tell during our mission in the field. ANRT consults interested parties before taking major decisions. However, some would prefer to be consulted more extensively than they are now, particularly in the final stage of decision-making. The consultation process is

swift and efficient, and seems to produce specific policies and tangible results.

However, ANRT's consultations are concerned principally with the telecommunication industry, operators and service providers, and certain professional associations. Consumer groups are normally not included in this consultation process, and hence are absent from the regulatory process itself.

It should be noted that it is not a characteristic of Moroccan culture for associations to spring up to defend consumers' interests, or for written complaints to be submitted to the authorities. The tendency is for consumers to note the existence of a problem and discuss it amongst themselves, but within closed circles and without ever making an official complaint. However, because ANRT has acquired a certain prestige in the public's eye, it has often been approached directly by citizens asking it to take up cases with operators concerning billing problems or telephone shopping authorizations (and even public health and environmental issues). After receiving a great many such complaints, ANRT invited the government ministries concerned to a meeting to discuss the subject. In addition, it plans to provide public information on its website concerning international studies in this area, and it has circulated a press release on the subject that has been published in every Moroccan newspaper.

17 Conclusions and recommendations

17.1 Strengths and best practices/ challenges of ANRT

In the space of three years, ANRT has gained credibility and respect as a regulatory agency. Although not all of its decisions have met with universal approval, there is widespread agreement with the way in which ANRT has been managing the telecommunication sector overall. The points mentioned most frequently as the Agency's strengths (best practices) are as follows:

- A young, dynamic and capable administration.
- Pragmatism versus idealism in the actual context.

- Integrity and impartiality.
- Transparency of the decision-making process particularly during the granting of the second GSM licence, and the VSAT and GMPCS licences (See Chapter 8).
- Its ability to delineate issues, to clarify rules of conduct and to apply those rules faithfully.
- Respect for deadlines, in particular in resolving the first interconnection dispute (See Chapter 15).
- Its willingness to listen to the parties involved and to assist them, in order to get a better grasp of issues.
- Its long-term vision, whilst nonetheless being able to sort out urgent short- and medium-term problems.
- Its use of specialized consulting firms to supplement its in-house expertise.

Morocco's success in its first phase of sector reform can also be attributed to the sequence of reform measures undertaken by the nation. Morocco first created the legal and institutional foundations to support its reform efforts prior to opening the market to competition. The following outlines the sequence of sector reform in Morocco:

- 1) Adopting telecommunication legislation covering the level of competition and creation of a regulatory authority.
- 2) Creation of ANRT.
- 3) Opening certain market segments and granting service licenses for these sectors.
- 4) Privatizing the incumbent operator.

Its challenges are:

- Lack of a clear separation between the functions and roles of the SEPTI and ANRT in the area of regulation; overlapping of functions, as noted by representatives of the State.
- Very slow process for approving proposals and terms of reference for the various kinds of licence.
- Very slow process for publishing decrees awarding licences (six to eight months).
- Excessively slow process for reviewing draft laws and decrees prepared at ANRT's initiative.

- Lack of appropriate mid-range economic and financial penalties.¹⁹
- Lack of participation by consumers in the consultative and regulatory processes.²⁰

17.2 Recommendations

In conclusion, let us review certain points that merit particular attention, and for which recommendations have been made.

As is the case in many countries, it is evident that a problem exists regarding the delineation of duties and responsibilities between the Office of the Secretary of State to the Prime Minister responsible for Postal Services and Information Technology (SEPTI) and ANRT. Each believes that the other is encroaching on its territory. Because regulations are made by the State, certain SEPTI officials believe that the regulatory function falls to the SEPTI under the law. Indeed, the SEPTI is responsible for defending draft laws and draft decrees proposed to the government.

¹⁹ With regard to penalties for failure to comply with interconnection deadlines, some countries such as Bolivia impose financial penalties ranging from USD 400 000 to USD 6 million; beyond that, equipment may be confiscated and a company may be prohibited from providing services for one year. In Pakistan in 2000, the regulator (the Pakistan Telecommunication Authority) imposed a fine on the incumbent operator amounting to more than USD 8 500 for each day of delay. South Korea not only imposes financial penalties but also provides for imprisonment (although no prison sentence has yet been imposed). (Source: Adapted from Trends in Telecommunication Reform, Interconnection Regulation, 2000-2001, ITU, 2001.)

²⁰ Some countries such as India and Singapore promote broad participation not only by submitting documents for comment (draft legislation, interconnection quotations, etc.) but also by posting all this material on their Internet websites, together with the comments received from interested parties. India also organizes public meetings in several major cities, and invites not only representatives of the private and public sectors but also consumer groups and any other interested individuals to attend. This ensures that the regulatory process is fully transparent and fair. In some countries, proposed regulations and decisions are made available for public comment before the final decision is made, typically by posting official notices on Internet websites. This makes it possible to receive comments not only from the parties directly involved in a dispute, but from third parties as well. Similarly, some countries require that all files administered by the regulator be treated as public documents (with the exception of any materials containing confidential business information), so that all competitors can stay abreast of all communications between their competitors and the regulator. In Brazil, the regulator (ANATEL) holds weekly press conferences.

However, these draft texts are prepared and put forward by ANRT, although the SEPTI could do so as well. The SEPTI believes that there is a lack of consultation on the part of ANRT in the preparation of draft texts. It seems that the law is being interpreted in two different ways. Accordingly, there is a need for a text in which the various tasks are clearly spelled out and assigned, with a common, unequivocal interpretation of the duties and responsibilities of each. This is essential to ensure that the relationship between the two agencies cannot in any way harm the regulatory process.

