







Bringing UAE Telecommunications Forward

Our Mission

To support and enable the ICT sector in the UAE by safeguarding competition, providing fair access to the domestic infrastructure, and ensuring the optimal use of natural resources through the implementation of best practice in every area.

To enhance the quality of services offered; to raise public awareness; protect the consumer interests; facilitate the growth of the e-commerce environment; encourage investment, innovation, development and education; provide a stimulating environment for the TRA employees and preserve its national staff; and commit to implementing our responsibilities towards the society.

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Our Values

- Transparency
- Fairness
- Credibility
- Sector participation
- Creativity
- Awareness



Our Vision

To create an optimal enabling environment
in which the UAE's ICT sector will emerge
as a leader in the global market place.

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Ahmed Al-Mazrouie



Issam Al-Tamimi

Thanks & Acknowledgement

TRA would like to seize this opportunity to express its gratitude to H.E. Issam Al Tamimi and H.E. Ahmed Humaid Al Mazrouie for their commitments and dedication, which led the TRA to greater achievements and continuous success.

Board of Directors

H.E. Mohamad Ahmad Al Qamzi
Chairman of the Board

H.E. Dr. Saeed Abdulla Al Ghafli
Board Member

H.E. Eisa Saif Al Mazrouie
Board Member

H.E. Rashid Mohamed Rashid Al Mutawaa
Board Member

H.E. Waleed Ali Al Mansouri
Board Member

H.E. Dr. Abdul Qader Al Khayyat
Board Member

H.E. Issam Al Tamimi
Board Member

The TRA contributed in achieving various successes in the country's telecom sector by sustaining the national identity, introducing and evaluating new regulations, initiatives, and business processes to push forward market trends and growth

A Word from the Chairman

The UAE ICT market has witnessed tremendous growth in the past few years, with 2009 representing a milestone in terms of strengthening competition and regulation, along with strong emphasis on quality of the ICT services and safe cyber environment. The growth of the ICT sector reached 45.7 billion including revenues and investments, with estimated contribution to GDP touching 4.9% this year (up from 4.4% in 2008).

The Telecommunications Regulatory Authority contributed in achieving various successes in the country's telecom sector by sustaining the national identity, introducing and evaluating new

regulations, initiatives, and business processes to push forward market trends and growth, while assessing the quality of telecom services provided to corporations and individuals alike.

Year 2009 saw concrete steps and developments in setting regulatory policies and enhancing market readiness for the introduction of new and advanced services that meet the needs of businesses and beneficiaries. We have also focused on fostering the development of sound ICT infrastructure to allow for national access for all ICT connectivity and services.

The Board of directors issued 52 Regulations and resolutions to meet the changing telecommunications regulatory landscape and support the evolution of new technologies and services within the ICT sector. The regulations issued range from strategic to operational levels in order to cover different areas within the telecom field.

The TRA continued its efforts to diversify sources available in the market through issuance of new licenses that supply new services and technologies. The new licenses covered areas of Satellite Services, Certification Service Provider and TV mobile, making UAE the first country in the region to issue these licenses.



The Telecommunications Regulatory Authority has also conducted the very first extensive survey of the Information and Telecommunications Sector in the country. The Survey covers indicators across seven different sectors, representative of the entire ICT landscape including; households, the private sector, educational establishments, higher education institutions, the government sector, the ICT business sector, and Public Internet Access Centers or (PIACs).

Maintaining and expanding the (.ae) domain name witnessed a significant development as the “.ae Domain Administration” managed to register more than 90,000 .ae domains. The TRA has also succeeded in registering and operating the country code top-level domain on the internet in Arabic. This marked a new unprecedented achievement for ICT on a regional level in introducing Arabic language for Internet domain names and the fact that the UAE is one of the four countries in the world to obtain approval from ICANN.

Providing a safe cyber environment for public, governmental organizations and business entities witnessed significant progress with the TRA's Computer emergency Response Team (aeCERT) signing over 43 Memorandums of Understanding (MoUs) with different bodies.

Last year was a milestone in terms of TRA's Corporate Social Responsibility policy and programs. The most prominent initiative was the launch of the “Echo of Silence” project, along with the Ministry of Social Affairs. This project was the first-of-its-kind in the Arab world to provide an opportunity for people with hearing and speech disabilities to use modern ICT

technologies. TRA also launched and is funding the “Emirates Telescope” project, along with Emirates Foundation of Science and Advanced Technology.

While TRA continues to build on its successes through the launch of various initiatives and programs, it remains true to its professional values and corporate social responsibilities.

In addition, the Authority is tirelessly working to advance the nation's human capital, to augment knowledge creation and to grow the ICT sector in the country. We adopted an ambitious plan that includes launch of the scholarship program “Be'tha”, to sponsor and support the UAE's national human resources specializing in the telecoms sector and related fields. In parallel, the number of Emirati employees working in the offices of the Authority, is increasing.

Finally, on behalf of the Authority, I would like to extend a special thank you to two of our board members, H.E. Essam Al Tamimi and H.E. Ahmed Humaid Al Mazrouie, for their active contributions in the TRA's progress between 2004 and 2009.

Furthermore, I would like to welcome the new board members and wish them success in TRA's endeavours.

Mohamad Ahmad Al-Qamzi
Chairman of the Board



A Word from the Director General

The annual report for 2009 offers a road map of TRA's successes, new initiatives, its progress in various sectors also it is a manifestation of TRA's vision to create an optimal enabling environment for UAE's ICT sector to emerge as a leader in the global market place

As we near the end of TRA's Operational Plan for the period of 2008-2010, I am glad to declare that we have achieved most of our planned objectives and have met the required KPIs for various programs and plans.

TRA finalized the revision and evaluation of the first offer for Mobile TV licensing. It licensed 'Nedaa' with a Public Access Mobile Radio and Etisalat with the first certification service provider in the UAE. TRA also approved the licensing of 'Al Yah Satellite Communications Company' as a satellite services provider.

In the second half of 2009, TRA completed carrying out an extensive survey of the second and third generation mobile networks and services provided by mobile licensees.

In 2009, TRA succeeded in promoting a safe cyber environment for all users, government, corporations and individuals alike, by signing several Memorandums of Understanding and by creating an interactive character named 'Salim', which is an embodiment of the TRA's strategy that aims to provide more information on security.

The (.ae) Domain Administration succeeded in making the (.ae) domain name a definitive

and default online address for all government bodies and businesses operating in the UAE after launching its two-month long campaign in August 2009. We also applied and received the approval from the Internet Corporation for Assigned Names and Numbers (ICANN) to use and operate the UAE Arabic domain name .emarat (إمارات).

In the past year, the UAE was nominated, for the 2nd term, as a member of the International Telecommunication Union (ITU). In addition, one of TRA's key senior staff was nominated for membership to the ITU's Radio Regulations Board (RRB12).

We have also maintained a prominent international and regional presence in major conferences and exhibitions, most prominently; the 9th International Defense Exhibition & Conference 2009 (IDEX'09), Telecom World Exhibition & Conference 2009, Middle East Communications Conference and Exhibition 2009 (MECOM 2009), and GITEX .

The annual report for 2009 offers a road map of TRA's successes, new initiatives, its progress in various sectors and highlights of 2009. It is a manifestation of TRA's vision

to create an optimal enabling environment for UAE's ICT sector to emerge as a global leader and is a result of the diligence and hard work of the TRA's staff, who have played an important role in achieving every success that is mentioned in this report.

Mohamad Nasser Al Ghanim
Director General



2009 General Review

Building on the Authority's track record in developing the ICT sector in the UAE, TRA continues to support sector growth by applying multi-layered approach to ensuring fair competition, licensing of new services, ensuring universal access services and policies, authorization of Telecom and ICT services as well as assessing impact of new ICT technologies on the market.

Legal and Institutional Framework - Regulations and Resolutions

Throughout 2009, TRA issued several regulations and resolutions to meet the changing telecommunications regulatory landscape and support the evolution of new technologies and services within the ICT sector.

The Authority's rulings for 2009 include:

- Regulatory Instrument Designations Version 2.1
- Determination No. (1) of 2009 on Cost Accounting, Account Separation and LRIC models (KPI)
- Determination No. (2) of 2009 on Weighted Average Cost of Capital (WACC) (KPI)
- Directory Information Policy V 1.2
- Quality of Service Policy V1.2
- Regulatory Procedure on Ex Ante Competition Safeguards (KPI)
- Regulatory Procedure on Ex Post Competition Safeguards (KPI)
- Regulatory Policy on Competition Safeguards (KPI)
- Unsolicited Electronic Communication Policy & Annex
- Voice Over IP v 2.0
- Conducting the initial امارات .ae policy formation session with ICT
 - Reviewing all .ae policies in order to form (.amarat - امارات) policy method.
 - Reviewing the list of reserved names related to form (.amarat - امارات)
- Publishing .ae code of conduct policy to ae registrars
- Regulatory Instrument Type Approval fees policy 1.1
- Annex (1) to Unsolicited Electronic
- Communications Regulatory Policy: Mobile Spam
- Issuing the technical annexure for the quality of service which addresses the technical parameters for the fixed and mobile network.
- Issue a revised Policy for "Number Portability" (Version 1.1)
- Issue Instructions on "Mobile Number Portability" version 1.0, which included a Porting Process Specification Annex (ending the long disagreement between the Licensees in this regard)
- Earth Stations Regulations
- Earth Stations on board Vessels Regulations





- Amateur Regulations
- Cellular Coverage Measurement Regulations
- Cellular On Board Vessels Regulations
- Short Range Devices Regulations
- Use of 2.4 GHz and 5.8 GHz bands for WLAN and RLAN
- Satellite Coordination Guidelines
- Fixed Service Regulations
- Aeronautical Radio Service Regulations
- Maritime Radio Service Regulations
- Private Mobile Radio (PMR) Service Regulations
- Spectrum Allocation and Assignment Regulations
- Digital Switchover Plan
- Revision of Spectrum Fees Policy

Licensing

In supporting the provision of ICT services, **TRA has accredited the Professional Communication Corporation "Nedaa" with a ten-year Public Access Mobile Radio (PAMR) license** – commonly referred to as the TETRA System. Through this first of its kind license based on TRA's the Regulatory Framework of licensing, "Nedaa" will provide specialized telecommunications services to the police, fire department, campus securities, money transport companies, construction companies, airports, and similar sectors in need of TETRA communications.

In supporting a secure electronic dealings and online business operations within the

eCommerce field, TRA has **accredited Etisalat as the first certification service provider** in the UAE offering Public Key Infrastructure (PKI) solutions to business with eCommerce and online and financial and business transactions.

Mobile TV Licensing

In 2009, TRA finalized the evaluation of the mobile TV tender presented to the Authority for a mobile TV licensee. The tender introduced by the "emirates Mobile Television Corporation" consortium met all of the requirements required by TRA and **granted the consortium a royalty license for exclusive mobile TV services for 5 years**, ending in December 2014. The Consortium consisting of "Etisalat", Emirates Integrated Telecommunications Company "Du", Abu Dhabi Media Company, Dubai Media Incorporated, Emirates Communications and Technologies Company a subsidiary of TECOM Investment, and MBC FZ-LLC "mbc", will provide its services using selected (DVB-H) technology, which is one of the modern technologies for mobile broadcast TV used in most advanced global markets.

TRA has also finalized the process **to grant a Satellite Services License to al Yah Satellite Communications Company**. Upon the license, Yahsat will provide the region's first multi-purpose satellite telecommunications system.

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Nedaa with a ten-
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eCommerce

In its efforts to promote and enhance economic growth by providing secure and effective electronic business transactions, TRA has been entrusted with developing and managing the electronic commerce and trade portfolio in the UAE. In doing so, TRA is responsible for all licensing, approval, monitoring and overseeing the activities of Certification Service Providers (CSPs).

In a forward step to boost confidence in the electronic commerce environment in the UAE, TRA signed a Memorandum of Understanding with Dubai eGovernment (DEG) for a partnership on the Trustae Initiative. Trustae is an initiative designed in line with the UAE government strategy plan and Federal Law No (1) of 2006 on Electronic Commerce and Transactions. It is a nation-wide trust mark initiative by the TRA and DEG to boost confidence in the electronic commerce environment.

By this initiative, TRA and DEG will work to acquire the Trustae seal, where online eProviders will be required to comply with a stringent code of conduct for online business practices proposed by this initiative.

UAE ICT Sector Survey

The Telecommunications Regulatory Authority of the UAE conducted the very first extensive survey

of the Information and Telecommunications Sector in the country. The Survey covered forty eight (48) core ICT indicators developed and agreed upon by international ICT bodies such as the International Telecommunications Union (ITU), the Organization for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTD), the UNESCO Institute for Statistics, the World Bank, and other relevant UN agencies. The Survey covers indicators across seven different sectors, representative of the entire ICT landscape including; the household, the private sector, educational establishment, higher education institution, government sector, ICT business sector, and Public Internet Access Centers or (PIACs).

Spectrum and International Affairs Radio Spectrum Management

Revision of National Spectrum Plan: TRA has initiated a review of the National Spectrum Plan, issued in 2006, after changes to the Radio Regulations, including changes to the Table of Frequency Allocations at the international level during the World Radiocommunication Conference of 2007 (WRC-07).

Cellular Spectrum Re-allocations: TRA concluded the cellular spectrum re-framing one year after its initiation in 2008; with the re-allocation of



additional 2x5 MHz in 900 MHz band to “du” based on its request, after Etisalat has vacated 2x5 MHz from the 900 band based on TRA’s demand. Additional spectrum allocations were also made to both licensees in the 1800 MHz and 2100 MHz Bands for improved cellular services.

Frequency Coordination for Broadcasting Services:

TRA completed the frequency coordination for FM Sound Broadcasting Service with Saudi Arabia and Oman. UAE is the active member within GCC to initiate and progress on the FM Coordination with Iran.

Frequency assignment for Mobile TV: With the Mobile TV License finalized and plans to issue the license in 2010, TRA has completed the Frequency assignment for Mobile TV service in the UAE. The multiple broadcast stations which together form a National layer to offer mobile TV services were evaluated technically. TRA also assured conformance validation of the mobile TV license offer to the UAE assignments in accordance with the Geneva-06 Plan.

International Presence and Affiliations

Throughout 2009, the Telecommunications Regulatory Authority of the UAE maintained an active presence on the international scene. With over sixty (60) international conference, meeting and events attended by senior officials, TRA sustained constant existence in main

international events such as those associated with the International Telecommunications Union (ITU), Mobile World Congress (GSM), Arab Regulators Network (AREGNET), Arab Ministers Councils Meetings, and the Gulf Cooperation Council. In addition, TRA participated in all high-level and international coordination meetings in regards to the regulatory works aspect of the telecom sector.

Following TRA’s election to the International Telecommunications Union Council (ITU) in 2006, the **Authority is re-nominated for a second term** by the Arab countries. The election will take place during the Plenipotentiary Conference (PP-10) meeting to be held in Mexico in 2010. The re-nomination was supported by all Arab States during the first Arab group meeting in charge of the preparations for the upcoming meeting.

TRA’s Director of International Affairs at TRA, was **nominated to the membership of ITU’s Radio Regulations Board** (RRB 12 member council) for the term (2010-2014), the first Arab national to be nominated for this post.

For a complete list of TRA’s international and regional meetings, please see appendix A.





Technology Development Affairs Type Approvals

The Telecommunications Regulatory Authority, through its Technology Development Affairs Department, has granted over 3251 type approvals in 2009 covering the following segments:

Total	Type
274	Company registered with Type Approval
695	Equipments Type Approved
2064	Custom release letter

TRA Internal Communication Strategy The Gate

Working to further enhance internal communications, streamline work flow and processes, and allow for timely access to information, TRA finalized the plans and structure to launch its internal intranet network "The Gate". The intranet is TRA's internal portal providing a timely interactive platform supporting TRA's staff in their daily workloads, monitoring and tracking of assignments and deadlines, and allowing access to information through a dedicated e-library. In addition, the Gate provides a space for TRA's staff to showcase their talents and creative through which they can share their personal and creative work with their colleagues.

