



ANNUAL REPORT

2004

**TELECOMMUNICATIONS REGULATORY
AUTHORITY**

SULTANATE OF OMAN



CHAIRMAN FOREWORD

I feel immense pleasure in presenting the Annual Report 2004 of Telecommunications Regulatory Authority, Sultanate of Oman. The telecommunication market in the Sultanate is operating now in a liberal regime with access to modern technologies attracting new investment in the sector. There is a growing realization that for keeping abreast with developments in telecom sector, induction of competition is essential.

TRA was established with a mandate to liberalize and promote telecommunications services in the Sultanate under the Telecommunications Act which was issued under the Royal Decree No. 30/2002 in March 2002 and as per its commitments to the World Trade Organization, which it became a full-fledge member on the 9th of November 2000, the Sultanate has been determined to implement a liberal telecom regime, open the market to competition and access to leading-edge technology. It is expected that some of these commitments with entail a major shift in the structure and economies of the telecom sector. Since then TRA is working with the objective of introducing of competition, which will enhance the sector and benefit the consumer through competitive and reasonable prices together with better choice of services.

The year 2004 was a momentous period for TRA. During this period, the exclusivity of Oman Telecommunications Company (Omantel) was virtually abolished in mobile services. TRA has achieved many milestones in pursuit of its mandate. The most significant breakthrough of the year was the declaration of the M/s Nawras Telecom (a consortium of TDC of Denmark, Q. Tel of Qatar, and local partner) as a second mobile licensee. It is expected to start its operation and open doors to consumer in early months of 2005. Another significant achievement was splitting the incumbent operator; Oman Telecommunication Company into two separate entities in February 2004. Two licenses were issued to Oman Telecommunication Company; one for Basic Public Mobile Telecommunications Services and the second for a Basic Public Fixed Network Telecommunication Services.



Telecommunications Regulatory Authority witnessed several challenges as new organization that had no precedence in the Oman's telecommunications market. The Authority has recruited the staff with right blend of experience and qualification to set up initial system and procedures to run the organization and prepared relevant rules and regulations. The Authority endeavoured to provide ample opportunity to its employees to ensure access to training in latest technology in various fields of telecommunications in an ongoing effort to build capacity.

The TRA has taken the responsibility of management and allocation of frequency since January 2003 and issued 5,226 licenses to private radio users and assigned new frequencies to 118 users during the year 2004. TRA also took over the management of numbering plan and domain name registration from Oman Telecommunication Company (Omantel). The TRA issued 219 type approval certificates for radio equipment including GSM handset in addition to other terminal equipment during the period under review. The new numbering plan was implemented during the year 2004, which is forecasted to satisfy the market for the next 20 years. Since the domain name falls within regulator's jurisdiction, TRA in consultation with Oman Telecommunications Company is studying all issues related to the process of transferring the domain name registration responsibility to the Regulator. In addition, TRA has formulated new regulation for the domain names registration so that domain names directly under ".om" can be allocated for entities registered in the Chamber of Commerce & Industry under the excellent class.

I would like to take this opportunity to acknowledge the efforts made by the members and employees of TRA for their contribution and support in running newly established organization. On behalf of the members and staff, I would also like to express our appreciation to the management of Oman Telecommunication Company (Omantel), Oman Mobile Company and others for their continued co-operation during the period to bring about TRA's efforts to a success in executing the tasks assigned to it.

It is our pleasure in this regard to express our appreciation to the Government of Oman under the wise leadership of His Majesty' Sultan Qaboos Bin Said and his enlightened



thinking and vision, for all its efforts towards developing the telecom sector in line with contemporary trends of telecommunications liberalisation. From the onset, this clear vision was the prime factor in the promotion of the telecommunications sector and helped in the formulation of the telecommunications liberalization policy. Through these policies, the citizens of Oman are ensured access to modern Information Communication Technologies (ICT)

The Government recognises that telecommunications and information technology pose enormous development opportunities for education, business and entertainment, and it is the Government's belief that Omani society should have access to these technologies. Providing an efficient and competitive environment in the telecom sector ensures that both consumers and businesses would benefit from high quality services at affordable prices.