One of the main limitations on ANRT's independence is the lack of financial and economic penalties at its disposal for regulating the marketplace. Indeed, its only "weapons" are placing an offender on notice and revoking its licence. There are no intermediate penalties between the two extremes. The private sector hopes that additional provisions can be put in place to remedy this lacuna.

Another problem relates to companies that are not subject to a licence, such as Internet access providers, for they have no legally valid way to submit complaints to ANRT. The private sector would like ANRT to propose amendments to the law so that it will have the power to regulate new services such as the Internet and thereby allow new entrants greater rights.

The Agency is going to have to make efforts in the area of management. Although it has already done a great deal in the area of training, it is going to have to invest further in this area in order to develop its in-house expertise and be ready to deal with and regulate the full-scale competition that is to come. The forthcoming amendment to the applicable legislation in regard to financial management will give ANRT much greater independence and much greater management responsibility. According to one official in the Ministry of Finance, ANRT will need to redouble its efforts to put a cost accounting system in place so as to assure transparency in the management of its affairs. Forthcoming changes in the sector will require ANRT to be ready to respond swiftly to the new challenges that will arise. Thus far, the Agency has had to deal with interconnection issues involving only two operators, and even then it has had to engage the services of outside consultants. But when full-scale competition comes, it will have to administer competition in the sector, and

intervene quickly in conflicts that are increasingly complex, involving interconnection issues or unfair competition. The Agency therefore needs to prepare itself and develop its own expertise and in-house capabilities, rather than depending to such a degree on capabilities brought in from outside.

No one who sits on ANRT's Board of Directors or Management Committee should be permitted to serve on the board of directors of any telecommunication operator whatsoever, so as to ensure that the Agency is truly independent in its decision-making.

Most private sector officials stressed the need for transparency, and indicated that there was by and large some measure of transparency in the Agency's procedures, in its operations and in its decision-making. Nevertheless, they noted that the Agency could improve its level of transparency. For example, in the case of dispute resolution, several private sector representatives indicated that ANRT did not treat correspondence exchanged between ANRT and parties of a dispute as public documents (The correspondence may have been made available to the parties of the dispute, but were not made available to third parties). Some private sector representatives have recommended that all decisions taken by the Agency should be made public, and not provided solely to the parties of the dispute. ANRT's current practices may be sufficient in a market open to a limited number of players. But it may have to consider further transparency measures – including treating all correspondence as public documents and publicizing its deci-

sions more widely – as the market opens to full competition.

In addition, ANRT could publish not only its own consultative documents on its website, but also all the responses it receives. It could begin by treating all correspondence received from licence holders as public documents (except for confidential business papers), as well as all of its own responses to that correspondence. ANRT could also allow a public consultation period before final decisions are taken, and allow anyone – not just parties to a dispute – to comment. Another option would be for ANRT to establish alternative means for settling disputes whereby competitors, consumers and other interested parties could participate with regard to important decisions such as interconnection agreements. Approaches such as these would enable the Agency to take a more proactive role vis-à-vis consumers. Even though consumer protection clearly forms part of ANRT's remit, and even though its activities in the area of conducting quality surveys show that it is pursuing this aspect of its mission, the ANRT should establish more direct channels of communication with consumers and help them become more involved in the regulatory process.

ANRT's mettle has been tested in the area of technical regulatory functions, specifically in the case of the interconnection dispute between the incumbent operator, Maroc Télécom, and the GSM services operator Médi Télécom, over tariffs. The Agency will now have to prepare itself for the more complex phase centring on economic regulatory functions that will come with a liberalized marketplace in 2002.

Annex A

List of persons interviewed:

- Officials within the National Telecommunication Regulatory Agency (ANRT)

Mr Terrab, Director General.

Mr Mouddani, Director, Regulatory Directorate.

Mr El Kadiri, Director, Technical Directorate, and the following division chiefs:

- Mr A. Hassibi, Chief, Frequency Spectrum Management Division;
- Mr Talib, Chief, Network Standardization and Quality Service;
- Mr Sidi Mohammed Drissi Melyani, Chief, Radio Installation Certification Service;
- Mr Khadiri, Chief, Commercial and Administrative Service.

Mr Alaoui, Director, Information Technology Directorate.

Mr Khaouja, Director, Evaluation and Competition Directorate.

Mr Choukhmane, Director, Administrative and Financial Affairs Directorate.

Mr Souit, Chief, Human Resources Division.

Mr Zouakia, Chief, Interconnection Division.

- People in the telecommunication industry

Maroc Connect (ISP): Mr Zaz, Chief Executive Officer.

CIMECOM (VSAT operator): Mr Aronsen, Chief Executive Officer; and Mr Bellamine, Director of Finance and Administration.

Casanet (ISP): Mr Tazi, Manager.

Médi Télécom (cellular services operator): Mr Arias Pondo, General Secretary; and Ms Doukkali, Director of Coordination.

Maroc Télécom (incumbent operator): Mr Akalay, Director of Development; and Ms Kaidi, Director of Planning and Strategy.

Globalstar Tesam (GMPCS operator): Mr Landrieux, Deputy to the Chief Executive Officer.

- Government representatives

Ms Lahrichi, Adviser to the Prime Minister.

Mr Bennani, General Secretary, Office of the Secretary of State to the Prime Minister responsible for Postal Services and Information Technology.

Mr Kadiri, Assistant to the Director, DEPP, Ministry of Economic Affairs and Finance.

Mr Toumi, Director of Studies and Planning, Office of the Secretary of State to the Prime Minister responsible for Postal Services and Information Technology.