Service Center – TRA's Newest Unit

With the aim of establishing effective communication lines with the general public and

industry stakeholders, the Authority established a "service center" as part of its Strategic Affairs Department with the objective of receiving constructive feedback and suggestions as well as complaints on all matters related to the ICT market within the UAE. Although the Center is relatively young, it proved to be - in the few months after its launch, a valuable communication tool, not only for the general audience, but also for TRA's strategic direction and provided for an unbiased reference for customer suggestions, inquires and complaints.

Since it commenced its operation, the Center received over 400 complaints covering the following categories: website blocking, Antenna tower, billing, VoIP, and type approvals. The Service Center managed to respond to over 97% of the complaints with a maximum of 3-day response period.

The number of complaints received, and the growth it witnessed over the past 9 months indicates TRA's growing credibility as a regulatory body amongst all sectors of the consumer base. The incoming inquiries provide, and according to the nature of the inquiry, valuable input to the strategic planning process, as such quarterly reports from the service center are delivered to the strategy dept for evaluation.

Emirates Telescope - TRA's Newest Initiative

Within its quest to support the advancement of a truly competitive ICT market, and driven by one of its core missions aimed at knowledge wealth creation and growth, the Telecommunications Regulatory Authority is sponsoring and funding the establishing of a UAE National Astronomical Telescope (Emirates Telescope) in partnership with the Emirates Institution for Advanced Science and Technology (EIAST). With the keen desire to advance the astronomical sector in the country, and taking the lead role in this initiative, TRA signed a Memorandum of Understanding with EIAST in 2009 with the later entrusted with conducting feasibility and scientific studies along with an overall geographical survey to; first, find the best location to establish and assemble the telescope, and second, to establish a solid vision for best implementation measures of the project; including determining the optimal telescope size to meet the needs of the UAE.

TRA adopts Emiratization plans to support the localization of jobs and achieve the UAE's strategic objectives in this regard"

Stemming from the objectives of the Telecommunications Regulatory Authority and its supporting strategy in maintaining a national human capital at the Authority, TRA adopts the "Emiratization plan" to fulfill its social responsibility towards the UAE community.

The adoption of the Emiratization plan is centered around supporting and realizing the strategies of the UAE government, this reflects a positive increase in the percentage of nationals in federal and government institutions, and contributes to enhancing viable economic and social stability by relying on national human capital, in addition to developing local talents and skills within the ICT Sector to meet the Sector's current and future needs.

TRA's Emiratization plan for the years 2010-2015 represents a true response and reflects a strong commitment in implementing the directives of the UAE government, moreover, it mirrors TRA's higher management's firm conviction in investing in local talents, citing that Emiratization rates at TRA has reached 63% by the end of the first half of 2009.

TRA has already developed several policies and strategies in support of the Emiratization efforts and currently implement a set of themes mainly in developing human resource strategies and developing the human resource operations and management, in addition to applying a "change" policy within the TRA.

In the past, the nature of the local human resources and the requirements of ambitious development plans of the UAE demanded reliance on foreign and experienced workforce. At that time, foreign human resource was not





a luxury, but a necessity to meet the expected requirements and a genuine desire to achieve a high rate of development as per the UAE plans at that time. In addition, such workforce was also needed to transfer knowledge and skills to local national talents, and help in building the capacity of the local human resources in various fields. TRA support the natural evolution and development of local talents to rely on nationals to replace the foreign workforce especially in the field of ICT.

Capacity Building and Emiratization Efforts

Committed to implementing national Emiratization strategies, the Authority has increased its efforts in attracting and retaining national talents to work in TRA. By providing a favorable working environment and commitment to capacity building and professional growth, TRA is one of leading federal entities with high percentage of national staff. TRA's has managed to increase its hiring of national staff to **of 200% between 2008 and 2009, achieving an overall nationalization rate of 72%.**

Mobile Quality survey

Keeping in line with its strategy to ensure the provision of quality telecom services to the consumer market, as well as ensuring both quality and variety in telecommunication services throughout the UAE and ensure that service providers are adhering to the terms of the of license; the Telecommunications Regulatory Authority carried out an extensive benchmarking survey of the mobile networks and services provided by mobile licensees (Etisalat and du).

The survey has covered more than **10,000 Km of the UAE's roads** between July and November 2009. All of the emirates including: Abu Dhabi, Dubai, Sharjah, Ajman, Um Al Quwain, Ras Al

Khaimah and Fujairah. TRA has **performed more than 27,000 test** calls during the survey; **covering both second and third generation of Mobile Networks.** Also, it tested mobile network coverage and the delivered quality of the voice, packet data, SMS and MMS services provided by the Du and Etisalat networks.

To ensure that the testing provides a fair comparison of the service provided by the mobile networks and that it provides a reliable basis for the encouragement of ever improving quality of service throughout the UAE; TRA has employed "state of the art" **test equipments that have been used in more than 160 organizations and 70 countries.** The equipment measures "key performance indicators" that directly relate to the public's experience. These include network coverage, dropped calls and the clarity of calls. For data users it measures download and upload speeds.

TRA Benchmark Quality of Mobile Networks and Services (mobile and network QoS) Delivered Throughout the UAE by Etisalat and du

The Telecommunications Regulatory Authority (TRA) of the United Arab Emirates has just completed carrying out an extensive benchmarking survey of the mobile networks and services provided by mobile licensees (Etisalat and du). The survey comes as part of TRA's commitment in ensuring both quality and variety in telecommunication services throughout the UAE and ensure that service providers are adhering to the terms of the of licences. The benchmarking survey is also an essential part of TRA's long term plan to help the UAE in becoming a recognised global ICT hub.

The survey has covered more than 10,000 KM of the UAE's roads between July and November 2009. All of the seven Emirates including major highways were covered. The TRA has performed more than 27,000 test calls during the survey.

This survey covered both second and third generation of Mobile Networks. Also, it tested Mobile network coverage and the delivered quality of the voice, packet data, SMS and MMS services provided by the Du and Etisalat networks. As well as comparing the quality of services delivered within the UAE.

To ensure that the testing provides a fair comparison of the service provided by the mobile networks and that it provides a reliable basis for the encouragement of improving quality of service throughout the UAE, the TRA has employed a "state of the art" test equipment that has been used in more than 160 organizations and 70 countries. The equipment measures "key performance indicators" that directly relate to the public's experience. These include network coverage, dropped calls and the clarity of calls. For data users it measures download and upload speeds.

TRA will publish the information after finalization of the discussion with both licensees. TRA intends to carry out similar Mobile Benchmarking Survey during 2010.

Universal Access and Services.

The Telecommunications Authority is working diligently to ensure that the ICT consumer base, be it governments, corporations, or individuals, have access to and benefits from available and new ICT technologies. As a regulatory body, TRA ensures that all its policies and regulations promote

universal access and services throughout the UAE. Working with the two telecom operators in the Country (Etisalat and du), the Authority is introducing several commercially viable services that allows both networks the benefit and use of the competitors network. As a result of TRA's work, **the total mobile sites shared between "Etisalat and du" in 2009 reached 134 site.** This is highly vital to the country's economic and social growth, as it ensures universal coverage of mobile services, fixed line services, and high speed internet access or broadband services and compliance with best international practices in this field.

TRA's fair market competition policy and licensing of a second mobile operator in the UAE resulted in an unprecedented mobile penetration rate of 200%, the highest in the world, with mobile subscriptions reaching 10 million. In the last quarter of 2009

2009 summary of TRA activities and projects

During 2009 many achievements have been accomplished by the TRA, most importantly, the revision and evaluation of the proposed offer for Mobile TV licensing presented by a consortium of several companies last October, and approving a Public Access Mobile Radio "PAMR" license to 'Nedaa' Company. TRA also licensed "Etisalat" as the first certification service provider in the UAE. TRA also adopted the marketing plans to increase awareness and market the .ae domain name registration.

The past year also witnessed the nomination of TRA to a 2nd term for the membership of the International Telecommunication Union (ITU), as well as the nomination of TRA's Director of International Affairs to the membership of the ITU's Radio Regulations Board (RRB12), the first Arab national to be nominated to this post.

TRA's fair market competition policy and licensing of a second mobile operator in the UAE resulted in an unprecedented mobile penetration rate of 200%, the highest in the world, with mobile subscriptions reaching 10 million. In the last quarter of 2009, TRA completed carrying out an extensive benchmarking survey of the mobile networks and services provided by mobile licensees (Etisalat and du), which covered both second and third generation of Mobile Networks. The survey tested mobile network coverage and the delivered quality of the voice, packet data,

SMS and MMS services provided by the two operators. The survey came as part of TRA's commitment in ensuring both quality and variety in telecommunication services throughout the UAE and ensure that service providers are adhering to the terms of the licenses.

2009 also was a year highlighting TRA's Corporate Social Responsibility by supporting several initiatives and projects including the "Echo of Silence" with the Ministry of Social Affairs, the first of its kind in the Arab world to provide people with hearing and speech impediments for the use of modern ICT technologies to help them integrate and become par with their peers. TRA also launched and is funding the "Emirates Telescope" project with Emirates Foundation of Science and advanced technology.

TRA succeeded in promoting a safe Cyber environment for all users, government, corporations, and individuals alike in 2009. Through its Computer Emergency Response Team (aeCERT), TRA signed several MoUs with governmental and non-governmental agencies to ensure the safety and protection of their IT infrastructure and online data. 2009 witnessed the birth of "Salim" the Emirati Cyber Security Advisor ,developed by aeCERT as a public awareness tool to provide safety tips and recommendations to computer and internet users. TRA also through its attentive .ae Domain



Administration announced its plan to launch .emarat (. امارات), the UAE was the first Arab country to introduce an Arabic domain name.

TRA participated in several conferences and exhibitions including; 9th International Defense Exhibition & Conference 2009 (IDEX'09), Telecom World Exhibition & Conference 2009, Middle East Communications Conference & Exhibition 2009 (MECOM 2009), and GITEX.

TRA's Board of Directors Endorses Several ICT Policy Issues and Approves the Authority's Budget for 2010

Under the Chairmanship of HE Mohamad Bin Ahmad Al-Qamzi, the Board of Directors of the Telecommunications Regulatory Authority (TRA) held its last meeting for 2009 in December.

During the meeting, the Board endorsed TRA's budget for 2010, and signed off several regulatory and policy related items including fair market competition policy, a number of spectrum related policies, the policy on "spam SMS", several licensing forms The Board also discussed the contractual agreement to establish the "Emirates Foundation for Mobile TV Broadcasting" and the endorsement of an external auditor. Members of the Board were briefed on the proposed Executive Order of the UAE Federal Law by Decree No. 3 of 2003 which is to be submitted to the Cabinet for approval. The Board also discussed several issues related to the ICT Sector in the UAE.

Coinciding with the Launch of the UAE Prize for Excellence in Government Performance, "TRA Launches its Corporate Excellence Program"

In line with the objectives of the Telecommunications Regulatory Authority in encouraging and fostering a corporate culture that promotes innovation and excellence amongst its employees through continuous education and training, The TRA announced the launch of the "TRA Corporate Excellence Program".

The Excellence Program presents a genuine opportunity to demonstrate distinctive competencies amongst employees, to promote innovation and outstanding performance. The Program is centered on developing the institutional framework of the TRA and creating an environment that promotes innovation and creativity amongst its employees, the Program will also focus on motivating them to perform and excel in their respective fields, work commitment, enhance and promote corporate values and loyalty, in addition to nurturing team spirit and a healthy competitive environment.

The program includes six categories covering various disciplines and levels, they are: distinguished manager (supervisor), distinguished employee in technical fields, distinguished employee in engineering fields, distinguished employee in professional fields, distinguished employee in field work, and distinguished employee in managerial fields. The Program will also honor old and new employees who display a unique performance in specific disciplines not covered by the categories.

The participation in the Excellence Program includes several important characteristics as winning one of the Programs awards reflects a clear recognition from the TRA for the performance

H.E Mohammed Nasser Al Ghanim delivered a speech in which he mentioned that achieving advanced global status requires meeting challenges ahead with vigilance while continuously pursuing excellence

of distinguished employees. These employees will present a role model for their colleagues and peers at the TRA. The Program winner will receive a merit certificate and a financial reward during the TRA's annual award ceremony.

TRA Announces Details of the National Emergency Plan for the Telecom Sector

H.E Mohamed Nasser Al Ghanim, Director General of the Telecommunications Regulatory Authority, announced during the 2nd annual Crisis and Emergency Management Conference held in Abu Dhabi from Jan 11-13 2010, the Emergency Plan for the Telecom Sector in the UAE.

The plan comes in response to the directives of the Government of the UAE to develop a National Emergency Plan that covers all vital sectors in the country in case of crisis, as the telecommunications sector is one of the most vital of sectors that becomes even more critical in times of crisis.

The TRA has developed the National Emergency Plan for the Telecom Sector in direct cooperation with the National Crisis and Emergency Management Authority (NCEMA) and in consultation with key stakeholders, Telecom operators, and service providers. That comes from the importance of consultation with key stakeholders as the participation of the key players of the Telecom Sector in the preparation of this plan is crucial and comes to confirm their role in setting and developing the plan, as they will be entrusted with its implementation in times of need.

The plan will also provide the cornerstone for achieving effective and coordinated response

to emergencies related to the sector as well as providing the necessary support to other vital sectors in the country during crisis times. The plan is designed to protect the critical infrastructure of the telecommunications network and clarifies the specific roles and responsibilities of TRA and the Telecom operators in response to measures during emergency situations and crisis times, and hence helps to effectively deal with the situation at hand.

The Emergency Plan for the Telecom Sector is based on TRA's role in regulating the vital Telecom Sector, which the country is dependent on when it comes to rapid and speedy information exchange, especially for classified government organizations in addition to its importance for individuals and corporations alike.. The plan is centered on the role of the telecommunications Sector within a national integrated framework that is fully capable to responding to emergency and crisis situations.

TRA, through developing the emergency plan, has mapped out the sectors processes to determine and analyze areas of strengths, weaknesses, improvements and opportunities, and as such, TRA and in coordination with the key stakeholders, managed to develop a solid framework consisting of the best indicators determining effective measures in dealing with emergency and risk mitigation in times of crisis. The plan includes the main thematic areas governing the process of dealing and responding to emergency situations including: prevention, preparedness, responsiveness, and ultimately recovery.

The plan presents an ideal model covering all the areas related to security and protection of this vital Sector and providing a network of effective



communication in the most difficult and scarce times on the other. TRA strained its full commitment to the implementation of this plan to the fullest while keeping up with up-to-date and advanced technologies necessary to keep pace with rapid changes of this diverse era.

ICANN Approves the String (امارات)

The Telecommunication Regulatory Authority (TRA) has yet to register another millstone with the Internet Corporation for Assigned Names and Numbers ICANN have approved the string .emarat (امارات) as the official Arabic top level domain for the United Arab Emirates. The announcement made by ICANN came after TRA announced the use of the Arabic top level domain name for the UAE in GITEX 2009, providing the approval of ICANN; the (.emarat) was endorsed by the UAE ministerial Council for services as the definitive and representative domain name of the United Arab Emirates on the World Wide Web for its native language script.

The .ae Domain Administration (.aeDA) was established by TRA as the Regulatory Body and Registry Operator for the .ae domain name. aeDA is responsible for enforcement of all policies reference to the operation of the .ae country code Top Level Domain (ccTLD) as well as overseeing the operation of the Registry System.

The International Telecommunication Union (ITU) re-delegated the UAE ENUM space (971) to TRA, which in turn entrusted .aeDA with the management of the whole issue. Since then it has proven to possess an excellent capability to manage the .ae ccTLD from both administrative and technical perspectives in compliance with International Best Practices.

TRA Introduces the Telecommunications' Competition Framework

The Telecommunications Regulatory Authority (TRA), and in keeping with one of its core missions manifested in safeguarding and monitoring competition within the local telecommunications market, announced today the telecommunications' "Competition Framework". The "Framework", the first to be developed by TRA, which provides detailed outline benefiting telecommunications consumers by promoting and protecting competition through deterring Licensees from engaging in activities that may impede competition in the UAE telecommunications sector.

The Competition Framework, that was announced by H.E Mohamed Nasser Al Ghanim, Director General of TRA, during a press conference held at TRA's main Offices in Abu Dhabi, sets out how TRA intends to apply the competition provisions contained in the Telecommunications Law and in the conditions set out in Etisalat's and du's Telecommunications Licenses. The Framework outlines TRA's approach to the definition of specific telecommunications markets in the UAE as well as a methodology for undertaking competition assessments to determine whether any licensee has market power in any of those markets.

