

TRA Work Plan 2010

(Important Initiatives)

Foreword

The Telecommunications Regulatory Authority (TRA) was established in 2002, to liberalize and promote the telecommunications services in the Sultanate under the Telecommunications Act which was issued under the Royal Decree No. 30/2002. TRA is committed to develop the telecommunications sector in the Sultanate by regulating and maintaining the telecom services, promoting the interest of telecommunications services providers and beneficiaries, and ensuring that consumers receive international standards of telecommunications services, with a reasonable range of choices at reasonable prices.

The Authority's policies and regulations aim to the development of infrastructure and the attraction of foreign investment into the sector which will result in further promoting the Sultanate's economy and increasing employment prospects for Omani citizens.

This document presents the major initiatives of the Telecommunication Regulatory Authority (TRA) of Sultanate of Oman to be taken up under Work Plan for the year 2010.

By publishing the work plan, the TRA aims to provide information to all stakeholders about TRA's future activities. It is an attempt to reinforce transparency and share the information on the state of progress and consistency in meeting our duties and objectives.

In 2010 TRA has planned for further challenging objectives, after achieving a number of milestones in 2009 by introducing the second fixed license, carrying out a number of studies like spectrum pricing, international access, reference Access offers, and facilitating Mobile Resale agreements. The TRA wishes to continue with its endeavours to the next year to serve the sector. The TRA will be taking further measures to meet its corporate objectives such as meeting stakeholder's expectations, further accelerating spectrum expansion in 2010-2012. A National Broadband Strategy is being developed as a plan to further enable every home, business, public and private institution to have access to affordable high speed broadband internet. Access to broadband internet offered via multiple technologies & access mechanisms will promote greater competition across the telecom industry. The strategy is aimed to enhance the competitiveness of the industry and commerce in Oman. Increasing liberalisation and implement fairer competition is another major corporate objective which the TRA hopes to achieve

in 2010, rules and regulations will be developed such as competition framework addressing market failures and remedies.

TRA Vision and Mission

TRA aims to be the most efficient and effective organization in Oman, enabling world class telecommunications services to all.

TRA has made it its mission to set up and implement a fair, flexible, efficient telecommunications regulatory framework that will:

- Develop the industry through a driven environment
- Ensure accessibility of all kinds of services within limits to all
- Balance the interests of all stakeholders, and
- Align with vision 2020

TRA Duties, Objectives and Powers

TRA was established with a mandate to liberalize and promote telecommunications services in the Sultanate under the Telecommunications Act which was issued under the Royal Decree No. 30/2002 in March 2002.

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

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

- Prepare necessary programs to raise awareness of the importance of telecommunications sector and its impact on development of the sector on the development plans.
- Prepare lists of the technical terms used in the telecommunications sector, and take necessary steps for its publication.
- Prepare the frequency plan, numbering and domain name plans, and to supervise the implementation thereof.

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

Work Plan 2010

The plan takes into consideration the experience from previous year plan and a strategic planning exercise carried out at the end of 2009. The strategic planning exercise identified the following main corporate objectives for 2010:

1. Meet stakeholder's expectations,
2. Accelerate expansion in 2010/2011/2012,
3. Target broadband development,
4. Increase liberalization with fair competition,
5. Develop rules and regulations,
6. Complete ISO certification,
7. Develop a detailed plan for policy implementation.

The TRA Work Plan briefly describes the various objectives and areas that TRA perceive to be critical in order to achieve the regulatory vision and mission. However, as the work planning process tends to be ongoing and dynamic, the focus and timing of many of these projects may evolve in response to new issues, and factors that can have an impact on the programme and lead to unavoidable changes.

The above objectives have been cascaded to each unit objectives that will take place over the coming 12 months. Those objectives will be accomplished through in-house and outsourced projects.

