

"We have always emphasized the importance of learning and knowledge and we have always been open to the adoption of new developments in this field. Information and communication technology have now become the main elements that move forward the development process in this third millennium; therefore, we have accorded our attention to finding a national strategy to develop the skills and abilities of citizens in this domain with the aim of further developing eGovernment services. We are closely following the important steps that we have made in this regard. We call upon all government institutions to speedily enhance their performance, and to facilitate their services, by applying digital technology in order to usher the Sultanate into the constantly evolving spheres for applying knowledge."

FOREWORD

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Upon the inception of the National Strategy for the Sultanate of Oman the Oman Digital Society (e.oman) in 2003 and its revision in 2010, Oman has taken concrete steps to fulfil its national and international obligations towards streamlining ICT, transforming communities and integrating societies.

In this context, WSIS Action Lines have served as an invaluable framework for e.oman and provided pivotal milestones to its goals. Of particular note is the WSIS Forum and its components, which provide a remarkable opportunity to learn and exchange how common human needs are attended to in diverse human experiences. In this sense, WSIS Action Lines dovetail the MDG framework. Enormous efforts have been exerted by several governments to achieve these MDGs.

In Oman, conscientious efforts have been consistently rendered to utilize the benefit of the MDGs framework and WSIS towards achieving tangible results and transforming lives. Oman has made significant strides towards the fruition of all MDGs most notably in Health and Education. This report highlights the major national achievements and progress made in the past 10 years according to WSIS outcomes and MDGs.



e.oman National Strategy

The Oman Digital Society and eGovernment Strategy, referred to as the e.oman Strategy, outlines the blueprint for several key IT initiatives in the Sultanate of Oman which aim to empower the citizens by providing meaningful interaction through eServices.

The e.oman Strategy addresses eGovernment as well as Digital Society issues, in an effort to transform the Sultanate into a knowledge-based community that is able to achieve the objectives of sustained development. It aims to create an effective government-community-citizen infrastructure that provides better public services to its people. Through eServices, the government seeks new and innovative ways to better engage and interact with citizens in the delivery of public services.

Oman's approach to transforming the nation into a knowledge-based community is comprehensive and as innovative as the mechanisms used to accomplish this feat, as it is identifies a number of e.oman strategic directions, which have been defined to realize the e.oman vision, and have been grouped under six strategic pillars:

- » Society & Human Capital Development
- » Enhance eGovernment & eServices
- » ICT Industry Development
- » Governance, Standards & Regulations
- » National Infrastructure Development
- » Promotion & Awareness

These pillars summarize the e.oman strategic directions and when translated into initiatives, projects and milestones, would result in a coordinated action towards the move to a knowledge based economy.



e.oman Achievements & International Recognition

- » Since 2009 e.oman projects have won first and second places in the United Nations Public Service Award programme. In 2013 the Sultanate was privileged to have received two United Nations Public Service Awards:
- » State Audit Institution 'Complaints Window '
- » Ministry of Regional Municipalities and Water Resources – 'INJAZ Hall'



- » With the inception of the WSIS Project Prizes in 2012, Oman has actively participated in this prestigious information society award with the following projects having won the award:
 - » Reducing Child Mortality and Protecting Mothers, Ministry of Health (MoH), e-Health, 2013 prize.
 - » One Stop Shop (OSS), Ministry of Commerce & Industry (MoCI), e-Business, 2012 prize.



- » The Sultanate received the highest share of GCC eGovernment prizes at the 3rd GCC eGovernment Conference, Exhibition and Award, held in Dubai from 9 - 11 December 2013, proudly winning seven awards:
 - » Information Technology Authority "e-Inclusion Project"
 - » Ministry of Commerce and Industry "One Stop Shop (OSS)"
 - » Higher Education Admission Centre "Data Exchange Portal"
 - » Ministry of Manpower & Pension Authority for Social Insurance (PASI) – "Employment Collaboration Project"
 - » Ministry of Interior "System of A' Shura Election and Municipal Councils Election"
 - » Muscat Municipality "Contact Center"
 - » Public Authority for Consumer Protection "The Portal"

- - » The Global Information Technology Report 2013 published by the World Economic Forum shows that Oman has demonstrated great developments in international global rankings. According to the Global IT Report for 2012/2013, the Sultanate ranked:
 - » 40th internationally in the area of Networked Readiness;
 - » 15th in Government success in ICT promotion;
 - » 15th in Importance of ICT to Government vision; and,
 - » 20th in ICT use and Government efficiency.
 - » According to the UN E-Government Survey 2012, Oman achieved a rank of 64 globally and ranked 16th on the e-participation index.
 - » In the Government sector, the measures assure that Oman's government entities are advancing in ICT uptake and use. Almost all government entities are connected to the internet, and have websites and intranet. The percentage of employees skilled in ICT exceeded 61% by the end of 2012 compared to 43% in 2010, where more than 51% of them were using computers regularly.
 - » In the General Education Schools (i.e. grades 1-12), the majority of schools are equipped with the ICT tools and technologies used for educational purposes such as radio, TV, telephone and computer labs. More than 88% of schools in Oman are connected to the internet.
 - » More than 62% of higher education institutions (institutions that provide a diploma certificate or higher) offer at least one ICT major. 19% of students enrolled in these institutions are ICT majors.
 - » Overall, as a result of the diligent implementation of the e.oman Strategy, the most telling factor of success is the dramatic increase in internet and PC penetration rates in Oman:
 - » In 2005, the internet penetration rate was less than 17%, but by the end of 2013, it surpassed 67%.
 - » In 2005, the PC penetration rate was less than 17%, but by end of 2013 increased to 80%.