It is my honour on behalf of the Telecommunication Regulatory Authority to take this opportunity to express my profound gratitude to His Majesty Sultan Qaboos Bin Said for his enlightened vision and continuous support in ensuring the Omani telecom sector is on par with that of the global telecommunications community.

Mohammed Bin Abdullah Al Harthi
H.E. the Chairman and the Minister of Transport and Communications



Major Activities During 2004

- Issuance of Basic Public Fixed Telecommunications Services License to Oman Telecommunication Company
- Issuance of Basic Public Mobile Telecommunications Services License to Oman Telecommunications Company
- M/s Nawras Telecom (a consortium of Q. Tel, TDC and local partner) was declared as a winner for award of License for 2nd Basic Public Mobile Telecommunications Services
- Issuance of 5266 licenses to private radio users
- TRA issued frequencies to 118 users
- National frequency allocation proposed schedule under finalization
- Issuance of 219 type approval certificates for different types of telecom equipments
- Implementation of new numbering plan to meet market requirements for next 20 years
- New regulations framed for domain name
- Oman Telecommunication Company submitted Reference Interconnect Offer (RIO) to TRA
- TRA hosted ITU/BDT Arab Regional Workshop on "Wireless Network Evolutions", in Muscat



Chapter 1

Telecom Sector At Glance As on 31-12-04

• Fixed line subscribers	249,281
• Fixed teledensity	10%
• Mobile subscribers.	806,280
- Prepaid	548,993
- Postpaid	257,287
• Mobile teledensity	34%
• Internet subscription	48,657
• Pay phones	6,535

Fixed Line

The year 2004 witnessed escalating development in the telecom infrastructure in the Sultanate. Fixed line services to date are solely provided by Oman Telecommunication Company. As the only provider of fixed line service, the main challenge facing Oman Telecommunications Company is to multiply the number of lines, increase telephony penetration and cover a wider scope of geographical regions.

The demand for fixed line in the Sultanate has been increasing over the years. There are several factors that contribute to the changes in the number of fixed line subscribers, such as the income of households, prices of services and also the level of social interaction. Figure 1 below demonstrates the rise in the number of fixed line subscribers from 1996 to 2004. As shown in the Figure from 1996 to 2003 there has been a gradual growth of 1 per cent on average in the number of subscribers. In 2004, the number of subscribers increased sharply by 5 percent from 236,178 in 2003 to 249,281 in 2004.



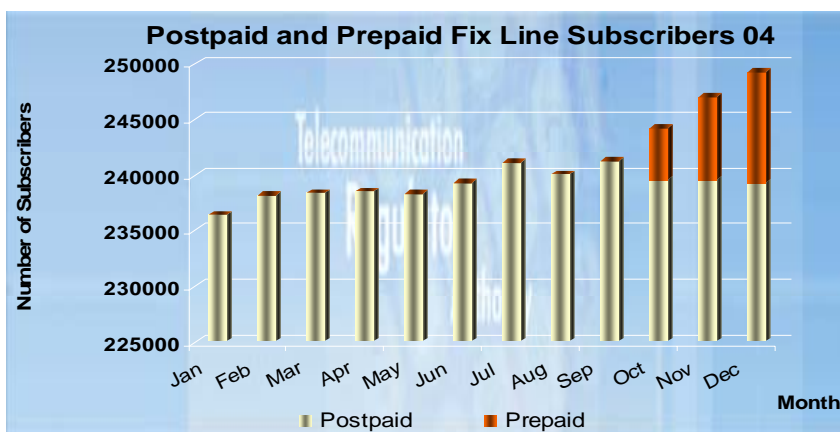
Figure 1



Source: Oman Telecommunication Company

The main reason for the sharp increase in the number of fixed line subscribers in 2004 owed to the introduction of the prepaid telephone "Sahl" in October 2004. In just a short period (three months), the prepaid service proved to attract a large number of consumers and generated higher sales compared with the post paid services. As a matter of fact, on the first month of its launch, the number of subscribers to Sahl was 4,609 and increased to 10,019 in December as shown on the Figure 2.