Code	TRA Objectives 2010	Unit Objective/KPI	Target	Completion date
IR2	1	Consumer Satisfaction Survey Completion	100%	Nov 30
EA1	1,4,5	Competition Framework Consultancy assignment to finalize Dominance criteria/decision, conduct market analysis and to prepare framework to address market failures and remedies.	100%	Sep 2010
EA6	4,5	Price-Cap and WACC Review Conducting a study to review the price cap regulations and new caps for the fixed-line operators. Further conducting a study for reviewing the WACC for Fixed and Mobile operators.	100%	Nov 2010
EA7	2,3	Implementation of USO Pilot Project (Area-2) This is Phase II of the USO project, launching the pilot project in the selected area by floating a Tender for invitation to the potential operators for the USO license.	10%	Dec 2010
EA8	3,7	Tele-center Framework In order to boost service take up in the USO area and to facilitate those citizens, who haven't their personal telecom facilities (telephone line, PC etc,) to make use of telecom services for e-government and other purposes.	100%	Jun 2010
SM1	1	Spectrum licenses issuance & Renewal	100%	As per Quality

		The objective of this project is to minimize the time required to proceed the activities and processes of the frequency assignment and licensing department in order to complete the job and reply the customers in a shortest possible time and to meet the ISO 9001:2000 requirements.		management System
SM2	1	<p>Revision of all radio licenses format and preparation of new licenses format (3G, Broadband, GSM)</p> <p>The aim of this project is to revise all radio license format issued for the licensees. These formats are used since years without any modifications. The revision will be in:- Administrative and technical data mentioned in the licenses. The shape and size of the licenses The material used for the licenses (Paper / Plastic). Moreover, there are some new technologies such as 3G and Broadband for which there is no license format available currently in the Unit for them. Therefore, it is necessary to prepare a license format for them. This will be done by taking some samples from some other countries and then proposing new licenses format which meets our requirements.</p>	100%	June 2010
SM3	4,5	<p>Revision and implementation of radio licenses application forms.</p> <p>The aim of this project is to revise and amend all application forms used for requesting the usage of frequencies and radio equipment. It is necessary to review these application forms after using them for several years for the following reasons:-</p> <ol style="list-style-type: none"> Try to simplify these application forms as possible in order to meet the licensee's satisfaction. To make sure these forms includes all data required for the Spectrum database. Add some new fields if necessary Delete the fields which are not necessary 	100%	June 2010
SM5	5	<p>satellite monitoring feasibility study</p> <p>As the telecom market in the country is getting more services and customers, the need for telecom satellite services gets increased as well. Therefore, it is important to study the need of having satellite monitoring system.</p>	100% completion	By end of June 2010
SM6	5	Frequency Jamming	100% Completion	By end of July

		The project aims to have and operate frequency jammer system in order to enable TRA to block any illegal transmission upon detecting the source of transmission. In this way, TRA can enhance the protection of licensed users and prevent the continuation of illegal practice.		2010
SM8	1	Completion of spectrum efficiency project The objective of this activity is to give an input to the proper spectrum planning about the status of utilization of different frequency bands. This is even beneficial for the assignment process as it reflects the real situation about RF environment. Furthermore, gathering such statistics is further important for building a history about development of telecom sector and spectrum usage in the country.	20-30 % of assignment completed	End of 2010
SM9	1	Implementation of Advanced Automated Spectrum Management System. The aim of this project is to acquire a state of the art Advanced Automated spectrum Management system which will replace the old ATDI system currently used by the unit. The new system will enable the unit to utilize the spectrum in a more efficient way and shortest time in order to meet customer expectation. In addition, this system will have web facilities for certain services	100% completion of phase one	1 year from contract signing
SM 11	5	Revision of SRDs regulations. As per the Unit's plan, the SRD Regulations of the TRA shall be revised on annual basis due to technological advances and accumulated experience of applying the Regulation in the practice. This annual revision is to analyze the current development of Short Range Devices, technological advances, staffs' feedbacks on application of this Regulation and responses from applicants, reports on compatibility issues. On the basis of such study, the proposal on possible amendments of current Regulations will be developed.	100%	Dec 2010
SM 12	5	Revision of National SRR regulations It was thought, that TRA would collect enough statistical data about imported vehicles equipped with Short Range Radars so SMU would be in a position to estimate the date of reaching the interference threshold level. Unfortunately, the Regulations become effective last year only, therefore enough statistical data hasn't been collected yet. Therefore, SMU plans to collect enough data for this and previous years by the end of this year and predict the expected date.	100%	Dec 2010
SM 13	1	New market-based spectrum management approaches: Possibility of implementation of new approaches in the	100%	November2010