Ministry of Transport and Communications (www.motc.gov.om)

The Transport and Communication sector is considered an essential building block in the process of nation building and development. This sector provides all important elements for the building of the country's basic infrastructure and it is playing an important role in establishing the basic elements of the infrastructure; be it in the field of roads, civil aviation or public transport. This has been aimed at realizing the greatest share of development for the modern life and the Omani national to whom all social and economic development are targeted.

Information Technology Authority (www.ita.gov.om)

The Information Technology Authority (ITA) was established by the Royal Decree 52/2006, promulgated on the 31st May 2006, as a financially and administratively independent national authority.

The ITA is the official government body responsible for implementing the Digital Oman Strategy and eGovernment in the Sultanate of Oman, with a vision to transform the Sultanate into a sustainable knowledge society by leveraging information and communication technologies to enhance government services, enrich businesses and empower individuals.

ITA also serves as a competency center on best practices in eGovernance and in harnessing Information and Communication Technologies (ICT), thereby offering efficient and timely services, integrating processes and improving efficiency in service delivery. With the establishment of the ITA and the implementation of the e.oman initiatives, the use of ICT has rapidly penetrated every strata of Oman's society from education, training, healthcare, business, as well as enhancing G2G, G2B, B2B and C2C interaction.

Telecommunications Regulatory Authority (www.tra.gov.om)

The Telecommunications Regulatory Authority (TRA) is the implementing authority of the Sultanate of Oman's telecommunications policies. It was established in 2002 to liberalise 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 facilitating the growth of the telecommunications sector. This commitment is carried out by ensuring the availability of state-of-the-art technologies via an increasing range of choices and delivery to consumers with reasonable prices. In doing so, TRA balances the interests of various stakeholders based on principles of non-discrimination, transparency and technology neutrality.

The regulations and rules introduced from time to time are aligned with the evolving and emerging market situations. At all times, our focus is on enhancing the competitiveness of the Omani economy, increasing employment potential for locals, providing an environment for the upgrade of skills, and the development of the knowledge society.

The Research Council (www.trc.gov.om)

The Research Council (TRC) is Oman's exclusive research funding body and leader of research development in the country. TRC serves as a focal point and hub dedicated to promoting and supporting research, scientific enquiry, and innovation in the Sultanate of Oman. At the heart of our work is nurturing research talent to power innovation and create economic benefit for our national prosperity.

Established in June 2005, TRC has been founded by Royal Decree No. 54/2005 under the chairmanship of His Highness Sayyid Shihab Bin Tariq Al-Said, adviser to His Majesty the Sultan. This was notably followed in 2010 by Royal Decree No.30/2010 with TRC set to lead the way in drawing up a national plan for scientific research in the Sultanate.

As a policy-making body and funding agency, TRC encourages the promotion and application of research, innovation and science to create value that serves business, markets and the wider needs of society. It is our belief that research conducted in Oman should further the public good with commitment to the spread and transfer of knowledge.

ICT <u>INFRAST</u>RUCTURE



Official eGovernment Services Portal (www.oman.om)

The Official eGovernment Services Portal was launched during 2009. In 2012, the Portal was rebranded as Omanuna. The concept of Omanuna was created from the sail of a ship, embodying the message, "Your direction to your destination". Omanuna will help you to access the eGovernment services you need. Several supporting features and factors have been applied to the portal, which render delivering eServices in a more flexible and comprehensive manner. For example, eForms are available, which enable users to download, fill out, and submit requests for all eGovernment services. Access to eGovernment services on this Portal is not confined to websites only, as the portal is also accessible through mobile and interactive smart phones. The Official eGovernment Services Portal, or Omanuna, seeks to offer electronic services to all individuals, whether nationals or residents. The Portal facilitates access to several governmental agencies and enables users to receive eServices pertaining to personal matters, immigrations, health, education, culture, entertainment and other services. Notably, the portal has also been made accessible to persons with disabilities.

Telecommunication

More than 55% of Oman's population live in the capital of Muscat and the Northern Coastal region of Al Batinah and have easy access to internet, as these are the two most densely populated areas in the Sultanate. However, connecting the rest of the population to a network of fibre optic is proving quite a challenge. The Government and the telecommunication companies face great difficulty in creating sustainable telecommunication infrastructure, due to the country's rugged mountainous and craggy, unrelenting terrain. Nevertheless the government and the telecommunications companies continue to find sustainable solutions to provide connectivity to all citizens in every governorate.

The National Broadband Strategy

With the focus on making broadband services available to everyone in the Sultanate, the government has made it clear that ICT would be a priority to improve the standing of Omani businesses in the international arena. The

National Broadband strategy was recently approved by the Council of Ministers and launched by the Minister of Transport and Communications. An ambitious yet balanced strategy, the National Broadband Strategy will provide access to the internet at high speeds. Taken into consideration was the diversity and effectiveness of the technique used in the provision of broadband services. Accordingly, the main focus at the beginning will be on the use of broadband basic speeds (up to 10 megabits per second) in all parts of the Sultanate.

The National Broadband Strategy comprises three main axes. The first axis aims to improve the supply of broadband in the Sultanate in the short term, which includes a set of measures designed to increase competition in the provision of broadband services in the Sultanate, thereby reducing costs. The second axis is aimed at stimulating the use of broadband in the Sultanate. It includes a review of Oman's Digital Society and eGovernment in an effort to keep pace with global developments in this regard and to create new programmes to encourage the use of broadband in the Sultanate. It also includes conducting dialogue with all parties concerned to agree on the measures undertaken by all to stimulate demand for broadband. The third axis aims to develop the infrastructure of broadband in the Sultanate in the long-term, by the use of government funding when appropriate.