Figure 2



Source: Oman Telecommunication Company

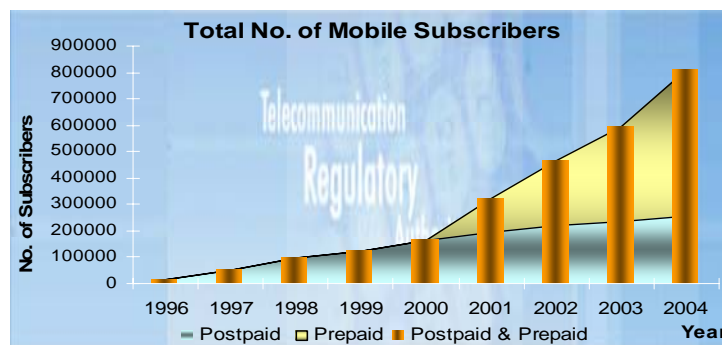


Cellular Mobile

While it took over a century for the world to reach a figure of one billion fixed telephone lines, it took less than two decades for mobile communications to reach this number. Mobile communication over the world spread enormously compared to fixed line services and the number of mobile subscribers over the world grew tremendously over the decades.

As to Oman's mobile market, the number of mobile subscribers grew tremendously over the years. Until December 2004 there was approximately 806,280 mobile subscribers compared to 162,000 subscribers in 2000. That is more than 4 times increase in number of mobile subscribers in just four years. Until recently Oman Mobile Company was the only dominant operator for mobile market in the Sultanate. With the introduction of competition in mobile segment, it is estimated that mobile subscribers will be doubled in next five years (at a level of 1.5 million by 2009). A trend of mobile subscribers (postpaid and Prepaid) from 1996 to 2004 is depicted in the Figure3.

Figure 3



Source: Oman Telecommunications Company

Internet

Like fixed and mobile telecommunication services, the Oman Telecommunication Company is also a sole service provider for internet services. The internet service was first introduced in 1997. The number of subscribers increased from 12,348 in 1998 to 48,657 by the end of year 2004. However, the number of internet subscribers decreased from 52862 in 2003 to 48657 in 2004 showing 8 % decrease in one year. Similarly, there



was significant decrease in the number of Cyber Cafes during the same period. TRA intends to analyze the reasons for this negative growth in these areas and also planning to cover it under USO project. However, the growth of sale in prepaid internet cards indicates higher usage of internet. The Oman Telecommunications Company (Omantel) introduced the prepaid internet service known as "Al Ufuq" in April 2003. The table given below shows growth of pre paid card sale for the period of April to December 2004 over April- December 2003.

Table.1
Growth of Ufaq Prepaid Card
(April-December 2003 to April- December 2004)

Denomination of the pre paid card	April-December 2003	April-December 2004	% Growth
RO.6/	46,200	88,999	93
RO. 10/	19,250	34,561	80
Total	65,450	123,560	89



Chapter 2

Telecommunications Regulatory Authority

- Telecommunications Regulatory Act issued under Royal Decree No.(30/2002) in March 2002
- TRA has been in existence since March 2002
- Currently TRA is managed by a temporary committee consisting of three members of which, one of them is full time and other two are part time
- TRA has 57 employees as on 31-12-04

Telecommunications Regulatory Authority

Telecommunications Regulatory Act (March 2002) was issued under Royal Decree No. (30/2002). Article (6) of the Telecom Act states” By virtue of the provisions of this Act an Authority to regulate the telecommunication sector herein after called Telecommunications Regulatory Authority shall be established and located in Muscat”. The Act provides duties, objectives and powers of TRA.

The TRA is a body corporate and has been in existence since March 2002. As per Telecommunications Regulatory Act, TRA will be managed by a minimum of three full-time members (the “Members”) who are appointed by a Royal Decree on recommendation by the Council of Ministers and the Chairman who is the Minister of Transport and Communications. Currently it is managed by a temporary committee consisting of three members deputed from Government agencies, of which one of them is full-time and the other two are part-time. The Members of the TRA are persons of recognized standing in the relevant field. The TRA is supported by 57 staff by the 31st December 2004.