		<p>practice of Telecommunications Regulatory Authority of Sultanate of Oman.</p> <p>This study is intended to explore the new market-based spectrum management approaches such as:</p> <ul style="list-style-type: none"> a) Different regimes in different bands; b) Market-framework based on spectrum trading; c) Mandating co-existence of exclusive rights <p>The interesting point is that these approaches are new and their advantages and disadvantages are not discovered fully yet. Currently, there are few articles about new approaches and experience of regulators which may require longer time for research and study. If the study clearly shows that there are significant advantages of applying new approaches to the situation of the TRA, appropriate recommendations on implementation of new approaches will be given.</p>		
SM 14	1	<p>Ultra Wide Band Technologies: Study and development of possible Regulations of UWB in Oman.</p> <p>As some manufacturers claim that UWB communications transmit in a way that doesn't interfere largely with other more traditional narrowband and continuous carrier wave uses in the same frequency band. However, some studies show that the rise of noise level be a number of UWB transmitters puts a burden on existing services. This may affect the stability of such existing systems.</p> <p>The aim of this project is to study the characteristics of UWB applications and issues of compatibility with existing systems. If the result of the study is favourable for development of the national regulation, then the draft of the Regulation will be presented to the Management of the Unit.</p>	100%	Dec2010
SM 15	5	<p>Cognitive radios: Possible regulatory acts to regulate the operation of cognitive radios in Oman.</p> <p>Cognitive radio is a paradigm for wireless communication in which either a network node changes its transmission or reception parameters to communicate efficiently avoiding interference with licensed or unlicensed users. The level of changes of characteristics of transmissions is very high; hence, taking all possible changes in interference modelling is not possible. Therefore there is a risk of causing certain interference to other telecom systems. This study is intended to research the characteristics of cognitive radios and to explore the possible regulatory acts to regulate the operation of cognitive radios in Oman</p>	100%	Dec2010
SM 16	5	<p>Next generation of mobile communication: Study on evolution of standards for mobile communication and investigation of possible use of current frequency bands by next generations (e.g. WCDMA, cdma2000, HSDPA, 4G, LTE etc.).</p> <p>Standards for mobile communication have been evolving continuously aiming higher connection speeds for end users.</p>	100%	

		This requires national regulators to meet the constant growing demands for radio spectrum. One of possible way of addressing the issue seems to be the re-using of existing radio spectrum for new generations. The complexity of the task is to find the right regulatory requirements to be imposed to operators so		
SM 17	5	<p>Prepare, update and coordinate preliminary Oman position on WRC-12 Agendas-</p> <p>The ITU World Radiocommunication Conference (WRC), which convenes every three to four years, is at the core of the international spectrum management process and constitutes the starting point for national practices. WRC reviews and revises the Radio Regulations, an international treaty establishing the framework for the utilization of radio frequencies and satellite orbits among ITU member countries. The participation in working parties and study groups in relation to WRC Agendas is important in order to develop Oman position to be defended in the next coming Conference (WRC-12).</p>	100% completion	Dec 2010
SM 18	1	<p>Maintain ISO measures</p> <p>The unit has gotten the ISO certification in 2008. As per the ISO requirements, it is required to conduct at least one external and one internal Audit per year in order to ensure that ISO measures are implemented.</p>	100%	DEC 2010
LA3	2,4&5	<p>Study of the Decision 152/2008 regarding Out of Court of Settlements' Committees and prepare its amendments.</p> <p>After two years of implementing the Decision No. 152/2008, the legal Unit notice several difficulties and barriers. Thus, it is necessary to study the current decision and to prepare the necessary amendments.</p>	100%	Jul 2010
LA5	2,4&5	<p>Regulation to control the distribution of unsolicited Marketing SMS, MMS, or phone calls through telecommunications networks.</p> <p>The provisions of the Regulation will control the distribution and sending of unsolicited Marketing through licensees and its assault such as SMS or phone calls.</p>	100%	Aug 2010
LA6	2,4&5	Competition Regulation	≥ 50%	Dec 2010