Oman Government Network

The Oman Government Network (OGN) is considered a national communication infrastructure linking all government entities to support all e.oman projects and enhance public services. The Network has been singled out for its ability to integrate data, sound, images, and video into its infrastructure, and aims to ensure smooth offering of services. The Network was designed to meet the future needs of integration in terms of offering eGovernment services, as well as keeping abreast of the latest developments taking place in a digital society.

The Oman Government Network (OGN) supports the MPLS technology, which in turn facilitates the process of adding or linking, and restructuring new sites within the virtual network. This technology also supports the process of organizing and directing the passage of data through the Government Network, so as to ensure greater efficiency of employing and activating its infrastructure. Currently, more than 650 sites have been linked to the Network.

Central Call Centre (80077777)

The Call Centre was launched to assist Portal visitors and users of eGovernment services 24/7, by calling the free number 80077777, in addition to responding to email queries. The support rendered by the Call Centre was expanded to include responding to queries about the National Data Centre, the Oman Government Network and the Information Security Division.

ICT Connectivity

Achieving total country connectivity in Oman is quite a challenge due to the vastness of the country and the population distribution. Apart from the larger cities like Muscat and Sohar which house a third of the population, the remaining population is spread throughout the 309,500 sq. km. With the slew of recent ICT initiatives under the Digital Oman strategy, coupled with liberalization of the telecommunication industry, Oman hopes to bridge the digital divide and enable its citizens, civil servants and private businesses to interact, transact and transform Oman into a knowledge-based economy.

The introduction of WiMax and WiFi technology has made it easy for citizens to get connected to the internet through mobile connectivity. With the growing number of smart phone devices, mobile connectivity is essential to internet connectivity in the Sultanate. This is evident with a more than 150% of mobile penetration rate per inhabitant for mobile internet services. Hence, every home, office, school, and business has access to the World Wide Web. Most importantly, they will be able to obtain information, interact, transact in the Official eGovernment Services Portal and gain access to a world of knowledge.

The National Data Centre

The National Data Centre (NDC) was launched in 2009 to be a multi-purpose centre with high readiness. NDC hosts ITA infrastructure projects and systems. Since being in operation, the NDC has hosted the data of several government agencies and institutions, as well as data of e.oman projects, whether pertaining to basic operations or disaster recovery, such as the Official eGovernment Services Portal, Information Security Division, CERT, eTendering Project, Disaster Recovery Site for the Ministry of Oil and Gas, or the Ministry of Commerce and Industry. As of 2012, the Storage Capacity of the NDC was 31TB out of which 19TB was allocated, 8TB unallocated and 4TB free. Today, the NDC capacity is 120 racks out of which 96 are Server Racks for co-location services.

Public Key Infrastructure and Certification Centre

As more and more business and governmental transactions are performed electronically without the physical presence of the partners, new concepts for the reliable identification of the participants of transactions are required. ITA has finished implementing the project and has become a ROOT Certificate Authority (RCA) for the Public Key Infrastructure as one of the e.oman initiatives to enhance eGovernment transactions. Digital identities are a key technology for authentication and digital signatures are crucial aspects of information security. The project is under process and is expected to be launched at the end of 2013.

ePayment Gateway

The ePayment Gateway, a complete and integrated set of rules and programs provided by the ITA to facilitate secure ePayment processes, works under an umbrella of rules and laws that ensure the security and protection of purchase procedures and service delivery. The Gateway offers complete ePayment services that can be accessed via the internet anywhere and at any time. Implementation of the Gateway has also granted merchants in the Sultanate an opportunity to sell their products and services on the internet to customers all over the world. Currently, the second phase of ePayment is being coordinated, which will entail payment through ID cards, mobile phones and transfers from one account to another. The total number of transactions during 2012 was 125,570 with a value of over 4.2 million OMR.

Internet

Currently, internet services are being provided by Omantel and Nawras. The national Internet Protocol (IP) network comprises 11 Post-Office Protocol (PoP) covering the whole country. Muscat, the most densely populated city in the Sultanate has 3 PoPs. Each PoP is equipped to provide IP services covering: dial-up, ADSL, Wi-Fi, leased lines and corporate services such as MPLS.

The other means of internet delivery includes Wi-Fi hotspots deployed in cafes, shopping malls and hotels, along with the mobile internet. Oman has two internet gateways in two locations that serve as peering points for internet traffic to and from Oman.

Mobile Internet

One of the major driving factors in the recent popularity boom in mobile connectivity is the fact that traditional landline options are simply unavailable or are prohibitively inconvenient to access in many areas. Wireless connectivity is the key to the development of internet infrastructure in Oman. Both operators now provide 3G and 4G network and have launched 4G Long Term Evolution (LTE) services. Both pre-paid and post-paid 4G mobile broadband services are available across the Muscat capital area with maximum download speeds of up to 15Mbps. The increased in mobile connectivity is clearly shown in the 150% of mobile penetration rate throughout the country's governorates.

Wi-Fi

Wi-Fi enables the user to connect to the internet without wires or cables. One of the benefits of Wi-Fi technology is its ability to have a wireless connection for laptop to the Internet and corporate network when away from the office. Many cafes, coffee shops, libraries, airports, and other public places offer Wi-Fi Access Points for the general public. These public Wi-Fi Access Points are often called Wireless Hot Spots. Moreover, most of the malls and restaurants now provide free Wi-Fi access.