Competition frameworks are well established in many telecom jurisdictions such as Europe and the US for example. TRA consulted with several stakeholders during the development phase of the framework, which constituted an important part of the Telecommunications Regulatory Framework in the UAE.

The framework will not only ensure that TRA continues to foster growth and development of the telecommunication sector through the creation of sustainable, vibrant and fair competition, but will also



provide guidance to stakeholders operating in this sector as to what TRA considers an acceptable competitive behavior.

The Framework also provides a detailed exposition of the types of anticompetitive conducts that are most likely to occur in the telecommunications sector in the UAE and provides guidance on how TRA will analyze any such occurrences of these conducts. Finally, the Framework includes a detailed procedure in which affected parties can lodge a complaint of anti-competitive behavior against a Licensee and the processes the TRA will follow to investigate such a complaint.

TRA Announces Recipients of its First Annual “Excellence” Award Program

Keeping in line with the UAE vision in recognizing and acknowledging exceptional performance and achievements, the Telecommunications Regulatory Authority (TRA) announced the award recipients of its “TRA Excellence” program at a large gathering of TRA strategic partners, stakeholders, and employees recognizing outstanding performance and achievements, strategic partnerships, stakeholders, and suppliers, TRA held the first award ceremony at the Emirates palace; H.E Mohammed Nasser Al Ghanim delivered a speech in which he mentioned that achieving advanced global status requires meeting challenges ahead with vigilance while continuously pursuing excellence. Covering

the importance of keeping up with business best practices, employing innovative management and leadership approaches, leveraging human resources, encouraging innovation, and creating a favorable investment client with the ICT Sector remains a major driving force to achieve distinction.

TRA launched the “Excellence” program echoing the vision of the leadership of the UAE reflected in the directives of H.H. Sheikh Khalifa bin Zayed bin Sultan Al Nahyan, President of the UAE, and H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, Ruler of Dubai. The Director General mainly presented TRA’s achievements in 2009; the launch of the Computer Emergency Response Team, the expansion of fixed monitoring systems, automation of TRA services and the launch of the .emarat Arabic domain name. Additionally, TRA developed and revised its strategic directives and plans to coincide with those of the government, while keeping in mind its corporate values.

The Director General announced the “Annual Corporate Excellence” program acknowledging and valuing distinguished human resources that left a mark on TRA. He further added that this program will provide a true opportunity to display TRA’s innovation, sponsorship and honoring of selected achievements and performance in all aspects and categories; supervisory; technical, management, field work, and new employee category.

The Director General finally presented awards to those whom fit the criteria from various categories including: Employees of the Telecom Regulatory Authority, Stakeholders from the private and public sectors, Employees of the stakeholder organizations, and Suppliers.

ISnSC grants a Cross Certification Service Provider Notification to sell SSL & Digital Certificates in UAE by Telecommunications Regulatory Authority

TRA grants ISnSC a Cross Certification Service Provider Notification; Telecommunications Regulatory Authority (TRA) of the UAE. The Notification enables ISnSC to sell SSL certificates, email digital certificates as well as a wide range of high end encryption products.

ISnSC, as a leading information assurance research and development house, provides a full range of high end encryption and digital signature solutions. The notification granted by TRA, empowers ISnSC to provide digital certificates required for ISnSC's wide range of PKI solutions.

TRA is working to achieve highest level of safety and confidence when conducting online business transactions.

ISnSC and Comodo CA came into agreement to outreach for the Middle East & African Markets

out of their mutual confidence in each other's capabilities and the outstanding technical skills that are mainly geared towards customer's satisfaction.

TRA Participates in the First Digital Communications Literacy Forum

The Director General of the Telecommunications Regulatory Authority (TRA), H.E Mohamed Nasser Al Ghanim, participated in the first Digital Communications Literacy Forum organized by ictQatar and the International Institute of Communications (IIC).

The forum tackles the issue of the lack of Arabic digital content on the internet and examined the role which digital literacy can play in the development of the new communications environment in the Middle East region and explores ways in which it can be addressed and creates an advantage to both economic and social objectives.

The forum's uniqueness brings two major players in the field of Arabic digital content creation, traditional media, and the ICT sector. Al Ghanim, in his capacity as TRA Director General and member of the National Media Council, commented on this gathering mentoring that as a result of the changing ICT landscape, digital literacy has been redefined; from innovative content development in Arabic, efficient use of social media, protection

The forum tackles the issue of the lack of Arabic digital content on the internet and examined the role which digital literacy can play in the development



of minors on the internet, to the use of digital content in informal learning and knowledge enhancement.

Al Ghanim mentioned that the Government of the UAE, and under the wise direction of its leadership, is keen on advancing the ICT Sector in the country; as such, TRA is keen in creating a conducive environment to encourage innovation and content creation. TRA has launched several initiatives in this regard, mainly the ICT fund responsible for knowledge wealth creation and management, the Computer Emergency Response Team to support a safe and secured web experience, and “Be’tha” Program to encourage the local talent to benefit from quality education in the ICT field.

The Digital Communications Literacy Forum brought together key players from the region and internationally. It concluded with a roundtable discussion on the range of topics covered.

eco and TRA signs an MOU for long term co-operation in relation to development of the Internet market

The Telecommunications Regulatory Authority (TRA) announced the signature of a Memorandum of Understanding (MOU) with eco – the Association of the German Internet Industry, the largest association of its kind, today with the aim of exchanging information in relation to the

usage of the Internet and developments in the German and UAE markets.

The MOU comes at an important time in the development of the Internet market, as Regulators and industry bodies increasingly face the challenges of promoting the growth of innovative Internet services while continuing to ensure safe and effective online usage.

Founded in 1995 and representing more than 400 Internet companies eco has proven to be a well-experienced partner to support the development process of the Internet industry and its participants in Germany and also Europe – especially regarding topics like infrastructure and technology, content, applications, as well as legal and regulatory matters.

In addition, the German Internet market is one of the biggest in Europe and the way in which it has grown over the last few years is an excellent example of a successful partnership between the Industry and other Stakeholders. Meanwhile the UAE market has also developed very quickly over the past few years. Therefore the signature of this MoU will open doors for further co-operation between the UAE and Germany to benefit from each other’s experience.



The TRA grants Al Yah Satellite Communications Company a Satellite Services License

The Telecommunications Regulatory Authority (TRA) awarded Al Yah Satellite Communications Company (Yabsat) a ten-year satellite services license for the installation, operation and management of a public telecommunications network and provision of satellite telecommunications services in the UAE. Under this license, Yabsat will offer a wide portfolio of voice, data, video and internet connectivity solutions designed to accommodate the demand for emerging applications in the satellite industry like HDTV and other broadband satellite services for both commercial and government bodies in the Middle East, Africa, Europe and South-West Asia. The license comes under the Federal Law Decree No (3) of 2003 and its amendments.

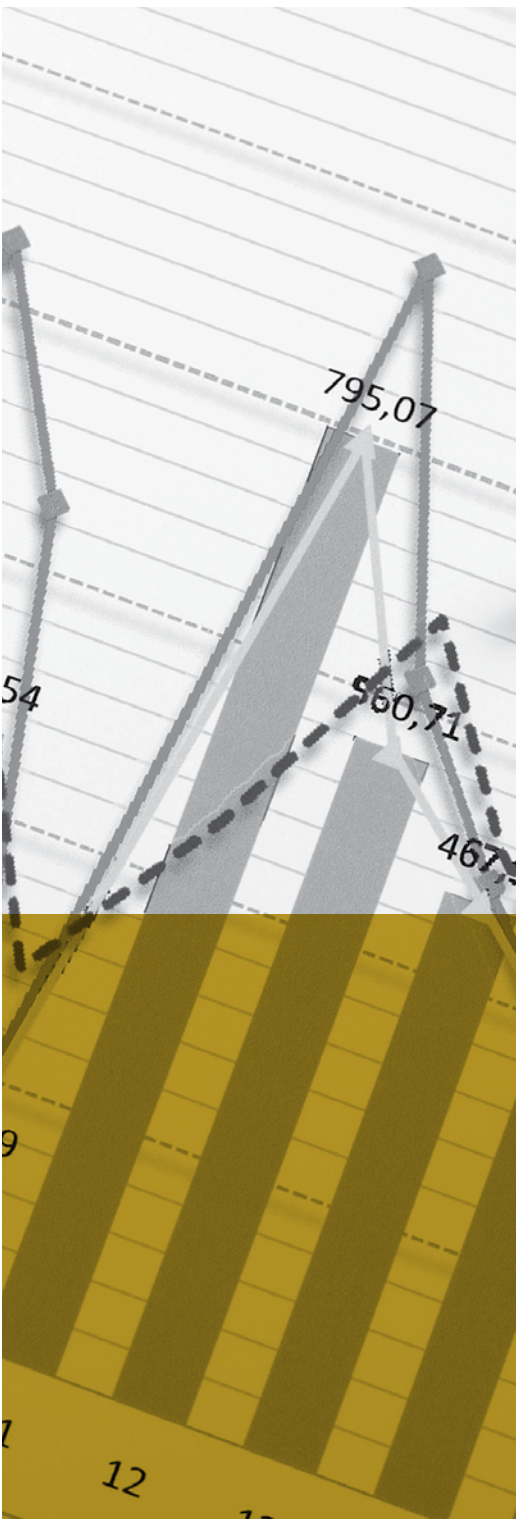
The agreement was signed during a press conference by HE Mohammed Nasser Al Ghanim, Director General of TRA, and H.E Waleed Al Muhairi, Chairman of Yabsat. The press conference was attended by executives and directors of departments from both sides and by the local media.

Licensing Yabsat comes as a confirmation to the role played by the TRA in driving the telecommunications market in the country to compete globally, through this license Yabsat

will provide the region's first multi-purpose satellite telecommunications system. TRA's strategy is aimed at supporting governmental entities and corporations alike in delivering their services and products by facilitating the registration process. The licensing of Yabsat for the installation, operation and management of a public telecommunications network and provision of telecommunications services that TRA issued to Yabsat is a testimony of the support for the ICT Sector.

The TRA's regulatory framework for licensing contains two categories of licenses, individual licenses and class licenses, based on international best practices. In addition this is the first individual license of this nature that the TRA has issued.

Furthermore, TRA's organizational objectives are derived from the UAE Telecommunications Law, its Executive Order and the UAE National Telecommunications Policy. These objectives may be summarized as: ensuring adequacy of telecommunications services throughout the UAE; achieving enhancement of services, both in terms of quality and variety; ensuring quality of service and adherence to terms of licenses by licensees; encouraging telecommunications and IT services within the UAE; promoting and enhancing the telecommunications sector within the UAE; promoting and developing the telecommunications sector in the UAE by training,



development and the establishment of relevant training institutions; resolving any disputes between the licensed operators; establishing and implementing a regulatory and policy framework; promoting new technologies; and ensuring that the UAE becomes the regional ICT hub.

Telecommunications Regulatory Authority Actively Participates in ISNR Abu Dhabi 2010”

TRA organizes workshops and panel discussions under the theme “The Role of Telecommunications in International Security & Risk Prevention” and signs three MOUs with government agencies to improve the security of their ICT infrastructure.

Under the patronage of H.H. General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, International Security and National Resilience 2010 (ISNR) took place from 1-3 March 2010 at the Abu Dhabi National Exhibition Centre. The Telecommunications Regulatory Authority (TRA) sponsored ISNR, the largest event of its kind in the region to address current and future dangers caused by growing security and safety concerns and homeland security. On the third day of ISNR 2010, TRA organized a full day conference on the sidelines of the conference under the theme “The Role of Telecommunications in International Security & Risk Prevention”. This active participation

comes in light of the growing emphasis on cyber safety, especially in national security matters. The full day workshops and panels discussed issues such as Digital & Multimedia Evidence Forensics, National Security in the Information Age, the Criminal Use of Social networks, Introduction to Malware from the Criminal Side, Building Digital Forensics Capabilities, and Trends in International Cyber Law Enforcement: The Dark Side of the Internet. TRA’s conference also included participation of internationally recognized experts and specialists from the field, as well as participation from the UAE.

TRA also had an active participation through its aeCERT stand at the ISNR Exhibition, the stand provided an active point to disseminate knowledge on digital and cyber security, and provided for a platform to highlight potential dangers and threats affecting digital infrastructures. The participation witnessed the signing of three MoUs with government entities; Abu Dhabi Company for Onshore Oil Operations ADCO, Abu Dhabi Health Authority, and Mohammed Bin Rashid Housing Est. to improve the security and safety of their ICT infrastructure by benefiting from the services provided by aeCERT.

Al Ghanim Addresses the 2nd Annual Global Broadband Summit

H.E. Mohamed Nasser Al Ghanim, Director General of the Telecommunications Regulatory Authority

delivered the special keynote address at the 2nd Annual Broadband Summit that took place in Dubai on March 9th to 10th, 2010. The Director General emphasized that in the UAE, broadband is considered an effective tool for positioning the country as a lucrative investment hub on a global scale and the ability of this technology to allow for instant access to and exchange of information is essential to all forms of economic activity.

Al Ghanim explained that new trends in consumers' digital experiences will drive the growth of this market [broadband], and ultimately the offers and pricing options provided by the telecom operators. Internet users today are more educated and digitally literate and are driving the supply of broadband services.

Additionally, Al Ghanim highlighted the role of the Government of the UAE in supporting a state of the art infrastructure that meets modern day ICT needs, untimely providing and allowing for high-speed internet access and services to be delivered to the mass consumer market. his Excellency further added in the speech

that the TRA is working to ensure a favorable market environment with sound infrastructure and a focus on innovation, competition and introduction of new technologies while keeping the best interest of the consumer at hand. In supporting broadband connectivity and accessibility, the TRA is planning to introduce "Bitstream", a commercial access service that will allow both telecom providers an access to the other operator's network, thus increasing broadband competition in the UAE beyond the current regional monopolies. In addition, TRA is looking to further increase broadband competition through the introduction of similar access services such as dark fiber and duct access which will allow each operator to have access to the other operator's cables and ducts.



Events and Conferences

TRA sponsored, hosted and actively participated in several local and regional ICT related events. The Authority participated in the **GITEX Gulf Technology Week 2009** where HH Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE Ruler of Dubai visited TRA's stand at GulfComms.

TRA also participated in the **Middle East Communications Conference & Exhibition 2009 (MECOM2009)**; one of the most comprehensive platforms to offer B2B solutions for the regional communications sector. Furthering its role in promoting a safe cyber environment in the UAE, TRA attended the **Third International Conference on Cyber Crimes "Procedural Aspects"**. TRA's participation for the third consecutive year in the event was extremely successful as the Authority considers similar events an ideal platform to disseminate its awareness messages on the importance of investing in cyber security as a measure against possible future threats against the ICT infrastructure.