Duties, Objectives and Powers

The Telecommunications Regulatory Authority under the Telecom Regulatory Act is conferred with the following major duties, objectives and powers:

- Secure the provision of telecommunication services for all the Sultanate within reasonable limits and charges;
- Safeguard the interests of telecommunication users and dealers regarding the prices of equipment, and the rates, quality and efficiency of telecommunication services provided;
- Ascertain the financial viability of the licensees;
- Promote commercial activities connected with telecommunication services and equipments, and to facilitate entry into those markets;
- Create an environment for competition amongst licensees to ensure the provision of world-class telecommunications services at reasonable cost and price, and to take necessary steps to enable the service providers to compete abroad;
- Ensure the optimal use of the frequency spectrum.
- Provide opinion on the matters related to the telecommunications industry.
- Coordinate with ministries, the concerned government agencies, the chambers of trade and industry, the unions, and other organizations in the field of telecommunications.
- Prepare necessary programs to raise awareness of the importance of telecommunications sector and its impact on development of the sector on the development plans.
- Prepare lists of the technical terms used in the telecommunications sector, and take necessary steps for its publication.
- Prepare the frequency plan, numbering and domain name plans, and to supervise the implementation thereof.



In fulfilling these aims, the TRA has responsibility and powers for proposing the general policy towards the telecommunications sector to be set by the Minister and presented to the Council of Ministers and to prepare programs and plans necessary to develop the policy.



Chapter 3

Liberalization Policy/Licensing

- Liberalization Policy announced to open the market for telecom services
- Three types of licenses (Class I, II, and III) are offered under the Policy
- Basic Public Fixed Telecommunications Services License was issued to Oman Telecommunication Company
- Basic Public Mobile Telecommunications Services License was issued to Oman Mobile Company
- Award of License for 2nd Basic Public Mobile Telecommunications Services was concluded

Liberalization Policy

Realizing the benefits achieved from telecommunication liberalization around the world, Sultanate of Oman intended to move away from the monopolized structure to liberalized one. Liberalization Policy was announced in 2003 and it opened the doors to development and opportunities in the telecom sector in the Sultanate. Responsibilities and challenges were vested on TRA. A brief description of the Policy is given as under:

Types of Licensing Regimes

There are four principal types of licenses which are awarded in Oman, these are as follows:

- Class I License – Basic Public Telecommunications Services
- Class II License – Additional Public Telecommunications Services
- Class III License – Private Telecommunications Services not connected to public network.
- Radio License



Table 2
Licensing Regime by Service Category

Class-I License	
Individual operator license(s)	License awarded by a Royal Decree proposed by H.E. The Minister of Transport and Communications after approval by TRA subject to pre-qualification and selection phases.
	<ul style="list-style-type: none">i. Basic Public Fixed Telecommunication Network servicesii. Basic Public Mobile Telecommunications servicesiii. Basic Public Rural Telecommunications servicesiv. Public Data Networks
Class-II License	License awarded by H.E. The Minister of Transport and Communications after approval from TRA based on eligibility criteria
	<ul style="list-style-type: none">i. Internet Service Provision (ISP)ii. Audiotext Servicesiii. Short Messages Services (SMS)iv. Public Voice Mailv. Calling Cardsvi. Other Value Added Services
Class-III license	License awarded by TRA based on eligibility criteria.
	<ul style="list-style-type: none">i. Leased Lines Provision for private closed user groupii. Private Telecommunications Networks not connected through public network.

Award of 2nd Public Mobile License

Under the liberalization policy a new mobile license will be awarded. TRA started off a series of activities in a very professional manner. A consultant (PWC) was hired to assist TRA in the whole process of awarding of the license in order to make the process open and transparent.



After publicizing the Expression of Interest (EOI), TRA received 28 applications for the second mobile license. The 28 applicants were short listed to 10 as per the pre-qualification criteria set forth in the EOI. From the 10 applicants 6 submitted their final bid consisted of a technical and financial proposal. The process was then transferred to the Tender Board where the bids were evaluated by the Regulatory Authority as per the bidding procedures set forth in the Information Memorandum to select the best offer. A final negotiation phase was conducted by the Tender Board which concluded by the Omani Qatari Telecommunications Company (NAWRAS) being awarded the second mobile license

Value Added Services

During the period under report, draft licenses and their qualification criteria were prepared for various value added services. TRA intends to issue various licenses in coming year.