CAPACITY BUILDING



The Sultanate's educational sector has made impressive progress, maintaining traditional values while embracing the science and culture of the modern world. For more than three decades education has been a priority sector for the Government, taking the Sultanate from the era of the "kuttab" (traditional Qur'an school), often conducted under the shade of a tree, to the high tech university age.

In a recent study conducted by the National center for statistics and information NCSI, there is a great improvement in the educational standards of Omani citizens aged above 15 years. The improvement reflects a major shift in the educational sector over the past decade, including an expansion in the higher education sector in terms of new private universities and colleges. The study, comparing statistics and data cited in the population censuses of 1993 and 2010, shows that one of the salient features of the educational scenario is a decline in the illiteracy rate from 41% in 1993 to 14% in the 2010 Census.

Under the revised education system, Information Technology has been incorporated into the curriculum. Some 292 schools in various parts of the country are now equipped with a modern wireless system, giving students easy access to computer facilities and a computer network and creating links between students, teachers and the electronic course syllabus. Today 86% of schools have internet facilities, some with ADSL/Broadband, as well students can now obtain their general certificate examination results via the internet.

PC Dissemination

The official figure based on ICT access to, and use by households and individuals 2013 survey for the PC penetration rate is 80%. This clearly shows an increase of about 63% from the 2003 population census up to 2013, which also indicates the initial success of the e.oman initiatives.

The National PC initiative aims to address two main issues in the e.oman strategy, namely, capacity building and PC penetration. The program aims to build capacity in the general population by creating a PC bundle offer that is affordable, provides value and includes a basic training module. The latter is designed to get the citizen off to a 'fast start' in his ability to use the core system and the internet and in doing so increase the PC penetration rate. With the bestowing of the Royal Grant by His Majesty the Sultan, more citizens can gain access to devices which include laptops, PCs and even tablets.

The initiative consists of allocating one free laptop for each beneficiary family of the social insurance scheme with at least one child or more registered in the K-12 school system, as well as granting one free PC per student in these families who are presently enrolled in higher education institutions. The grant also includes a subsidy on the cost of a PC for students in the first year of study in the Sultanate, in addition to teachers who are graduates of the Government IT Training & Certification in IT (GITTC) programme. In line with the PC Initiative, Omantel also offered free-of-charge internet services to the recipients of the Royal Grant. To date more than 116,000 PCs, laptops and laptops have been distributed along with more than 75,000 free internet modems.

Training Programmes for Capacity Building in the Use of ICT

The National IT Training & Awareness Framework (NITTA) initiative is a governmental nation-wide e.oman initiative aimed at developing Information & Communication Technology skills, capability and increasing ICT awareness and proficiency within the Government, the community and the private sector. The NITTA Framework covers a wide range of ICT competency and skills development projects. Based on the NITTA Framework, ITA has implemented the following projects:

A. Government IT Training & Certification in IT (GITTC)

This project aims to provide all civil service employees with information and digital skills, consequently allowing them to benefit from every opportunity to develop their ability to offer eGovernment services. To date, more than 74,000 civil servants have been trained, and on the top of that, the GITTC program has qualified more than 200 citizens as international ICT Trainers. The project has improved the skills and performance of the civil servants, empowering them with ICT knowledge and skills to enable delivery of public sector e-services and most importantly prepare them for the knowledge-based economy. A recent ITA ICT Government survey indicates that more than 70% of civil servants now have basic ICT skills.

B. Specialised IT Training (SITT)

This program focuses on providing specialized IT training courses and granting opportunities to obtain specialized certificates, thereby increasing the number of holders of specialized certificates in the different fields of information technology. Moreover, the program contributes to meeting the current needs for the ICT industry in the public and private sectors, as well as satisfying future needs so as to enhance the growth of the local ICT sector. In this way, competencies, skills, and experiences necessary for the development of the ICT industry are provided, in addition to contributing to the different initiatives to achieve the objectives of the e.oman strategy and eGovernment in the Sultanate. It is important to mention that special focus has been placed on job seekers, through conducting an accurate study of the labour market to identify the needs of scientific specializations of graduates. This is to be added to taking the necessary steps to bridge the gap between the knowledge graduates acquire during their academic study and the practical experience required by the labour market in both the public and private sectors. Consequently, emphasis is placed on some specialized programs and courses in co-operation with pioneering ICT companies. To date, more than 2,500 citizens have been trained under the SITT umbrella.

C. Community Knowledge Center (CKC)

ITA has set up Community Knowledge Centers (CKC) in various regions in Oman as part of the e.oman strategy to bridge the digital divide. Although the centers were established to provide digital literacy training and other IT training for the community, the centers do also function as one of the multi-purpose community access points in which the general public can access eGovernment services via the internet or simply obtain information. Since its inception in 2009, there are a total of 19 CKCs. Nine of the CKCs implemented in different regions and Wilayat (districts) are dedicated especially for women. So far, more than 44,000 citizens (male and female) have participated in this training. Homemakers are now able to communicate online with the schools through the Education Portal regarding their children's progress, monitor their children using internet, communicate with family and friends using the social media network, or become a technopreneur, all from within the comfort of home.