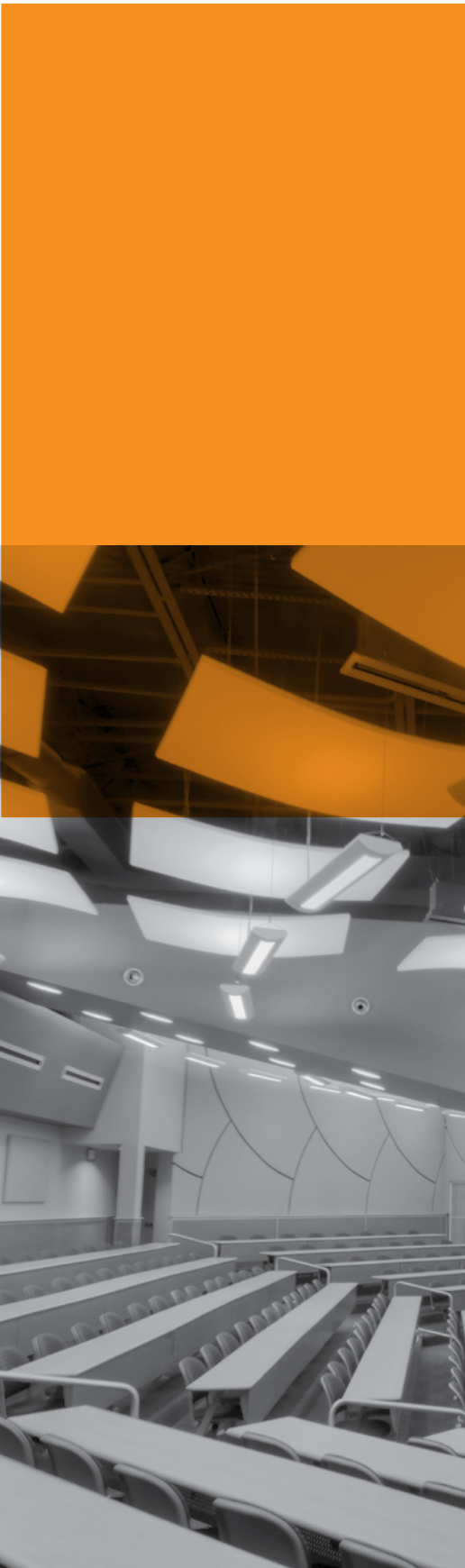
TRA participated in the **9th International Defense Exhibition and Conference 2009 (IDEX'09)** at which TRA presented its services related to monitoring and securing spectrum all over the UAE. The Authority's presence in the Exhibition was highlighted by its stand, with a focus on one of TRA's leading initiatives; the Computer Emergency Response Team (aeCERT). Key senior figures visited TRA's stand including H.H. Gen. Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, and H.E. Sheikh Nahyan Mubarak Al Nahyan, Minister of Higher Education and Scientific Research.

During IDEX'09, TRA a contract with the Technology for Communication International (TCI) to provide the TRA state-of-the-art fixed monitoring stations for 10 million AED in the field of radio frequency (RF) solutions for spectrum monitoring.

During IDFEX'09, TRA also signed an MOU for the establishing the "Telecommunications Regulatory Authority Professor in Information and Communication Technology (ICT)" discipline at the Higher Colleges of Technology. This move by TRA is aimed at providing UAE national students with opportunities to develop skills and careers in ICT from a regulatory perspective.

Arab Delegation Participating in ITU PP-10 Conference

The first Arab group meeting in charge of the preparations for the upcoming Plenipotentiary Conference (PP-10) to take place in Mexico 2010 concluded its meeting in Dubai on December 22nd, 2009.



The three-day meeting, which convened upon the invitation by the Telecommunications Regulatory Authority (TRA) and the sponsorship of both Etisalat and du, was attended by 15 Arab delegations in addition to the representative of the League of Arab States - Cairo, the representative of the Technical Communications Bureau of the General Secretariat of the Gulf Cooperation Council – Bahrain, the ITU – Arab Regional Council, Cairo, in addition to observers and Arab regional organizations. The meeting discussed a number of working papers presented by the UAE, the TRA on behalf of the UAE, introduced several of suggestions and memos on the preparation for the upcoming PP-10 especially on the amendments to ITU's internal policies and treaty. The meeting saw the emergence of joint Arab working papers for the upcoming conference covering several issues of importance dealing with telecommunications policies and the ICT sector in the Arab World.

The meeting also witnessed the support of all participating Arab delegations for the re-election of the UAE to the membership of the International Telecommunications Union Council (ITU) as well as the nomination of Engineer Nasser Bin Hammad, Director of International Affairs at TRA, to the membership of Radio Regulations Board (RRB 12 member council) for the term (2010-2014). Upon the nominations, TRA thanked members of Arab delegates for their support and trust to re-nominate the UAE to the membership of the ITU as well as the nomination of Eng. Nasser Bin Hammad to the RRB 12 member council, which approves Rules of Procedure, used by the Radio communication Bureau in applying the provisions of the Radio Regulations and registering frequency assignments made by Member States.

TRA wished the Arab delegates every success in the planning of shared Arab platform in preparation for the PP-10. Also TRA extended its gratitude for both Etisalat and du for their support and sponsorship of the meeting as well as all the participants from the Arab countries and the delegations from the General Command of the Armed forces, Thuraya Telecommunications Company, and Al Yahsat Holding for the valuable contributions.

The Conference is the key event at which ITU Member States (of 191 countries) decide on the future role of the organization, thereby determining the organization's ability to influence and affect the development of Information and Communication Technologies (ICTs) worldwide. The UAE was elected to the ITU Council in 2006 during the PP-9 conference in Turkey.



The Telecommunications Regulatory Authority - Initiatives



The Computer Emergency Response Team, (aeCERT)

Year 2009 can be described as the year of cyber security and IT safety for TRA and its Computer Emergency Response Team (aeCERT). In its mission to support a digitally safe environment and information security, TRA launched its aeCERT initiative in 2008 to serve as cyber security co-ordination center in the country for the facilitating the detection, prevention and response of cyber security incidents on the Internet.

In 2009 alone, **aeCERT signed over forty three (43) Memorandums of Understandings (MoU) with governmental institutions and private sector entities.** Such MoUs provide the second party with aeCERT's services to enhance the cyber security of their IT infrastructure by providing the following:

- Advisory, education and awareness
- Advisory and communications services
- Monitoring and Response
- Research and Analysis
- Security Quality

aeCERT achievements in 2009 include:

- Research partner with Anti phishing Working Group (APWG); through this partnership, aeCERT now has

the capacity to work on counter-phishing activities. This includes access to the APWG Work Site and working sub-groups, subscription to the APWG news and discussion news list, eligibility to participate in APWG conferences and eligibility to access the Phishing Repository.

- Partnership with International Entities; As part of the requirements of the Coordination Center for Computer Emergency Response Team in the United States, the group is currently coordinating with different computer emergency response teams from different countries, and this step has a significant impact in terms of exchange between the difference in the process of dealing with electronic incidents in the country. The main objective of this initiative is to exchange experiences and create a strategic partnership with international organizations to reduce the negative impacts and losses that may be caused by cyber-crime.
- Establishment of the Honeynet Chapter; Honeynet chapters are part of the Honeynet project, which are developing tools and performing security research. Its goal is to improve the cyber security by sharing lessons learned about the most common threats.
- Penetration Testing; aeCERT penetration testing will attempt to simulate attacks against vulnerable operation systems or software running on a

In 2009 alone, aeCERT signed over forty three (43) Memorandums of Understandings (MoU) with governmental institutions and private sector entities.

constituent's device. It is intended to determine the possibility a successful attack and the impact of the exploitation on the system.

- Establishment of advanced warning system; aeCERT provides proactive services in the form of preliminary alerts and advisories to advisories and constituents to improve their infrastructure and related security processes before any incident or event occurs or is detected, and to enable the provision of early warning and notification of threats, vulnerabilities and exploits to constituents.

- Data Feeds & Analysis; this part deals directly with studying the statistical behavior of the attacks coming to the UAE. The main sources of our feeds in this report are:

- UAE shadow server (drone report)
- ATLAS
- Honeynet

- aeCERT Infrastructure Enhancement; aeCERT underwent infrastructure enhancement to provide the highest quality services to constituents and to guarantee the continuity of services by avoiding any hindrance or delays caused as a result from the weakness of infrastructure. As such, aeCERT is established a redundancy infrastructure that is supporting the main infrastructure in case of any hazard or failure.

- Establishment of Digital Forensics Lab; the establishment of a Digital Forensics Lab helps aeCERT in fulfilling one of its services; to provide supporting forensic services for incident analysis to selected constituents.

- Monitoring & Security Incident Handling; one of aeCERT's main goals is to provide a central trusted point of contact for reporting all cyber security incidents in the UAE and assist its constituents in establishing their Computer Security Incident Response Teams (CSIRTs). aeCERT has worked on 72 different types of security incidents (phishing, compromised





accounts, Website defacement, etc that were either reported by its constituents, other CERTs or discovered through aeCERT's different monitoring tools.

- Issuing Pattern for Electronic Information Security Policy; aeCERT issued The Information Security Policy which is a high-level document used by the organization to put different control measures for protecting their information and information systems. This document highlights the rules, laws and best practices of the information security within the framework of a particular approach of the organization.
- Establishment of advanced warning system; aeCERT provides proactive services in the form of preliminary alerts and advisories to advisories and constituents to improve their infrastructure and related security processes before any incident or event occurs or is detected, and to enable the provision of early warning and notification of threats, vulnerabilities and exploits to constituents. In order to implement this, aeCERT relies on data, gathered from its constituents and other sources to develop actionable intelligence from the analysis of threat, incident and vulnerability data. This information enables aeCERT to deliver short term, reactive information, as well as announcements, guidelines, or recommendations that pertain to longer term security issues.
- Smart Services to Detect Security Vulnerability; in order to sustain a resilient and vigilant ICT infrastructure against a broader set of cyber security threats, aeCERT provides vulnerabilities assessment service to their constituents to increase the security level of their IT infrastructure. The service has been activated on July 2009.


TRA reporting the most growing cyber attacks

Cyber crime incidents are on the rise globally, in the UAE and as per a report by the Telecommunications Regulatory Authority prepared by the Authority's Computer Emergency Response Team (aeCERT), in 2009 alone, the UAE IT infrastructure witnessed 51 cases of e-crime incidents. To bring more attention to this critical issue and its devastating effects on businesses and individuals alike, H.E Mohammed Gheyath, Executive Director of Technology Development Affairs at TRA, participated in a paper highlighting the 2008/2009 major e-Crime incidents during the Crisis and Emergency Management Conference (CEMC) held in Abu Dhabi. The paper presented different aspects of cyber crime incidents that aeCERT has dealt with throughout 2008/2009 and types of such incidents targeting the UAE ICT infrastructure and threatening the very confidentiality of data and information stored electronically.

The paper also contained statistics on the number of these attacks, their destinations and frequency and finally provided some theoretical examples on the nature of such attacks and preventative measures to avoid them from taking place. The types of cyber attacks were categorized as compromised accounts, where aeCERT was able to capture these accounts being used illegally, Email abuse which can be either spam, offensive or fake, the propagation of malware codes and finally the compromised websites either being in the form of defacement or phishing.

Furthermore, one of the most growing cyber attacks on a global scale last year included "Phishing Emails". Phishing is the criminally fraudulent process of attempting to acquire sensitive information such as usernames, passwords and credit card details by masquerading as a trustworthy entity in an electronic communication. Communications purporting to be from popular social web sites, auction sites, online payment processors or IT administrators are commonly used to lure the unsuspecting public. Phishing is typically carried out by e-mail or instant messaging. People receiving phishing emails will be asked to update their profiles including usernames and passwords by providing a link to the fake bank website. Once a user clicks on the link provided by the phishing email, he or she is directed to a website, much similar to their banks' website, which from many cannot be detected as a fraud site. Once the information is updated by the user, hackers get immediate access to their online banking accounts.

Cyber hackers sending and using phishing emails rely mostly on deceiving the user. However banks offering online banking and financial services are investing heavily in securing their ICT infrastructure to prevent hacking of any kind. It is, at this point,



Phishing is the criminally fraudulent process of attempting to acquire sensitive information such as usernames, passwords and credit card details by masquerading as a trustworthy entity in an electronic communication.

aeCERT awareness campaign takes the form of multi-dimensional panels within the specific disciplines in online security and safe cyber environment issues



the awareness and knowledge of the average user to be always aware of attacks that target individuals with minimal knowledge of secure online transactions.

aeCERT receives many forwards from banks and online e-business providers of fraud and scam sites that threaten their business, they are always diligent and alert when it comes to protecting their brands and clients. aeCERT take immediate measures by blocking such fraud sites with the help of local ISPs and inform international organizations such as Anti Working Phishing Group (APWG) of the incident. aeCERTs has future plans to provide their constituents with new services to help minimize cybercrime incidents in the UAE.

TRA's Computer Emergency Response Team Kicks off its Awareness Campaign

Following the signing of several Memorandum of Understandings with various entities in the UAE on issues related to safeguarding the ICT infrastructure and early detection of potential online security threats, The Telecommunications Regulatory Authority (TRA) and through its Computer Emergency Response Team (aeCERT) initiative started a nationwide awareness campaign to educate and train its constituents on enhancing the safety and security of their ICT systems. The campaign covered a three-days workshop with the Abu Dhabi General Services (Musanada) and

will continue to cover all government entities and corporations who signed similar MOUs with TRA. The campaign comes in light of the commitment made by aeCERT to provide their constituents with the required support, guidance and consultancy to safeguard their internal ICT infrastructure and protecting their online data systems from possible threats.

The objective is to create a safe and rewarding ICT environment in the UAE, allowing government entities and business alike to conduct their operations without worrying about threats to their IT infrastructure or online data and information. In addition this awareness campaign is the second step towards instilling a culture of safe and secure online transactions, be it for business or governments. TRA and through aeCERT will continue providing such awareness and training programs to meet this objective.

aeCERT awareness campaign takes the form of multi-dimensional panels within the specific disciplines in online security and safe cyber environment issues, the first campaign with Musanada, which signed an MOU with TRA last year, will include three days of extensive topics covering twelve different themes within cyber security. Main topics of the awareness campaign include: "You are a target, protecting your email account, protecting your mobile, protecting your personal computer, online browsing security,



coding, ICT security, and the information's security policy". The campaign's target group includes four employee types categorized according to their roles and responsibilities.

TRA signed an MOU with the Abu Dhabi General Services (Musnada) in December of last year with the objective of providing surveillance services and early response to possible threats to the IT infrastructure of Musnada, in addition to providing guidance and consultancy services regarding cyber security, research and analysis.

To utilize the Services of Computer Emergency Response Team, HAAD Signs an MOU with TRA

The Health Authority – Abu Dhabi (HA-AD), the regulatory body of the healthcare sector in the Emirate of Abu Dhabi, signed a Memorandum of Understanding (MOU) with the TRA, to improve standards and practices of information security and safeguard the IT infrastructure at the Authority against cyber crime.

The MOU was signed by H.E. Engineer Zaid Al Siksek, CEO of HAAD and H.E. Mohammed Nasser Al Ghanim, Director General of Telecommunications Regularity Authority, during the International Security National Resilience (ISNR) Exhibition and Conference held from 1 – 3 March at Abu Dhabi National Exhibition Centre (ADNEC).

Under the memorandum conditions, the Computer

Emergency Response Team (aeCERT) is to provide HAAD with guidance, education, and awareness on the risks and breaches of the Internet; provide advice on communications systems; information security and control; respond to emergencies and crises; in addition to providing research and analysis on information security.

HE Mohamed Nasser Al Ghanim, Director General of TRA emphasized the importance of working on creating a safe and well secured national digital infrastructure that is protected against all kinds of cyber attacks and possible threats targeted at its ICT infrastructure or at the security of electronically saved data and information. In doing so, TRA employs latest technologies and best practices in the field. This MoU will allow the Health Authority of Abu Dhabi to benefit from the services offered by the aeCERT in the fields of guidance, education, and awareness, surveillance assistant in addition to research and analysis of current situation and future threats related to cyber security.

The MOU does not specify a time frame to this cooperation and does not impose any contractual obligations on the parties, but it opens the door for further cooperation in the future.



HE Mohamed
Nasser Al
Ghanim, Director
General of TRA
emphasized
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infrastructure



إدارة أسماء نطاق الإنترنت
Domain Administration

The .aeDomain Administration (.aeDA)

Launched by TRA in 2007, the .aeDomain Administration is responsible for operating and managing the .ae country code Top Level Domain (ccTLD). In doing so, it continues to work on developing, revising and reviewing .aeDA policies and regulations to meet the growing market needs.

The .aeDA succeeded in announcing the .ae as the definitive and sole representation of the UAE on the Internet in 2008. Following the announcement, it launched two main awareness campaigns with the aim of raising public awareness on the .ae domain name. The campaigns have been successful in reaching the desired target audience; in 2009, number of registered .ae domain names reached 85,000. In addition, TRA accredited "Injazat Data Systems" as registrar of the UAE national domain name (.ae); increasing number of accredited registrars to 10 registrars, three of which are based in the UAE.

2009 marked the approval of the Internet Cooperation for Assigned Names and Number

(ICANN) for the use of (.emarat - إمارات) as the official Arabic top level domain for the UAE. The Telecom Authority has announced its application for the operation of the Arabic domain name in GITEXT 2009; the application was approved by ICAN two months after; the UAE is one of four countries approved to use domain names other than Latin scripts.