Radio Spectrum Allocations and Licenses

Telecommunications Regulatory Authority took over the management and allocation of frequency from Ministry of Transport and Communications since January 2003. Frequency Management Department has updated its data base for frequency users and is in the process of finalizing the national frequency plan proposal and completion of frequency monitoring project. TRA hired two ITU experts to conduct the required analysis in this regard. Radio licensing covers Radio Trunking, Fixed, Mobile, Broadcasting, Satellite, Maritime Services, Demonstration and Testing Equipments. TRA issued 5266 licenses to private radio users and assigned new frequencies to 118 users during the year 2004.



Chapter 4

Tariff and Interconnection

- Oman Telecommunication Company submitted Reference Interconnect Offer (RIO) to TRA
- Tariff proposals of Oman Telecommunication Company and Oman Mobile were examined
- Domestic and international leased circuits tariff reduced

Tariff

The TRA oversees various aspects of tariff and its regulation for various telecommunications services as per provisions in the Telecommunications Regulatory Act and license conditions. The main planks of regulatory policy as far as tariffs are concerned are to move towards a regime of competitive tariffs based on principles of transparency and fair competition. The TRA received references from Oman Telecommunications Company and Oman Mobile for tariff approval. These were assessed in terms of its impact on market outcomes, competition as well as consumer affordability and welfare. TRA examined tariff proposals received from Oman Telecommunications Company and Oman Mobile. These included tariffs for ADSL, Hayyak tariffs, Pre paid (Sahel) tariffs, national long distance tariffs and ATM. The market also witnessed, following TRA's approval, lowered rates for domestic and international leased circuits. Varied offerings for GSM related services such as GPRS, MMS and Bulk SMS were the other highlights of the tariff proposals filed by Oman Mobile. The tariff proposals signaled the way for introduction of new services while making them competitive with respect to their previous levels.

Reference Interconnect Offer (RIO)

In keeping with regulatory principles, both Oman Telecommunications Company and Oman Mobile submitted their Reference Interconnection Offers (RIO) to TRA in



September 2004. The RIO contained several chapters on technical and commercial aspects of interconnection so as to facilitate seamless conveyance of calls between networks. The operators were expected to commercially negotiate between themselves and then submit an interconnection agreement to TRA for approval as per the given legal provisions in the license

Consumer Affairs

TRA developed draft framework for consumer issues which is under finalization. The framework dealt with procedures for handling consumer complaints, setting up of an advisory committee and usage of media for consumer awareness.



Chapter 5

Technical Affairs

- 219 type approval certificates for different types of telecom equipments were issued
- New numbering plan to meet market requirements for next 20 years was implemented
- 4-digit short codes allocated for service providers
- New regulations for domain name were framed
- Guidelines for service providers were developed for quality of service

Type Approval

Type approval certificates are issued according to the Ministerial Decision No. 45/2003 and the approval is given with respect to the technical standards according to the Telecom Regulatory Act 2002, Article 8/11 and Article 51/6, which stipulates to include the standards, rules and specification required for type approval in the Executive Regulation which is yet to be issued. The main purpose of the type approval is to ensure that the users of the telecommunications equipment in the Sultanate are getting standard equipment from telecommunication companies and establishments which trade and deal in these equipments in general markets based on international standards that are used globally after being issued and approved by organizations such as ETSI, ITU, and IEEE. These equipments must meet technical standards including: spectrum used, distance coverage, output emitted power, safety and health hazard standards. TRA took over the responsibility of radio equipment type approval from the Ministry of Transport and Communications in January 2003 and the responsibility of type approval of all terminal equipment including GSM mobile equipments from Oman Telecommunications Company in July 2003. After taking over the management of all type approval matters, TRA started to issue type approval certificates for radio equipments and systems



including GSM mobile equipments and all other terminal equipments. The number of type approval certificates issued by TRA is given in Table 3.

Table 3
Type Approved Certificates

2004

Type of Telecommunications Equipment	Number of Granted Approvals
Radio	114
GSM	59
Terminal/Others	46
Total	219

Table 4
Registered Dealers
2004

Charge per Dealer (R.O.)	Total Number of Registered Dealers
10	401

Table 5
Imported Telecommunications Equipment

2004

Type of Telecommunications Equipment	Radio		Terminal equipment	Total Number of Imported Equipments
Total Number of Imported Equipment	GSM	Others	983	68491
	38690	28818		



Numbering Plan and Domain Names Allocations

As per Article 8(3) of the Telecommunications Regulatory Act 2002, “the Authority shall prepare the frequency plan, numbering and domain name plans, and to supervise the implementation thereof.” TRA took over the numbering Plan’s responsibilities from the incumbent, as a result TRA has created an application form, guidelines, database management system to handle the numbering plan as requested. Accordingly, licensed operators apply for number blocks as needed.