D. National Free and Open Source Software Initiative

In line with its ongoing initiatives to support the use of free and open source software in the Sultanate, the Information Technology Authority (ITA) organized a series of training workshops on free and open source software. A Free and Open Source Software Conference (FOSSC-Oman' 2013) was jointly organized by the Communication and Information Research Center (CIRC) at Sultan Qaboos University (SQU) and the Information Technology Authority (ITA). The FOSSC-Oman' 2013 was the first edition of this event and is planned to be held every two years in Oman. In addition, ITA also launched the FOSS Portal in collaboration with SQU as a mirror server in the region for downloading FOSS packages. ITA redesigned and updated Open DVD content, distributing more than 30,000 Open Source Software DVDs to Government employees in collaboration with the Government Licensing team. Kicking off the preparation of the Free & Open Source Conference in collaboration with SQU, ITA also launched the Oman Open Source Challenge competition as an activity of the FOSS conference in collaboration with Intel and higher education institutes and also established 3 FOSS labs for training and R&D.

E. e.oman Awareness Events

Another key component of capacity building is the ongoing e.oman awareness programmes. An integrated ongoing e.oman awareness campaign consists of seminars, presentations and programmes conducted across the Sultanate. ITA targets all segments of the society to enhance awareness of government eServices, the importance of IT, opportunities to benefit from IT and encourages individuals to gain digital literacy skills. Face to face interaction with the community is possible by participating in public events such as the Muscat Festival, Khareef Salalah Festival, and the COMEX technology show.

The thematic roadshows provide awareness on digital literacy and promote a digital culture, as the maturity of e.oman initiatives progresses. These roadshows include a series of educational sessions on averting online security

risks, e-law protection, e-payment and e-learning services for the public and private sectors and the industry. With a special focus on children and women, ITA also hosted a series of plays and competitions in a family village. The plays depicted the newly emerging digital culture and the benefits of using technology in various walks of life. During the events, weekly raffle draws were also conducted through television programmes and laptops were given away as prizes. The IT Talent corner in the family village created during the roadshows was equipped with computers loaded with interactive software especially for the children to interact and learn.

World Telecommunication and Information Society Day (WTISD)

Since 2006, Oman has been celebrating the World Telecommunication and Information Society Day on the 17th May, as per the ITU chosen theme each year to spread ICT awareness in the society. The purpose of World Telecommunication and Information Society Day (WTISD) is to help raise awareness of the possibilities that the use of the Internet and other information and communication technologies (ICT) can bring to societies and economies, as well as of ways to bridge the digital divide. During such events, ITA focuses on the theme for each year and adapts it to the overall e.oman Strategy.

2013 - ICTs and Improving Road Safety:

Celebrated by government entities and NGOs interested in road safety, the celebration highlighted the role technology can play in making our roads, vehicles and drivers safer.

2012 - Women and Girls in ICT:

Oman focused on Omani women in the various ICT capacity building programmes such as the Woman community knowledge center initiative and how they have benefitted from the e.oman Strategy.

2011 - Better Life in Rural Communities with ICTs:

In the rural context, ICTs provide enhanced opportunities to generate income and combat poverty, hunger, ill health and illiteracy.

Innovation and Support Center (ISC)

The Innovation and Support Center (ISC) was established by ITA in January 2008. The center was established in association with Microsoft Corporation with local teams to identify, design and implement new innovative solutions to benefit the Government of Oman. The ISC aims to create a local ICT center with world-class capabilities, managed and operated by highly trained local Omani talent.

ICT FOR DISABLED PERSONS



eAccessibility

Under the eAccessibility policy, ITA embraces accessibility procedures for people with disabilities and elderly people to provide them with fair and equal life opportunities through the use of Information & Communication Technologies (ICT). In cooperation with *The Global Initiative for Inclusive ICTs (G3ict)*, a specialized organization with a focus in issues related to people with disabilities, the ITA represented by the Chairman of ITA, signed the policy in partnership with the public and private institutions in the Sultanate.

The policy emphasizes that government agencies should ensure that:

- 1. Public information and eServices are accessible by persons with disabilities and elderly people;
- 2. ICT-based public equipment is fully accessible to persons with disabilities and elderly people;
- 3. Internal information and applications shall be made accessible to employees who are disabled and elderly;
- 4. ICT is available to persons with disabilities and the elderly people within their respective lines of businesses; and,
- 5. Private sector institutions are to have certain eAccessibility policies in place and regularly monitor them.

In addition, as part of the ITA's efforts in eliminating ICT illiteracy among disabled people in the Sultanate, a Memorandum of Understanding (MOU) was signed in Oct 2012 between ITA and Oman Oil Company (OOC), a leading oil and gas company in Oman, aimed at encouraging public private partnerships in digital society development initiatives.

ITA's Awn Initiative

In order to provide people with special needs the same capabilities that other people have, ITA also launched a new initiative called "Awn" in March 2013. 'Awn' is an Arabic word that means "Help". This program aims to assist disabled individuals to get jobs and to start their own business, as disabled people often face challenges that ablebodied individuals do not, when it comes to finding a job. Another goal of the initiative is to provide fair and equal life opportunities to persons with disabilities through the use of information & communication technologies (ICT). Putting this goal into practice, ITA has already employed two visually-impaired individuals as a start.

Association for the Welfare of Disabled Children

In addition, ITA also works closely with the Association for the Welfare of Disabled Children. ITA held a series of Web Accessibility Workshops to enhance disabled children's learning process. The workshop enabled teachers to acquire knowledge on how to teach disabled children to use ICT tools, so that these children can also interact, communicate and eventually transact using the web just like any other citizens in a knowledge based economy.