The (.emarat) was endorsed by the UAE ministerial Council for services as the definitive and representative domain name of the United Arab Emirates on the World Wide Web for its native language script. To ensure smooth operation of the .emarat domain name once it is launched officially, the .aeDA has invited all .ae accredited registrar for a three month trial of the Arabic domain name and provide their respective feedback.

Fulfilling one of its roles in facilitating the .ae Dispute Resolution Policy, the .aeDA issues two policy enforcements in 2009:

- Decision Policy deleted more than 73 domains which violated .aeDA polices
- New domains added to reserve list which were subject to cyber squatter



<p>ENUM 1.7.9.e164.arpa re-delegation to TRA</p> <ul style="list-style-type: none"> • Study conducted for re-delegation from administrative and technical perspectives • ITU approval was obtained • UAE ENUM re-delegation was technically completed to be managed at .aeDA DNS infrastructure platform 	01/06/09
<p>Conducting new gTLD application process and procedure for EDTDA & ICT</p> <ul style="list-style-type: none"> • Analysis of new gTLD guide book. • Application procedure & process. • Application requirements and fees. 	04/04/09
<p>Submitting UAE IDN fast track application for الإمارات (is it the same as applying for .emarat to ICANN)</p>	16/11/09

**Following the Opening and the Renaming of “Burj Khalifa”
TRA Secures the Domain Name burjkhalifa.ae**

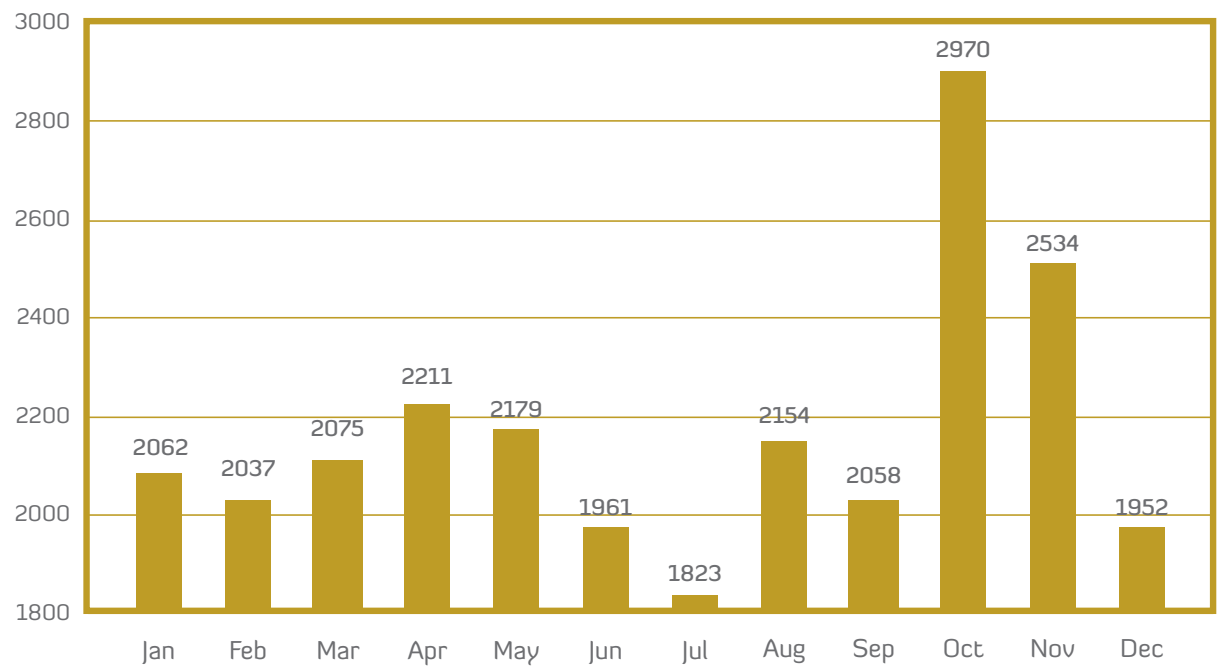
During the live radio show covering the opening of the legendary UAE icon, Burj Khalifa, and the difficulties of finding available domain name for Burj Khalifa as the show mentioned the unavailability of (burjkhalifa.com), TRA announced that it has immediately reserved the domain name (burjkhalifa.ae) upon the announcement of the renaming of the UAE iconic structure.

TRA reserved the domain name to protect the rights of the authorized entity entitled to this domain, to protect the intellectual property rights, and to safeguard the domain from cyber squatters.

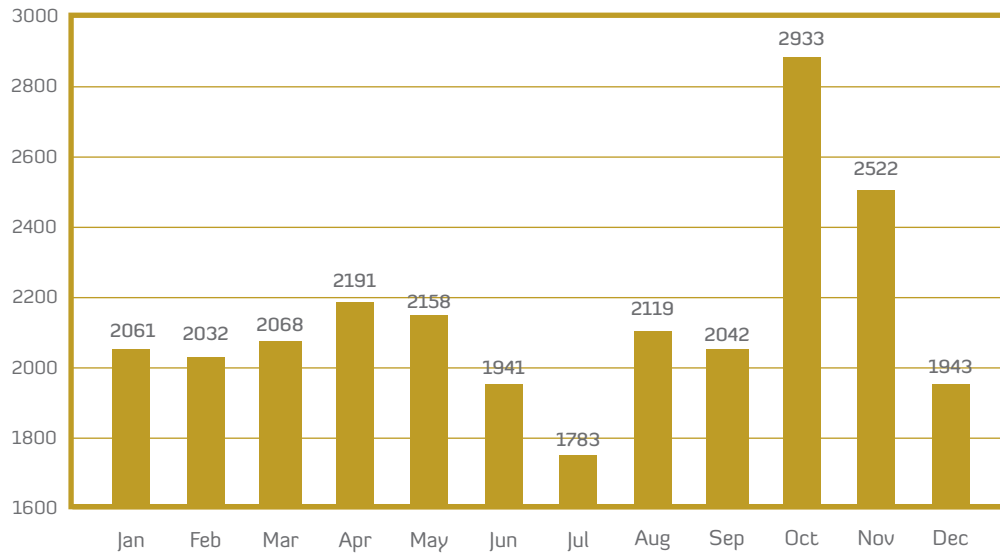
The move by TRA comes to protect the .ae ccTLD and encourage the use of the .ae domain name space. The .ae domain name is secured by well defined polices and regulations by TRA, contrary to the .com domain name. TRA has launched last year, and through the .aeDomain Administration initiative, a nation-wide campaign with the aim of making the .ae domain name the definitive and default location where the Internet using public of the UAE can be represented in the World Wide Web.

.aeDA EOM Report to the
TRA Total Registrations Scorecard
December 2009

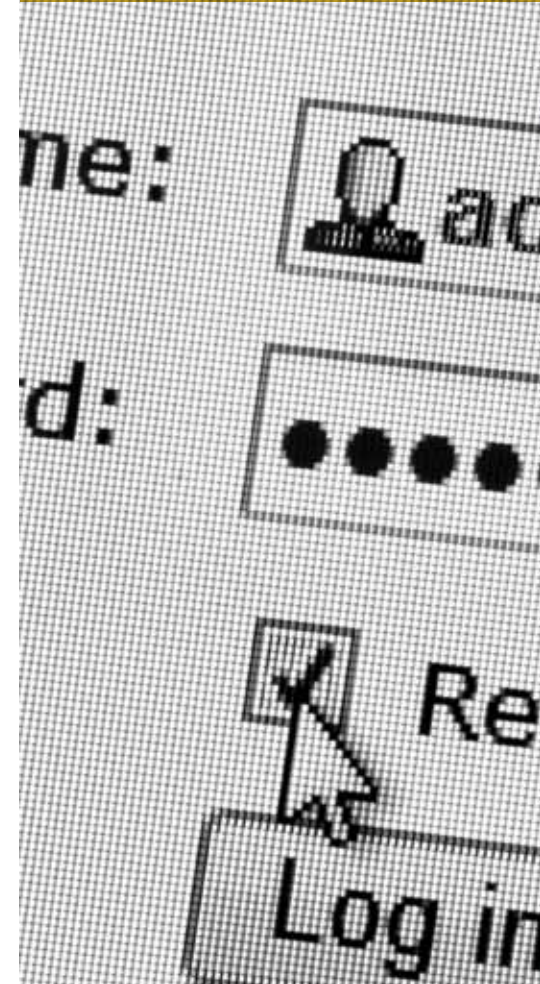
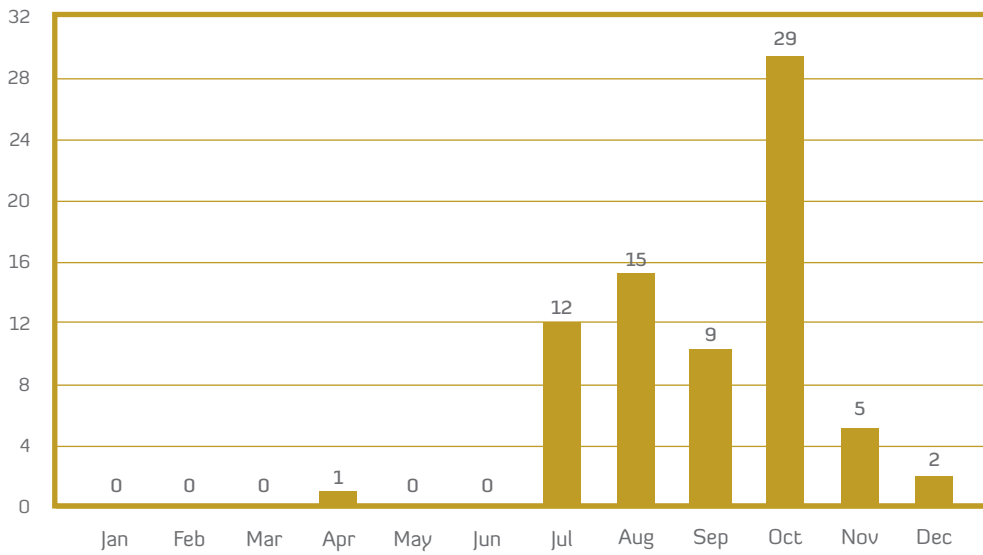
Total (2009 January-2009 December)



.ae (2009 January-2009 December)



.co.ae (2009 January-2009 December)





Be'tha

TRA launched its scholarship program "Be'tha" with the goal of creating a specialized and well trained ICT human force in the country. Betha supports national education efforts by matching the educational output with the needs of the evolving job market, focusing on providing scholarships in the leading scientific, telecom and IT specializations and majors.

TRA mapped current human national potential in the ICT sector; as a result, findings showed that the current number of UAE nationals specialized in the ICT sector is far less than the market need, especially with the expanding and rapid growth of this vital sector. TRA, and through Be'tha, provides fully funded scholarships for academically distinguished students all



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over the country to study in the world's leading universities abroad, as well as at local universities, majoring in ICT and related subjects. TRA signed several agreements with local universities to provide scholarship opportunities to local students; mainly with Khalifa University of Science, Technology and Research and with the American University of Sharjah. TRA also signed an agreement with the Scholarship Coordination Office of the UAE, to sponsor national students to study ICT academic programs in Ivy-league and world class educational institutions.

Betha provides students with several opportunities during and after the completion of the scholarship program, mainly:

- Up to five years waiver of tuition and administrative fees to complete a Bachelor's
- Guaranteed employment at the UAE Telecommunications Regulatory Authority after graduation
- Opportunity for UAE nationals to develop skills and knowledge in the field of Information Technology from highly reputable American universities
- Opportunity to fulfill the UAE growing need for highly qualified Information Technology specialists and to succeed in the professional workforce

In 2009, TRA signed an Agreement with American University of Sharjah (AUS) to sponsor 50 UAE national students to study telecommunications engineering and related subjects at AUS. The Agreement aims at fulfilling the increasing demand for national human resources specialized in the ICT domains and relevant majors as the number of national graduates in these domains remains low and does not cope with the present rapid progress of the sector and its expected future development.

Number of Students in Betha

American University of Sharjah (AUS)
16 students

Khalifa University of Science,
Technology & Research (KUSTAR)
26 students

The Scholarship Coordination Office
71 students



ICT Fund

Considered to be the first of its kind in the Arab world, the ICT Fund was initiated by TRA to achieve rapid, progressive and concrete developments within the ICT sector in the UAE. The Fund launched its operations to jumpstart innovation within the sector mainly in the fields of intellectual capital, technological leadership, smart research, innovative ideas, and incubating start-ups. The Fund's Board of Trustees is chaired by TRA, and encompassing high level professionals and dignitaries from the ICT private sector, academia, and telecom operators of the UAE (Etisalat and du); both contributing to 1% of their annual net profit towards financing the Fund's operations.

TRA has signed an agreement with the Khalifa University for Science, Technology and Research (KUSTAR) through which the ICT Fund will support the establishment and funding the Advanced Network for Research and Education. The 60 million AED project will provide a network connecting academic and research institutions at speeds typically multiple times faster than commercial Internet. It facilitates research collaboration by providing access to databases and supercomputers. It is also used for teaching through rich multimedia content and high-definition video conferencing.



صندوق الاتصالات ونظم المعلومات
Information Communication & Technology Fund

Considered to be the first of its kind in the Arab world, the ICT Fund was initiated by TRA to achieve rapid, progressive and concrete developments within the ICT sector in the UAE.



Corporate Social Responsibility (CSR)

From the beginning TRA, its values and corporate culture have been grounded in a commitment to make a positive impact on the UAE community. While Corporate Social Responsibility is embedded in its core business operations and initiatives, the Authority continues to place a strong emphasis in its ability to produce a tangible impact through a well-thought approach to sound citizenship and social work.


TRA is currently in the process of developing a CSR policy that reflects its commitment towards a competitive ICT landscape, a skilled national human capital, and a social vibrant society.

Local CSR activities in 2009:

- **Blood Donation Campaign:** over x number of TRA's staff participated in a blood donation campaign.
- **Donation of free .ae domain names** to various local entities and individuals in a step towards raising public awareness on the .ae domain name and supporting local

talents. The .aeDA donated 50 domain names to young Emirati talents, a domain name to Sha3bia Al Cartoon and several domain names to local journalists

- **Echo of Silence** (requested information on updated not received)
- TRA supported the execution of the mega sporting event "Formula One" that took place in Abu Dhabi- in 2009. TRA and through its Spectrum Affairs Department, ensured the event enjoyed harmless wireless communications. TRA deployed a field office at Yas Marina and participated from the initial RF survey to the arrival of teams and actual event itself. With more than 1500 frequency assignments for different type of wireless network, only those that were found to be harmful were reported and resolved.



TRA supported the execution of the mega sporting event “Formula One” that took place in Abu Dhabi- in 2009.

On the international level, the Telecommunications Regulatory Authority has demonstrated its global citizenship by supporting and financing the ICT Exploratorium. The Exploratorium, managed by the ITU and headquartered in Geneva, will provide for an interactive information center for visitors on latest and exciting development in the ICT sector. In addition, it will portray the ITU’s role in its mission to “Connect the World”.

The Exploratorium will feature interactive exhibits showcasing cutting-edge ICT systems and their role in transforming the way people live and interact. It will also host periodic rotating exhibitions on key topics, such as new inventions, emergency communications, ICTs and climate change, and the future of the Internet.

The UAE became the Founding Partner of the new learning centre, through a donation of USD 2 million towards its design and construction. A voluntary agreement between the Administration of United Arab Emirates and the ITU was signed at Abu Dhabi on the 8th November 2009. The TRA will be identified as the co-founding partner of ICTE (opening planned in 2010), in all publications and promotion material related to this Exploratorium.