The new numbering plan was implemented during the year 2004, which is forecasted to satisfy the market for at least the next 20 years. The numbering plan also caters for the requirements of the short codes to enable beneficiaries and the public to reach telecommunication service providers as well as national emergency services. The restructuring included the expansion of the short codes to contain 4 digits.

As regards to the domain name registration, TRA formulated a new regulation for the domain names registration so that domain names directly under “.om” can be allocated for entities registered in the Chamber of Commerce & Industry under the excellent class.

Quality of Services and Standardization

In the year under review the fundamental planning department successfully completed several endeavors, key of which are the following:

- Technical guidelines are developed for service providers
- The operators are asked to provide the Key Performance Indicators (KPIs) (e.g. blocked calls, dropped calls, etc) either monthly or quarterly.
- The data is analyzed and scrutinized if operators have met their license obligations or not.
- Technical standards, regulations, reports and recommendations for different areas of telecommunications (e.g. WiFi, CDMA450, NGN, VPN, etc) are prepared.



Chapter 6

Legislation, Enforcement and International Representation

- Executive Regulations sent for approval
- Inspections carried out for illegal activities and sue cases filed against them
- TRA hosted ITU/BDT Arab Regional Workshop
- TRA temporary committee's Member is the Vice-Chairman of ITU-D Study Group 1
- TRA employees actively participated in ITU study groups

Legislation and Enforcement

A second license to provide Basic Mobile Telecom Services was issued to the Omani Qatari Telecommunications Company (Nawras).

The draft Executive Regulation was raised to H.E the Chairman of TRA for issuance and publication. Moreover, the draft Interconnection and Price Control Regulations are currently being reviewed. In addition, TRA filed a case against an unlicensed service provider and is still awaiting the court judgment. Furthermore, three cases of Radio Licenses violation were detected and these were referred to the public prosecution for further action.

Participation in International and Regional Telecommunication Organizations

Rapid changes are taking place in the field of telecommunications in all over the world. All this has not only changed the traditional diplomacy but also changed the approaches to international relations among nations. All countries are therefore emphasizing on mutual relationship for assistance and development of their telecom sector. Oman is an active member of all international telecom organizations including ITU, GCC, ITU's Arab Center of Excellence (Arb/CoE)



Workshops

The International Telecommunication Union (ITU) provides various opportunities for capacity building through conducting various workshops to develop the skills of telecommunications professionals. TRA employees participated in these workshops to develop their skills in respective areas.

Assistance from ITU

The International Telecommunication Union is unique among international organizations in that it was founded on the principle of cooperation between governments and the private sector. Sultanate of Oman joined International Telecommunication Union on 28th April 1972 which enabled us to actively participate in the elaboration and adoption of decisions both on the current technical and strategic matters of ITU. ITU consistently providing technical and capacity building support to Oman for development of telecom sector. Presently ITU 's experts are carrying out Oman case study and business case for 2G to 3G study for Oman. TRA also got services of two ITU experts to develop national frequency plan.

Study Groups

The three sectors of the Union - Radiocommunication (ITU-R), Telecommunication Standardization (ITU-T), and Telecommunication Development (ITU-D) - Each of the three ITU sectors works through conferences and meetings, where members negotiate the agreements which serve as the basis for the operation of global telecommunication services.

Study groups made up of experts drawn from governmental entities, telecommunication regulators, operators as well as telecommunication service providers worldwide carry out the technical work of the Union, preparing the detailed studies that lead to authoritative ITU Recommendations. Currently, TRA temporary committee's Member is the Vice-Chairman of ITU-D Study Group 1 (Telecommunication Development Strategies and Policies [Study Period: 2002 – 2006].



In the year 2004, TRA was represented by its members and employees on various international events (meetings, conferences, symposiums & seminars)