State-of-the-art Computer Facility

The Petroleum Development Oman (PDO), a government owned company, funded the setting up of a state-of-the-art computer facility at the Al Wafa Technical Centre at Omar Ibn al Khatab Institute for the visually impaired. The fully equipped computer laboratory serves the educational needs of visually impaired students using the latest trends in hardware and software including the Text-to-Speech (TTS) technology, which displays Arabic text in Braille language.

Donations Portal for Charitable Organizations

This online portal is a one-stop-shop for assisting with the collection of charity funds for the less privileged people and the people with special needs. The portal makes it easy for Omani citizens and residents to donate with a single click from anywhere at any time. The Donations Portal for Charitable Organizations receives donations through the ePayment Gateway from bank cards issued by local banks. The donations are then relayed to participating charitable organizations, including: Al Noor Association for the Blind, Association of Early Intervention for Children with Special Needs, Oman Cancer Association, Oman Charitable Organization, Dar Al Atta'a Charity, Al Rahma Charity, Hereditary Blood Disorder Association, Association for the Welfare of Disabled Children and Environment Society Oman.

ITA Text-To-Speech Initiative

In liaison with an international company, the Information Technology Authority (ITA) has started to employ Text-To-Speech (TTS) software at a number of government institutions within the Sultanate. The software as a service is considered one of the latest applications to enable users to browse the internet, especially those with special needs, including the disabled and illiterate. The service has already been launched on more than 25 government entities portals including Omanuna, the Official eGovernment Services Portal.

ICT CONFIDENCE RND SECURITY



Regional Centre for Cyber Security for the Arab Region

In December 2012, the Oman's National Computer Emergency Readiness Team (OCERT) was designated to serve as the regional centre for cyber security for the Arab region. Recognizing the leading role played by the Information Technology Authority (ITA), represented by OCERT, a Memorandum of Understanding (MOU) was signed between OCERT, in cooperation with both the International Telecommunication Union (ITU) and the organization of IMPACT (The International Multilateral Partnership Against Cyber Threat), which is the cyber security executing arm of the United Nations' specialized agency ITU.

Among the objectives for establishing this regional centre in the Sultanate is to localize ITU-IMPACT's cyber security services in the Arab region. Through localization, services will be able to be delivered based on a regional language, culture and other issues. It is also hoped that by creating such a regional centre it will encourage information sharing within regions.

Information Security Division (ISD)

The Information Security Division (ISD) is one of the ITA's key initiatives. It aims to address security risks and build information security awareness within the Sultanate. The ISD provides a wide range of information security related services. The ISD services add high value to the state institutions through providing security support for eGovernment services, technology-wise and knowledge-wise. The information and data, applications, systems and networks are considered of high value and must be protected from intentional damage, negligence, natural disasters or technical failures. Hence, the ITA, represented by the ISD, provides security services to governmental agencies and institutions according to best practices to guarantee information confidentiality, integrity, and access. To spread awareness on information security among government agencies and institutions' employees, the ITA has conducted several activities, including seminars and workshops on themes such as information security management systems, risk management, business continuity management and post disaster recovery.

Oman's National Computer Emergency Readiness Team (OCERT)

Oman's National CERT is another key ITA initiative, aiming to analyze and treat information security incidents on the internet, as well as to enhance information security awareness and culture among different social strata, whether individuals or institutions.

The OCERT was established in May 2009 to serve a wide group of ICT users, particularly the national infrastructure institutions and major industries, in addition to nationals and residents. It provides a diverse set of information security related services. The Centre also aims to provide timely accurate data on threats and risks and means of protection against them. It also aims to create precautionary measures and steps to avoid or minimize exposure to security threats. The Center also conducts specialized courses on Information Security, which includes wireless networks security, protecting children in the Cyber Space, Emergency and Business Continuity plans and judicial templates for cybercrimes.

ENABLING ENVIRONMENT

eTransactions Law

Oman's digital society initiatives require wide legal protection for all official and personal electronic transactions. Accordingly, the ITA has taken proactive steps in drafting legislation regulating transactions in the Sultanate. This was done in collaboration with the concerned agencies and stakeholders to strengthen the confidence of individuals and business sector in eTransactions.

This was culminated in the promulgation of the eTransactions Law by Royal Decree 69/2008. The law addresses key issues such as: legality of eTransactions, Intellectual Property Rights (IPR), taxation, data protection, legality of e-signatures and emails, and the validity of ePayments, in addition to issues pertaining to emails, privacy and security.

In 2011 the Cyber Crimes Law was promulgated under Royal Decree No. 12/2011 as the first integrated law curbing IT crimes. It was declared to complement and crown the great efforts exerted by the Sultanate in all its units and agencies to address IT crimes. The promulgation of this law was the result of a great effort of research and study of international experiences spanning more than two years.

Standardization in ICT

The Oman eGovernance Framework is a set of standards, best practices and process management systems to enhance the delivery of government services in alignment with the e.oman Strategy. The framework spells out the rules and procedures that ensure that Government IT projects and systems sustain and extend e.oman's strategies and objectives. Officially named the Oman eGovernment Architecture Framework (OeGAF), it serves as a guide to the development, deployment and operations of Information Systems of the Oman Government entities.

OeGAF contains the principles, strategies and building blocks that support the goals of the government. The architecture can direct the selection, use and operation of the technologies needed to support government business requirements and delivery of services. OeGAF works to reduce the time and cost of deploying applications, while making it easier to integrate information and services. OeGAF contains Business Architecture, Solution Architecture, Information Architecture and Technical Architecture.

OeGAF was awarded 1st place in the prestigious Enterprise Architecture Excellence Awards 2010 conducted by Open Group Arabia. The first place award was conferred on the OeGAF Team at the Enterprise Architecture Excellence Award ceremony in Abu Dhabi, UAE in early March 2011.