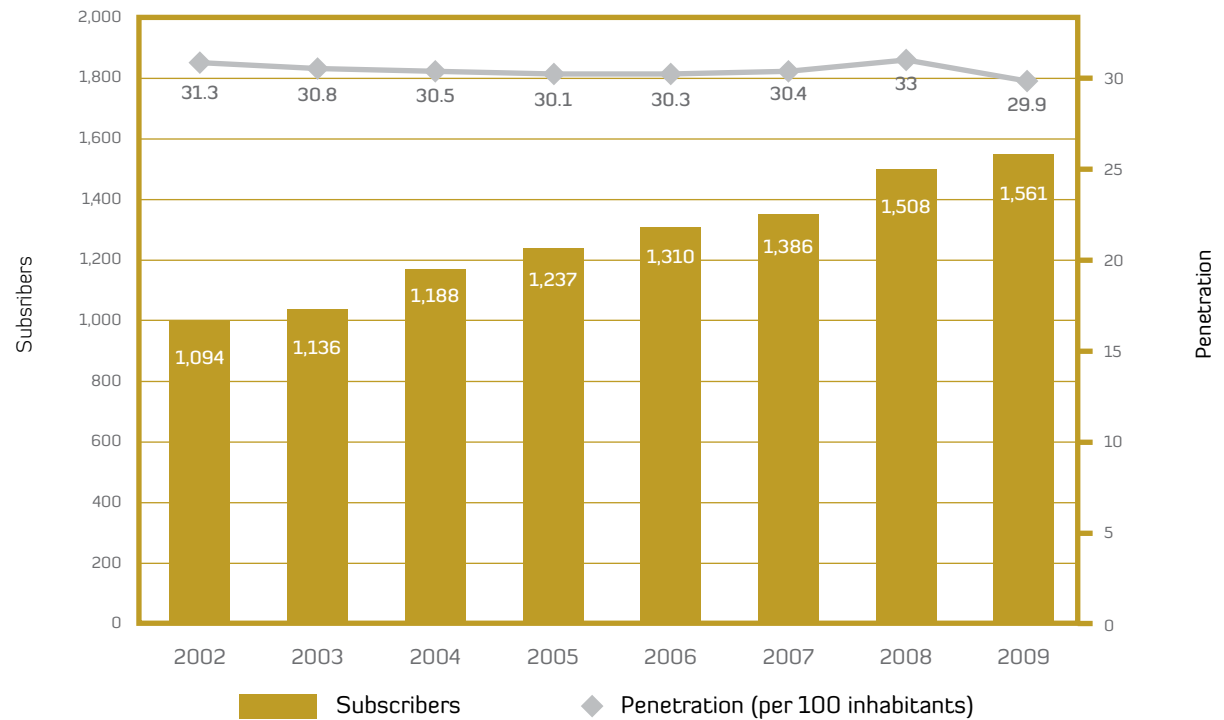
The UAE ICT Sector

Reporting Growth, Success and International Recognition

The UAE ICT sector is one of the advanced markets in the Arab World. The UAE lead the world in terms of mobile penetration rates reaching over 200% penetration rate by the end of 2009 as well as sector readiness and regulatory environment¹. We have also finalized the first ever extensive ICT survey in the UAE; of which TRA presents a full mapping of all related indicators and figures related to the sector. The survey conducted was developed and executed based on best practices in the field and well defined indicators consistent with international ICT standards and definitions.

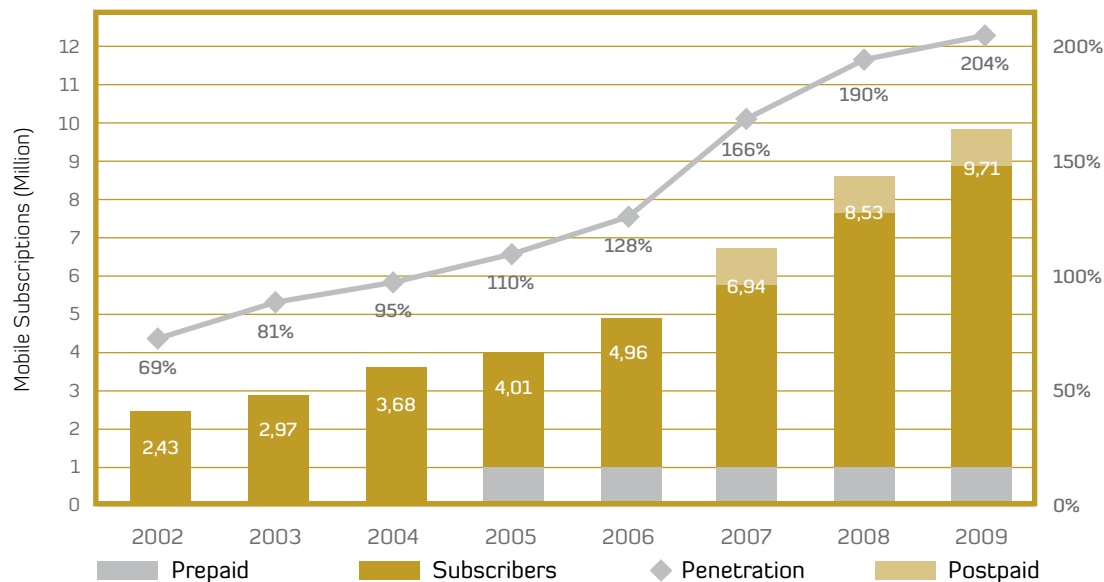
Summary of main ICT indicators are included in this report

Fixed Telephone Lines (2002-2009)



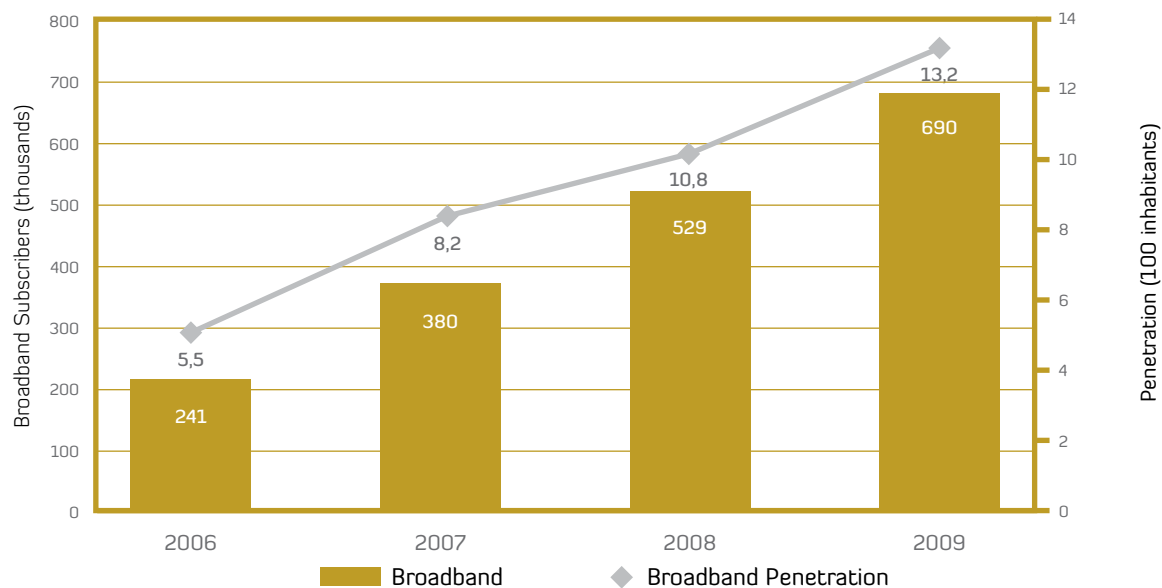
The number of fixed lines reached 1.56 million in 2009, an increase of 3.5% over 2008. However, fixed line penetration fell for the first time since 2005 to 29.9 lines per 100 inhabitants.

Mobile Market Subscriptions (2002-2009)



Mobile subscriptions grew by 14% to reach 10.67 million in 2009, which represents a penetration rate of 204% active subscribers, of which 91% are prepaid, accordingly the UAE ranked one of the highest rates of mobile penetrations in the world.

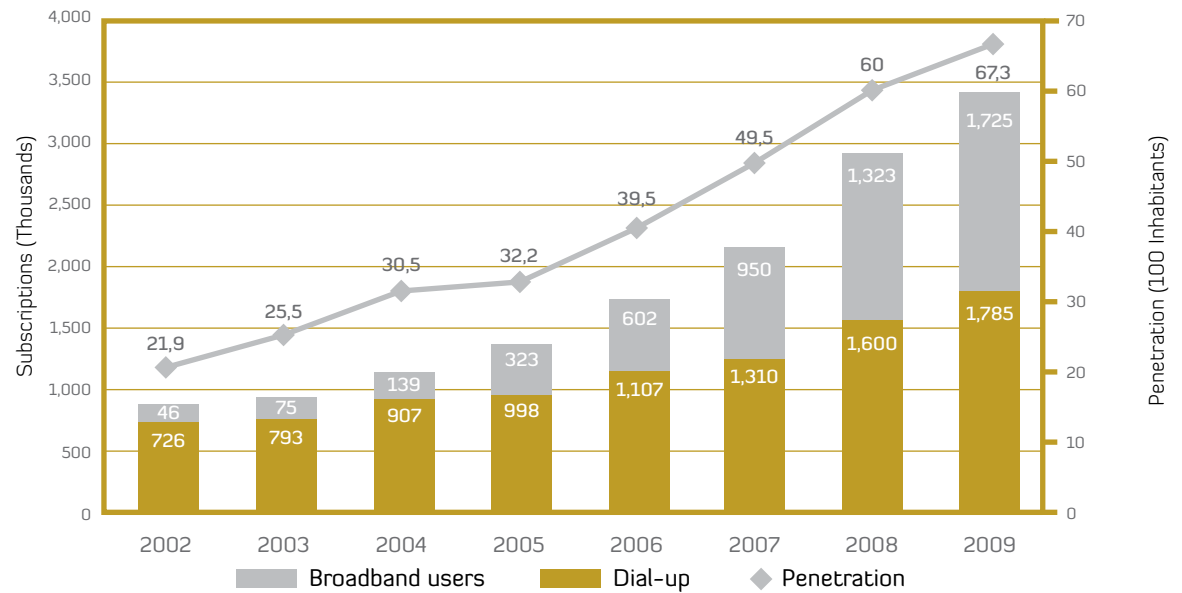
Broadband Subscribers (2006-2009)



Broadband subscribers grew to 690 thousand in 2009, an increase of 30% over 2008 and a penetration rate of 13.8 subscribers per 100 inhabitants in 2009. Since the introduction of the TRA the number of Broadband subscribers have grown by 186%.

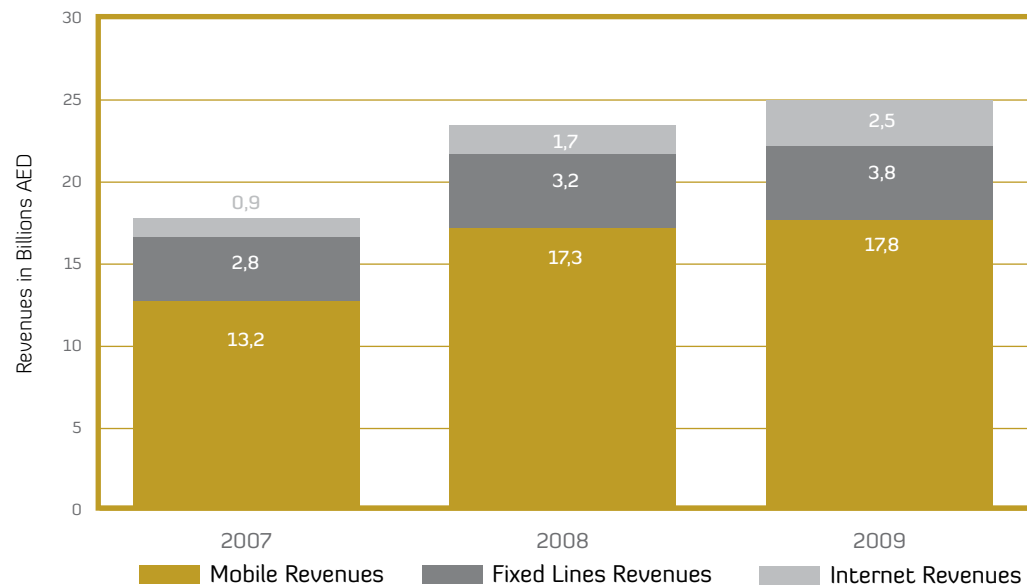


Internet Users (2002-2009)



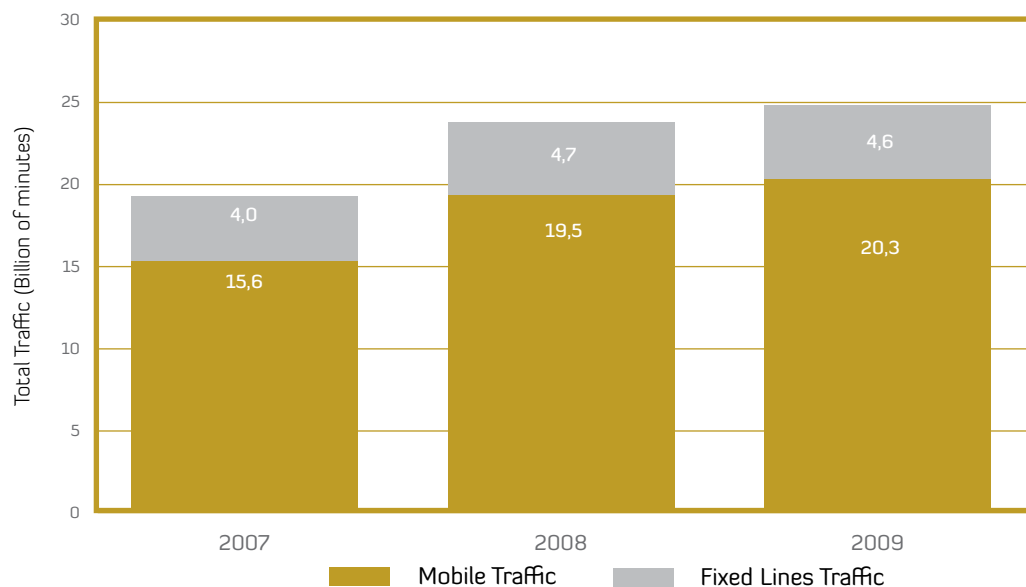
Based on the ITU measure of 2.5 users per subscription, Internet users grew to 3.5 million users in 2009, an increase of 20% over 2008. Broadband users constituted 1,725 thousand internet users or 49% of total internet users. Interestingly, dial-up internet users still constitute a significant proportion of total Internet users and have continued to grow year-on-year. Total internet penetration continued to increase to 67.3 internet users per 100 inhabitants in 2009.

Total Revenues (2007-2009)



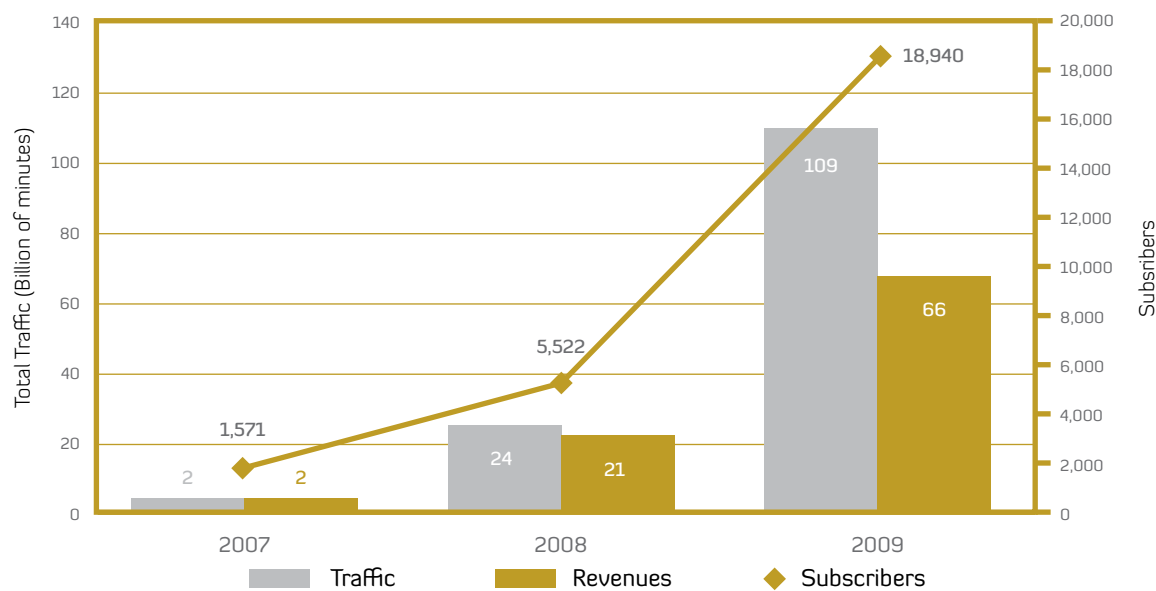
Telecommunications revenues have grown from AED 16,9 Billion in 2007 to 24,1 Billion in 2009, a growth of 43%. Mobile revenues constitute the largest percentage of total revenues at 74%.