TA1	1	<p>Audit of submitted Emergency Plan</p> <p>The purpose of this project is to verify that the Emergency Plan being submitted by Class-I infrastructure-based operators, is in accordance with the guidelines issued by the TRA. This will help ensuring that the operator's Emergency Plans covers all the mandatory items which are supposed to be covered by them and also to have a consolidated Emergency Plan covering all the operators.</p>	100%	3 rd Qtr 2010
TA2	1	<p>Billing Audit</p> <p>The aim of this project is to allow TRA to verify the accuracy of the billing systems and whether they are complying with Billing Accuracy Guidelines issued recently by the Authority.</p>	100%	2 nd Qtr 2010
TA3	1	<p>Implementation of the labelling scheme</p> <p>As TRA aims to eliminate the phenomena of flooding of the Omani market with unauthorized telecom equipments, a new approach through Implementation of a labelling scheme, is proposed for the import of telecommunication equipment in the Sultanate. The scheme shall facilitate not only telecom equipment dealers but would be customer friendly also.</p>	100 %	1st Qtr 2010
TA4	1, 4	<p>Issuance of BWA licenses</p> <p>Second Fixed Public Telecommunications System license that includes Broadband Wireless has already been awarded to Nawras. As additional Spectrum is available in 2.3 GHz and 3.4GHz bands, in line with the liberalization process and increasing competition, additional licenses(s) are proposed for the introduction of competition in the BWA services as it will be of significant benefit to consumers and the economy of the Sultanate of Oman, and further is consistent with the general aim to promote market entry under Article 7 of the Telecommunications Regulatory Act.</p>	2	2 nd Qtr 2010
TA5	1, 5	<p>Guidelines on compliance of interconnection regulation</p>	100%	1 st Qtr 2010

		Guidelines shall be finalised and published covering interconnection and related products. For transparency purposes, this task will assist the new operators on their business plans and enhance their capabilities for their commercial negotiations with Class I operators on wholesale market products.		
TA 6	4, 5	Implementation of Domain name Registry System According to the Telecom Act, TRA has the function of managing the country code top level domain names '.om' which is partially being done by Omantel currently . In order for TRA to fully pursue this function, the registry system has to be deployed. This project will develop the system and at the end of the project, the function of managing the .om domain names will be fully taken over by TRA.	100 %	3 rd Quarter 2010
TA7	4	Accreditation of Domain Name Registrar Currently there is only one '.om' domain names registrar (Omantel). In order to liberalize this sector, more registrars will be needed to be accredited in accordance with minimum acceptable accreditation requirements. This project will accredit at least 2 registrars in the Sultanate.	≥ 2	3 rd Quarter 2010
TA8	5	Premium Services Numbering Regulation approval This project will produce Premium Services Numbering Regulation that aims to protect the interest of the public / consumers of premium rate services in particular by – (a) Specifying the duties to be observed by premium rate service providers in their promotion and provision of premium rate services; and (b) Specifying the duties to be observed for billing by network operators in their billing and collection of payment from consumers of premium rate services	100%	3 rd Quarter 2010
PA1	3	National Broadband Strategy A study to devise Broadband Strategy for the Sultanate in order to complement e-Oman initiatives. The study will identify appropriate market structure together with business models for the access to broadband and suitable delivery mechanisms.	100%	4 th Quarter 2010