SANAD - IT Enabled Service Centres

SANAD (Self-Employment and National Autonomous Development) IT Enabled Service Centre creates gainful employment and business opportunity for the nation's youth by delivering ICT enabled services from Government and corporate to public, electronically. The Sanad Service Centres program is considered to be a highly visible nation-wide initiative. One main service provided by the SANAD offices is the commercial registration process.

The automation of the commercial registration process through the One-Stop-Shop (OSS) system allows registrations to be done not only in the Head Office in Muscat but, also in the local offices in wilayats across the country. The registration process is now decentralised and outsourced to a local entrepreneurship programme known as SANAD offices, as well as through the self-service Kiosks and registered Legal Services offices. Currently, there are more than 600 SANAD offices throughout the Sultanate.

E-GOVERNMENT



eTransformation Plan

In 2012, ITA unveiled the eTransformation Plan which comprised the policies and the strategy. The eGovernment Transformation Policies cover four areas and focus on the following:

- A. Government information and data which dictates the need for shared information and databases to avoid duplication and redundancy;
- B. Government services which dictate that all government entities list all services, document all business process and reengineer business process to enhance their services;
- C. Government eTransactions which focus on IT enabling all the services; and,
- D. Indicators and measurement which entails each government entity to evaluate the outcome of their eServices and performance.

The eTransformation Policies are accompanied by a comprehensive eTransformation Plan which detailed the processes of the eTransformation for all government entities in Oman. This plan was carved out based on detailed analysis of the current services status and adoption in the country. It encapsulates three main areas namely: eGovernment Transformation Targets, eService Capabilities Development and eService Implementation & Support.

eTendering

The soft launch of the eTendering project in 2010 was a result of joint cooperation between the Tender Board and ITA as an e.oman project. The primary goal of eTendering is to establish a centralized state-of-the-art procurement management system & set of processes, which will help in achieving higher efficiency and will also enhance elements of transparency and accuracy in government procurement process with considerable cost-savings. eTendering allows government entities to prepare, float, evaluate and award tenders online. It also provides contractors, suppliers and consultants the mechanism to purchase tenders, submit offers, register and renew registrations with the Tender Board online. The eTendering System was awarded the Best G2G prize in the 2nd GCC eGovernment Award in 2011.

National Registration System (NRS) – Royal Oman Police

The National Registration System (NRS) developed by the Directorate General of Civil Status (DGCS) and the Royal Oman Police (ROP) is an integrated computer system with an archive of accurate information about life events for all citizens and residents of Oman.

This NRS project covers the following activities:

- Issue of Omani Identity cards (ID Smart Cards);
- Issue of Resident Cards for expatriates;
- Registration and issue of certificates for birth & death; and.
- Registration of marriage and divorce.

More than 3 million of these cards have been issued since the NRS project was successfully implemented and, with advances in technology, the ID cards can now be used for the following services:

- ePurse solutions allow both citizens and residents to store and load money on their National Identity and Residence Cards as a mode of payment besides credit and debit cards.
- eGate facilities at Muscat international Airport allow for scanning the ID or Residence Card, enabling users to clear the passport section easily. They no longer need to gueue for the stamp;
- Omanuna services (http://www.oman.om) allow users to utilize services on the e.oman Portal.
- eVoting is another important application of the ID card related to the Consultative Assembly (Majlis al-Shura) elections, where mobile units are used to install the eVoting application in the Omani ID cards to allow the voters to use their ID cards in the process of election. This promotes transparency in the electoral process.

In June 2009, the Civil Status System (NRS) received the prestigious global UN Public Service Award 2009 in the category 'Improving the Delivery of Public Service'.

ePolice – Royal Oman Police (ROP) Electronic Services

The concept of ePolice leverages eGovernment services utilising the electronic means of interaction and transaction for the citizens. ROP has led the way towards eGovernment by developing eServices for essential services delivery through the web portal. The ROP web portal offers many ePolice services that help all citizens and residents in Oman and outside Oman to access a huge range of user-friendly services. The portal is

bilingual since it serves both the citizens and residents. The main online services include traffic offense payment, online visa application, visa status enquiry and lost documents. The success of the ePolice services is remarkable national wide.

Fingerprint Reader Service at Notary Public Offices

The Ministry of Justice launched the fingerprint reader service at the Notary Public offices in a step towards digital transformation. The system, which is linked to the Civil Status at the Royal Oman Police (ROP), aims at providing maximum security to official records issued by the Notary Public offices and to save time and effort at codification of the data of the visitors, including women without them having to reveal their faces. The system is part of a package of electronic services, which will link up with 17 government entities, including the Administrative Affairs Council for the Judiciary, ROP, the ministries of Finance, Housing, Manpower, Commerce and Industry and Civil Service.

Muscat Municipality Municipal eServices

Muscat Municipality (MM) is a government body responsible for providing quality services to almost a million citizens and residents living in the Muscat governorate. As an autonomous entity under the jurisdiction of Diwan of Royal Court, the Muscat Municipality is respon¬sible for the development of the Governorate of Muscat. The following are some of the innovative eGovernment Services that the Muscat Municipality has successfully implemented:

- Contract Management System As a G2G application, this system serves to better monitor and manage the contract and disbursement of the budget to approve contrac—tors and consultants executing the project.
- eBuilding Permit Architecture One of the services is the issue and renewal of building permits. Previously, it would take about 3 to 4 weeks for a consultant to get the approval from Muscat Municipality (MM) building per¬mits department. With the new system, it only takes a maximum of 1 week.
- Payment of Parking via SMS By using the SMS parking services, the public can simply purchase a parking ticket via SMS anytime and anywhere. In doing so, Muscat Municipality aims at providing better services to the public and introduces new ways to purchase a parking ticket using SMS technology.