Total Traffic (2007-2009)



Despite a fall in total traffic between 2008 and 2009, traffic between 2007 and 2009 grew by 27% from 19,6 Billion minutes in 2007 to 24,8 Billion minutes in 2009. Mobile traffic constitute the largest percentage of total traffic at 82%.

Carrier Selection Traffic and Revenues (2007-2009)



Following a slow start, since its introduction in 2007 Carrier Selection has grown significantly to reach 18,9 thousand subscribers in 2009.



The UAE ranked the first of all the Arab states in the 2009-2010 Networked Readiness Index (NRI) study issued by the World Economic Forum and 23th among all 134 countries assessed.

UAE Rankings in International Studies and Reports

A number of recently published international studies demonstrate the UAE's favorable performance from an international perspective across various ICT indicators.

The UAE ranked the first of all the Arab states in the 2009-2010 Networked Readiness Index (NRI) study issued by the World Economic Forum and 23th among all 134 countries assessed³. The NRI measures the capacity of an economy to fully leverage ICT for increased competitiveness and development. The NRI study was published in The Global Information Technology Report 2009-2010 and is based on data collected by organizations such as the International Telecommunications Union (ITU), the World Bank (WB), and the United Nations (UN).

According to the Report, the UAE has scored very favorably leading most 134 countries and all Arab countries on major variables as per the below table:

Strengths (Economy's 10 best ranks)	
Variable Name	Rank
Mobile telephone subscriptions (hard data)	1
Government procurement of advanced technology products	2
ICT use and government efficiency	2
Government success in ICT promotion	2
Importance of ICT to government vision of the future	2
Extent and effect of taxation	3
Prevalence of foreign technology licensing	4
Government prioritization of ICT	4
Firm-level technology absorption	4
Total tax rate (hard data)	4

³ The Global Information Technology Report 2009 - 2010 – World Economic Forum and INSEAD

UAE ranked eighth in the world in the availability of the latest technologies, ahead of Canada and Netherlands, and was ranked tenth in the world in terms of laws and legislations related to information technology right behind the United States of America which ranked ninth.

According to the findings of the report, the UAE has been ranked high on the elements that were evaluated to measure performance in the field of information and communication technology; ranking second in the world with regard to readiness of the government, and ranking second in the world in the field of government efficiency, which reflects the government's success in applying information and communication technology across the government departments and used to enhance the performance and services provided.

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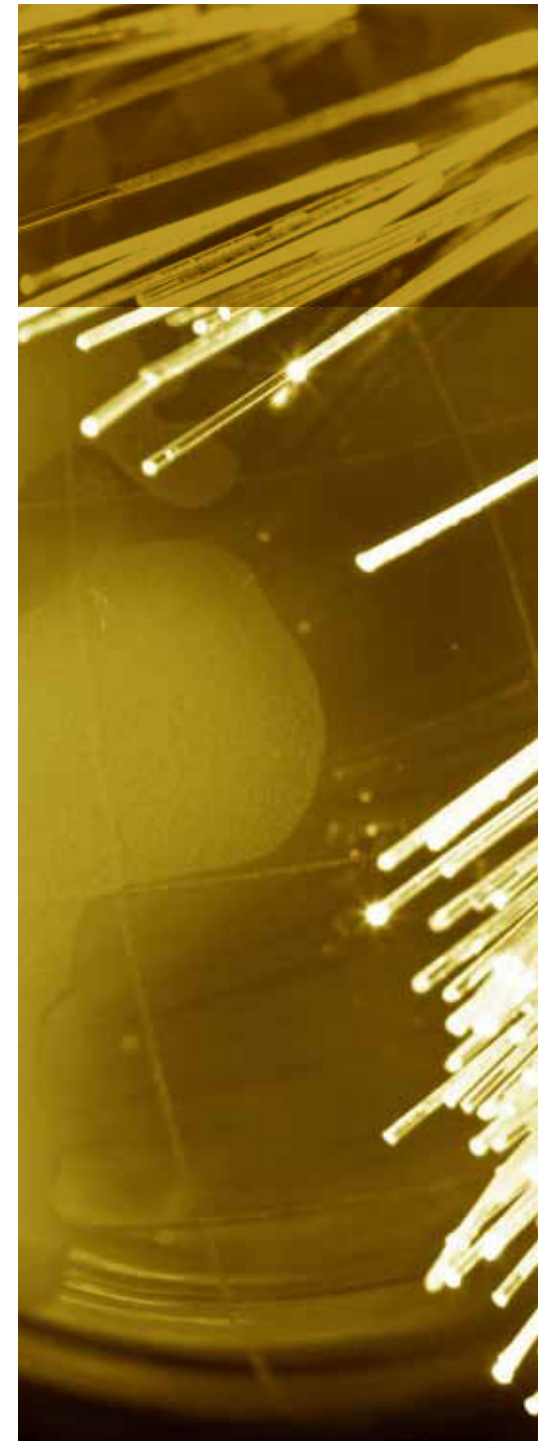
The report ranked the UAE thirteenth globally in terms of availability of venture capital to investors with innovation and creativity projects, and fifteenth globally in the protection of

intellectual property including anti-counterfeiting measures. These ratings reflect the significant progress that has been made in empowering young local talent and harnessing national resources to supply the market with goods and innovative services, as stated in the UAE Vision 2021.

Thank you and Acknowledgements

The Telecommunications Regulatory Authority of the UAE would like to acknowledge the following for their support to the Authority and to the ICT sector development in the Country

- The Government of the UAE
- Government of Abu Dhabi
- Board of Directors
- Industry Stakeholders
- Media
- TRA staff



World Trade Organization Meetings - Free Trade Negotiations

The Telecommunications Regulatory Authority is very active in participating and advancing its Free Trade Agreements with the World Trade Organization. It has attended and actively participated in the following high-level meetings and negotiations:

- Trade Policy Review document for Ministry of Foreign Trade used as a model for all UAE entities.
- Australia/GCC - handled telecom sector negotiations on behalf of the UAE Ministry of Foreign Trade for the GCC. Assisted the Ministry of Economy negotiating the Competition Chapter.
- FTA negotiating meeting for GCC/ Turkey
- Participated in WTO trade in services conference in Geneva
- Submitted comments to Ministry of Foreign Trade regarding drafting edits to GCC-Aus free trade agreement
- Ministerial meeting in Geneva



Financial Statements
31 December 2009

Independent Auditors' Report to the Board of Directors of Telecommunications Regulatory Authority

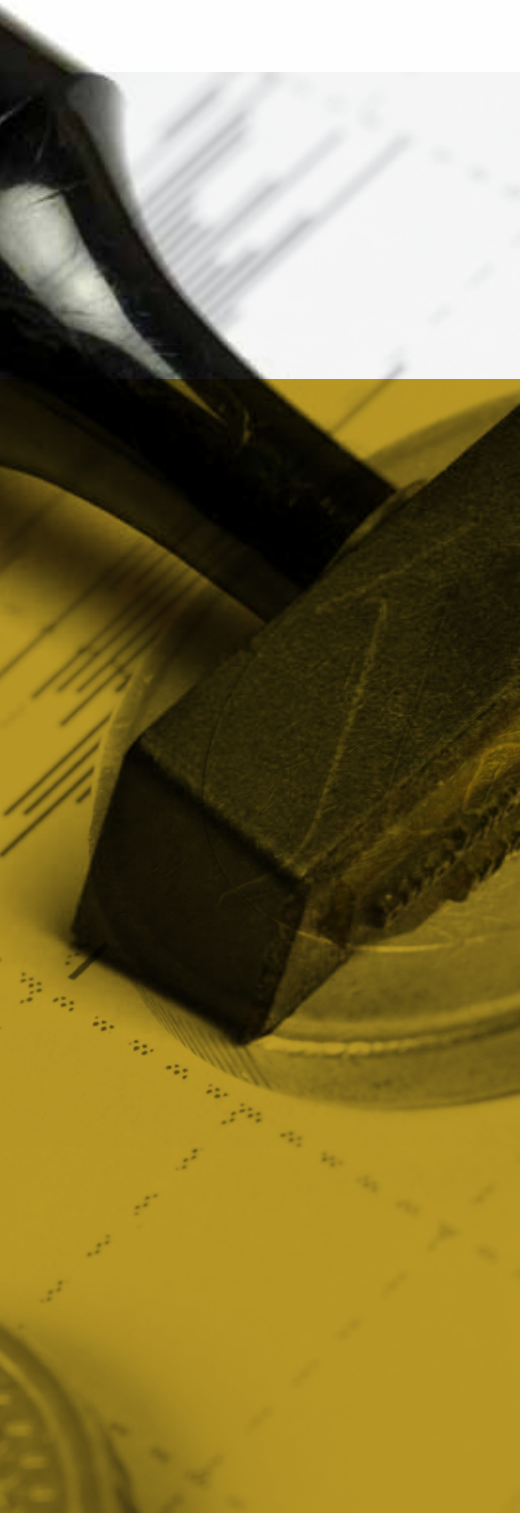
Report on the Financial Statements

We have audited the accompanying financial statements of Telecommunications Regulatory Authority ("the Authority"), which comprise the balance sheet as at 31 December 2009 and the statement of income and expenditure, statement of changes in accumulated surplus and cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory notes.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the accounting policies outlined in note 2 to the financial statements. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.





Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements presents fairly in all material aspects the financial position of the Authority as at 31 December 2009, and of its financial performance and its cash flows for the year then ended in accordance with the accounting policies outlined in note 2 to the financial statements.

Ernst & Young

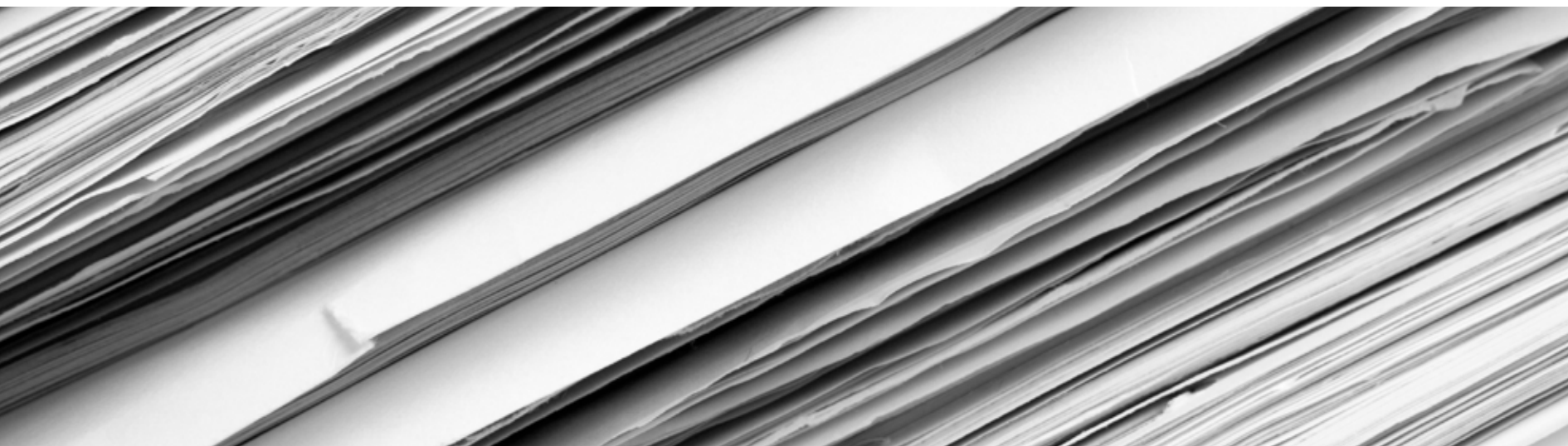
27 February 2010

Abu Dhabi

Statement of Income and Expenditure

For the year ended 31 December 2009

	Notes	2009 AED	2008 AED
Income			
Licenses and authorizations	3	374,908,737	305,734,191
ICT Fund's contribution from licensees		316,529,888	212,071,357
Interest income		32,187,415	31,069,307
Other income		20,744	389,804
		723,646,784	549,264,659
Expenditure			
Staff cost		82,117,247	53,085,474
Scholarships/ICT fund expenses		32,420,168	22,122,087
Sponsorship, advertisement and exhibition expenses		45,392,291	14,147,769
Consultancy fees		25,644,904	24,244,224
Rent		11,036,247	10,612,343
Depreciation & amortization	4&5	10,090,685	7,534,978
Training, seminars and publications		9,505,914	6,754,789
Other expenses		15,533,170	14,042,909
		231,740,626	152,544,572
SURPLUS OF INCOME OVER			
Expenditures for the Year		491,906,158	396,720,087



Balance Sheet

At 31 December 2009

	Notes	2009 AED	2008 AED
ASSETS			
Non-current assets			
Property, plant and equipment	4	77,391,174	32,705,105
Intangible assets	5	7,850,636	5,110,137
Supplier advances		67,000,881	24,770,126
		152,242,691	62,585,368
CURRENT ASSETS			
Trade and other receivables	6	78,966,980	137,610,019
Prepayments		13,561,001	6,651,539
Investments	7	406,732,500	-
Cash and cash equivalents	8	273,754,119	415,193,249
		773,014,600	559,454,807
Total assets		925,257,291	622,040,175
ACCUMULATED SURPLUS AND LIABILITIES			
Accumulated surplus			
Accumulated surplus		841,559,284	549,653,126
Non-current liabilities			
Provision for end-of-service benefits	9	2,145,169	1,228,485
Retentions		4,614,680	1,164,178
		6,759,849	2,392,663
CURRENT LIABILITIES			
Trade and other payables	10	76,938,158	69,994,386
Total liabilities		83,698,007	72,387,049
Total accumulated surplus and liabilities		925,257,291	622,040,175

Cash Flow Statement

For the year ended 31 December 2009

	Note	2009 AED	2008 AED
OPERATING ACTIVITIES			
Net surplus for the year		491,906,158	396,720,087
Non-cash adjustments to reconcile surplus for the year to net cash flows:			
Depreciation and amortization		10,090,685	7,534,978
Provision for end of service benefits charge		1,047,760	822,448
Loss on disposal of property, plant and equipment		39,106	41,283
Interest income on fixed deposits		(32,187,415)	(31,069,307)
Working capital adjustments:			
Decrease in trade and other receivables		58,643,039	2,772,903
(Increase)/decrease in prepayments		(6,909,462)	576,604
Decrease in long term receivables		-	134,038,577
Increase/(decrease) in trade and other payables		6,943,772	(171,274,569)
End of service benefits paid during the year		(131,076)	(166,924)
Net cash flows from operating activities		529,442,567	339,996,080
INVESTING ACTIVITIES			
Purchase of property, plant and equipment and intangible assets		(57,596,861)	(31,335,772)
Increase in retentions related to above purchases		3,450,502	674,646
Advances paid to contractors for capital work in progress		(42,230,755)	(20,391,452)
Proceeds from disposal of property, plant and equipment		40,502	33,000
Interest received on fixed deposits		32,187,415	31,069,307
Placements of fixed deposits		(406,732,500)	-
Proceeds on maturity of fixed deposits		-	197,146,200
Net cash flows (used in) from investing activities		(470,881,697)	177,195,929
FINANCING ACTIVITIES			
Payments to the Ministry of Finance		(200,000,000)	(700,000,000)
Net cash used in financing activities		(200,000,000)	(700,000,000)
NET (DECREASE) IN CASH AND CASH EQUIVALENTS			
Cash and cash equivalents at 1 January		415,193,249	598,001,240
Cash and Cash Equivalents at 31 December	8	273,754,119	415,193,249

Statement of Changes in Accumulated Surplus

For the year ended 31 December 2009

	AED
Balance at 1 December 2008	852,933,039
Payment to Ministry of Finance	(700,000,000)
Surplus of income over expenditure for the year	396,720,087
Balance as at 31 December 2008	549,653,126
Payment to Ministry of Finance	(200,000,000)
Surplus of income over expenditure for the year	491,906,158
Balance as at 31 December 2009	841,559,284



1. General

Telecommunications Regulatory Authority (“the Authority”) was established as a federal independent public authority, for the purpose of regulating the telecommunication sector in the United Arab Emirates (UAE), under Article (6) of Telecom Law (Federal Law by Decree No. 3 of 2003). The Authority is governed by Federal Law (Decree No. 3 of 2003 and its Executive Order). The registered office of the Authority is P.O Box 26662, Abu Dhabi, United Arab Emirates.

The Authority derives its strategic objectives from the UAE Telecommunications Law, the Executive Order, and the UAE National Telecommunications Policy. As such the Authority is mandated to: ensuring adequacy of telecommunications services throughout the UAE; achieving enhancement of services, both in terms of quality and variety; ensuring quality of service and adherence to terms of licenses by licensees; encouraging telecommunications and IT services within the UAE; promoting and developing the telecommunications sector in the UAE by training, development and the establishment of relevant training institutions; resolving any disputes between the licensed operators; establishing and implementing a regulatory and policy framework; promoting new technologies; ensuring that the UAE becomes the regional ICT hub; developing the country’s human capital; and encouraging research and development

2. Significant Accounting Policies

2.1 Basis of preparation

The financial statements have been prepared under the historical cost basis and presented in United Arab Emirates Dirhams (“AED”), which is the functional currency of the Authority.

These financial statements have been prepared using policies established by the Board of Directors and described below.

2.2 Revenue recognition

License fees

License fees are recognised as and when the license is granted, which is usually the agreement date.

Spectrum fees

Spectrum fees are recognised when the basis for these fees can be measured reliably, in accordance with the relevant agreements, and it is probable that the economic benefits associated with such fees will flow to the Authority.

Numbering fees

Numbering fees are recognized on receipt of funds or on confirmation from the licensee regarding acceptance of final invoice.

ICT Funds contribution

Contributions from licensees are recognised one year in arrears.



Interest income

Interest income is accrued on a time basis, by reference to the principal outstanding and at the interest rate applicable.

2.3 Sponsorship, scholarship and ICT fund expenditures

Sponsorship, scholarship and ICT fund expenditures are recognized as expense upon payment.

2.4 Property, plant and equipment

Plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Such cost includes the cost of replacing part of the plant and equipment when that cost is incurred, if the recognition criteria are met.

Depreciation is calculated on a straight line basis over the estimated useful lives of the assets as follows:

Leasehold improvements	over 5 years
Computer hardware	over 3 years
Furniture and fixtures	over 5 years
Frequency monitoring equipment	over 5 years
Office equipment	over 4 years
Vehicles	over 4 years

The carrying values of property, plant and equipment are reviewed for impairment when events or changes in circumstances indicate the

carrying value may not be recoverable. If any such indication exists and where the carrying values exceed the estimated recoverable amount, the assets are written down to their recoverable amount being the higher of their fair value less costs to sell and their value in use.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in income statement in the year the asset is derecognised.

The asset's residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively if appropriate.

Capital work in progress is recorded at cost which represents the contractual obligations of the Authority for the construction of the Head office building. Allocated costs directly attributable to the construction of the asset are capitalised. The capital work in progress is transferred to the appropriate asset category and depreciated in accordance with the Authority's policies when construction of the asset is completed and commissioned.

2.5 Intangible assets

Intangible assets, which represent acquisition of software, are capitalised at cost and are stated at cost less accumulated amortisation and any impairment in value. The carrying values of intangible assets are reviewed for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable. Amortisation is calculated on a straight line basis over the useful life of the asset (3 years) and in case of licenses that have an annual validity, amortization is calculated on a straight line basis over one year from the date of acquisition.

2.6 Accounts receivable

Accounts receivable are stated at original invoice amount less a provision for any uncollectible amounts. An estimate for doubtful debts is made when collection of the full amount is no longer probable. Bad debts are written off when there is no possibility of recovery.

2.7 Employees' end of service benefits

The Authority provides end of service benefits to its employees. The entitlement to these benefits is based upon the employees' final salary and length of service. The provision for end-of-service benefit for expatriate employees is made in accordance with the Authority's Human Resources policies, which is more favorable than UAE Labour Law. For UAE national staff, the Authority makes a contribution to the UAE Federal Pension Scheme as per the rules of the Scheme.

2.8 Provisions

Provisions are recognised when the Authority has an obligation (legal or constructive) arising from a past event, and the costs to settle the obligation are both probable and able to be reliably measured.

2.9 Cash and cash equivalents

For the purpose of the statement of cash flows, the Authority considers all bank and cash balances and bank deposits with an original maturity of less than three months from the date of placement and other than those under lien, to be cash and cash equivalents.

2.10 Investments

Investments represent bank deposits with maturity of more than three months and are classified as held-to-maturity when the Authority has the positive intention and ability to hold it to maturity. After initial measurement held-to-maturity investments are measured at amortised cost using the effective interest method. This method uses an effective interest rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset. Gains and losses are recognised in the income statement when the investments are derecognised or impaired, as well as through the amortisation process.



2.11 Government grants

Land granted by the government is recognised at nominal value where there is reasonable assurance that the land will be received and the Authority will comply with any attached conditions, where applicable.

2.12 Financial instruments

Financial instruments comprise financial assets and financial liabilities.

Financial assets consist of bank and cash and cash equivalents, investments and trade receivables.

Trade and other receivables are stated at their nominal value as reduced by appropriate allowances for doubtful amounts.

Financial liabilities, which consist of retentions, trade and other payables, are stated at their nominal value.

2.13 Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

Authority as a lessee

Finance leases, which transfer to the Authority substantially all the risks and benefits incidental to ownership of the leased item, are capitalised at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are reflected in the income statement.

Leased assets are depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Authority will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the income statement on a straight line basis over the lease term.

Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability.

3. Licenses and Authorizations

	2009 AED	2008 AED
Spectrum and other license fees	233,099,365	201,355,867
Numbering fees	127,669,182	97,616,665
Sale of domain names	8,777,850	1,977,150
License fee	2,100,000	2,000,000
Application fee	1,216,665	1,372,555
Registration fee	1,145,675	1,011,954
Fines and penalties	900,000	400,000
	374,908,737	305,734,191





4. Property, Plant and Equipment

	Leasehold improvements AED	Computer hardware AED	Furniture and fixtures AED	Office equipment AED
2009				
Cost:				
At 1 January 2009	5,804,044	9,473,608	3,413,064	2,220,284
Additions	1,036,525	4,123,798	953,649	1,163,108
Disposals	(101,180)	-	(4,500)	-
At 31 December 2009	6,739,389	13,597,406	4,362,213	3,383,392
Depreciation:				
At 1 January 2009	1,857,787	3,674,040	974,556	485,822
Depreciation charge for the year	1,208,756	3,013,280	787,970	589,095
Disposals	(25,997)	-	(75)	-
At 31 December 2009	3,040,545	6,687,320	1,762,451	1,074,917
Net carrying amount				
At 31 December 2009	3,698,843	6,910,086	2,599,762	2,308,475
2008				
Cost:				
At 1 January 2008	4,846,956	3,559,294	2,987,814	585,792
Additions	1,050,348	5,928,114	425,250	1,751,847
Disposals	(93,260)	(13,800)	-	(117,355)
At 31 December 2008	5,804,044	9,473,608	3,413,064	2,220,284
Depreciation:				
At 1 January 2008	884,199	1,041,646	312,393	213,172
Depreciation charge for the year	1,039,797	2,639,613	662,163	363,660
Disposals	(66,209)	(7,219)	-	(91,010)
At 31 December 2008	1,857,787	3,674,040	974,556	485,822
Net carrying amount				
At 31 December 2008	3,946,257	5,799,568	2,438,508	1,734,462

Property, plant and equipment include plots of land granted by the Government of Abu Dhabi and Government of Dubai on which the Authority has the intention to build its head office premises. The land is accounted at a nominal value of AED 1 each.

Frequency monitoring equipment AED	Vehicles AED	Capital work-in progress AED	Total AED
7,443,822	278,350	11,925,086	40,558,258
424,863	112,500	44,236,858	52,051,301
-	-	-	(105,680)
7,868,685	390,850	56,161,944	92,503,879
746,552	114,396	-	7,853,153
1,616,223	70,300	-	7,285,624
-	-	-	(26,072)
2,362,775	184,696	-	15,112,705
5,505,910	206,154	56,161,944	77,391,174
6,200	227,650	2,592,932	14,806,638
7,437,622	127,000	9,332,154	26,052,335
-	(76,300)	-	(300,715)
7,443,822	278,350	11,925,086	40,558,258
1,550	118,421	-	2,571,381
745,002	57,969	-	5,508,204
-	(61,994)	-	(226,432)
746,552	114,396	-	7,853,153
6,697,270	163,954	11,925,086	32,705,105



5. Intangible Assets

Intangible assets represent software.

	AED
Cost:	
At 1 January 2008	3,777,556
Additions	5,283,437
At 31 December 2008	9,060,993
Additions	5,545,560
At 31 December 2009	14,606,553
Amortisation:	
At 1 January 2008	1,924,082
Charge for the year	2,026,774
At 31 December 2008	3,950,856
Charge for the year	2,805,061
At 31 December 2009	6,755,917
Net carrying amount	
At 31 December 2009	7,850,636
At 31 December 2008	5,110,137

6. Trade and Other Receivables

	2009 AED	2008 AED
Trade receivables	66,514,639	132,535,656
Other receivables	12,452,341	5,074,363
	78,966,980	137,610,019

All trade receivables are due within a credit term of 30 days.

There are no impaired receivables.

All trade receivables are not due yet, except of AED 9,700,513 which is overdue between one and three months.

7. Investments

Investments represents bank fixed term deposits with maturity between 3 and 12 months and were placed with local banks in the United Arab Emirates. The deposits earn annual interest in the range of 5.00% to 6.25%.

8. Cash and Cash Equivalents

	2009 AED	2008 AED
Cash in hand	33,259	25,259
Bank balances	273,720,860	1,617,990
Fixed deposits with maturity less than three months	-	413,550,000
	273,754,119	415,193,249

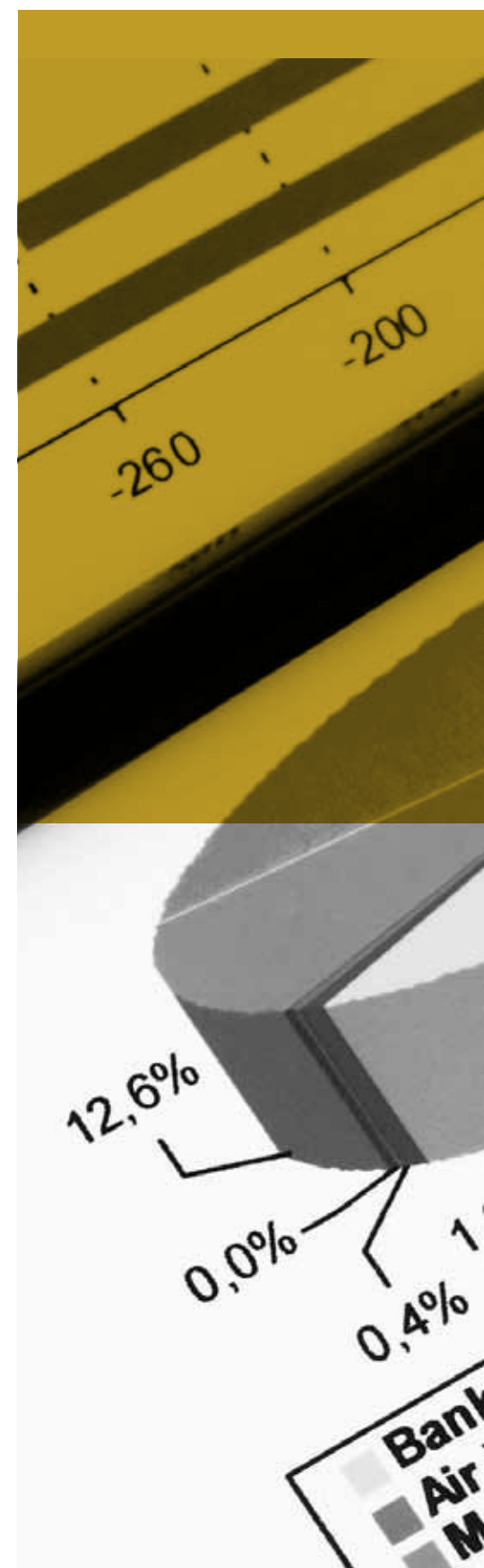
9. Provision for End of Service Benefits

	2009 AED	2008 AED
At 1 January	1,228,485	572,961
Charge during the year	1,047,760	822,448
Paid during the year	(131,076)	(166,924)
At 31 December	2,145,169	1,228,485

10. Trade and Other Payables

	2009 AED	2008 AED
Trade payables	48,282,020	16,635,532
Accrued liabilities	19,606,632	17,236,859
Customer advances	9,049,506	36,121,995
	76,938,158	69,994,386

In 2008 customer advances include AED 35.5 million received on account of Information & Communication Technologies Fund. This Fund was established to serve the telecommunication sector in the UAE by supporting the scientific research and development. The funds received were transferred to revenue in accordance with the accounting policy of Authority.



11. Financial Risk Management Objectives and Policies

The Authority's financial liabilities are trade payables and retentions.

The Authority has various financial assets such as trade and other receivables, cash and cash equivalents and investments which arise directly from its operations.

The Authority does not enter into or trade in financial instruments or investment in securities, including derivative financial instruments, for speculative or risk management purposes.

The main risks arising from the Authority's financial instruments are credit risk, liquidity risk and interest rate risk. The Board of Directors reviews and agrees policies for managing each of this risks which are summarised below.

Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Authority, and arises principally from the Authority's trade and other receivables and bank and investment balances. The Authority's receivables mainly include amounts due from Emirates Telecommunications Company (Etisalat). The Authority's management does not consider this significant concentration to be a credit risk. Balances with bank were assessed to have low credit risk. The amount that best represents its maximum credit risk exposure at the balance sheet date, in the event counter parties fail to perform their obligations under financial instruments generally approximates their carrying value. Trade and other receivables and balances with banks are not secured by any collateral.

Liquidity risk

The Authority monitors its risk to a shortage of funds considering the maturity of both its financial assets (e.g. trade and other receivables, investments, cash and cash equivalents) and projected cash flows from operations.

The table below summarises the maturity profile of the Authority's financial liabilities at 31 December 2009 and 2008 based on contractual undiscounted payments.

	Less than 3 months AED '000	3 to 12 months AED '000	1 to 5 years AED '000	> 5 years AED '000	Total AED '000
31 December 2009					
Trade payables	48,282,020	-	-	-	48,282,020
Retentions	-	-	4,614,680	-	4,614,680
Total	48,282,020	-	4,614,680	-	52,896,700
31 December 2008					
Trade payables	16,635,532	-	-	-	16,635,532
Retentions	-	-	1,164,178	-	1,164,178
Total	16,635,532	-	1,164,178	-	17,799,710

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Authority does not have any interest bearing liability and its interest bearing assets have fixed interest rates, therefore it is not exposed to interest rate risk.

Fair values

The fair values of financial assets and liabilities are not materially different from their carrying values at the balance sheet date.

12. Commitments

Capital expenditure commitments

The authorised capital expenditure contracted for at the balance sheet date but not incurred amounts to approximately vAED 61.9 million (2008: AED 148.3 million).

Non cancelable lease rental commitments

	2009 AED	2008 AED
Payable within 1 year	11,451,222	11,188,125
Payable after 1 year but not later than 5 years	12,530,555	11,747,531
	23,881,777	22,935,656

13. Comparatives

The Authority changed the following comparative figures to adapt presentation to 2009:

- Supplier advances of AED 24,770,126 now shown as non-current asset, previously shown as current asset under trade and other receivables.
- Retentions of AED 1,164,178 now as non-current liability, previously shown as current liability under trade and other payables.
- Intangible assets of AED 5,110,137 now shown as a separate asset within non-current assets, previously shown within property, plant and equipment.