MM has also established a contact center (1111) that facilitates the flow of services' information from customers to MM through various channels. The center is equipped the latest ICT equipment to receive, record and process customers' requests and complains.

eComplaint Window of the State Financial and Administrative Audit Institution

The State Financial and Administrative Audit Institution (SFAAI) implemented an automated eForm on the SFAAI portal to obtain feedback and document complaints from the general public in July 2011. Through the feedback and complaints received, the SFAAI could carry out specific audits and investigations in order to weed out corrupt practices. Through regulated audits by the new SFAAI and public feedback, the citizens and residents now can confidently alert the SFAAI of any wrongdoings in any public services, government-owned organizations and private companies. SFAAI recently launched its e-window through Smartphone applications, as part of its keenness to activate the communication with the community in order to achieve the principle of partnership in protection of the public funds. This project also won first place in 2013 United Nations Public Service Award (UNPSA) in the category 'Preventing and combating corruption in the public service'.

Municipal eServices in the Rural Community (Injaz Hall One-Stop Municipal Services)

The Ministry of Regional Municipality and Water Resources (MRMWR) oversees municipal services, infrastructure and water resources for 44 municipalities in 8 governorates with a population of over 3.6 million scattered all over the country, which is now offered in new one-stop-shop ICT solution called "Injaz Hall". Services include licensing, permits for the application, approval and renewal of various requests such as building permits, rent contracts, shop licenses, issuing of health permits and water resource management and revenue collection of licensing activities. The system has reduced processing time from 5 weeks to less than a week and has saved tremendous costs. Notably, this system won the first place in 2013 United Nations Public Service Award (UNPSA) in the category 'Improving the Delivery of Services'.

Public Authority for Consumer Protection eComplaint Window:

Public Authority for Consumer Protection (PACP) has developed the eComplaint service to enable the public to provide a suggestion or lodge a complaint regarding any violation to the consumer rights including market price hikes, monopoly, low quality services and products, and counterfeits. The eComplaint service provides PACP with an important tool to monitor the market and provide a healthy environment for consumers and ensure their satisfaction. The service includes an array of supporting eParticipation tools to keep the consumers engaged in different ways and mediums, provide timely feedback, and promote transparency. This initiative is both innovative and creative as PACP is able to offer various channels of communication to the consumers to empower them with the capability to police the market place. Through the use of mobile and information technology, the public is empowered to bring to light malpractices and issues which infringe consumers' rights.

The joint effort between the consumers and PACP has facilitated over 3,000 complaints to be reported and 2,400 to be resolved on average per month. This practice provides PACP with tools to constantly measure the consumer's awareness and satisfaction, which is the essence behind its role.

Oman's consumer protection initiative with its eComplaint system is the first of its kind in the region. Consumers' sovereignty regions supreme in the Sultanate after decades of limited consumers' protection.

Microsoft Enterprise Agreement

On February 2013, The Information Technology Authority (ITA) launched the Government of Oman Microsoft Enterprise Agreement 2012-2015, in cooperation with Microsoft Corporation and International Information Technology Company (IITC), the company responsible for implementing the agreement. The agreement seeks to ease the purchase of Microsoft licensing for government institutions and provide more opportunities for government employees in terms of training and other benefits. 81 government entities are participating in this agreement in which they will get benefits divided into different categories – entrepreneurship, capacity building, and business. Through the implementation of the agreement, IITC seeks to update the software used in the government institutions, and provide associated services, such as training seminars for the employees and develop IT infrastructure in the government institutions.

E-BUSINESS



One-Stop-Shop (Ministry of Commerce and Industry)

The One-Stop-Shop (OSS) is a highly useful service offered by the Ministry of Commerce and Industry (MoCI), which enables investors to set up companies in Oman while minimizing paperwork, saving costs and time. In cooperation with MoCI, ITA has worked to align this service with the overall eGovernment framework in an integrated manner from a single-access point. The Commercial Registration Database is a shared database within the eGovernment architecture, whereby other entities can reference complete and updated company data electronically via the Government Nervous System. The commercial registration number becomes a national identifier for businesses. In 2012, the OSS won the WSIS Project Prizes in the category 'e-Business'.



National ICT Incubation Program (Sas)

More recently, ITA launched the Sas Programme and Centre. 'Sas' in Arabic means foundation. The Sas Centre already has 12 projects – 9 of which are being fully incubated and 3 projects in the pre-incubation phase. As an ICT business development initiative and a state-of-the-art business designed to help promote small and medium enterprises (SMEs) build a robust ICT sector in Oman, Sas aims to create a business eco-system which will help to develop globally competitive ICT businesses here in Oman, particularly as ICT use has been on the increase. Sas has hosted a number of important visitors who come to learn more about the Programme, including Prince Charles (The Prince of Wales) who toured the Sas Centre in March 2013 and met with the entrepreneurs.

Knowledge Oasis Muscat

The Knowledge Oasis Muscat (KOM) is an example of successful multi-sector partnership (MSP) with the Public Establishment for Industrial Estate (PEIE). Knowledge Oasis Muscat (KOM) is a technology park. Dedicated to supporting technology-oriented businesses, KOM brings together a diversity of enterprises from industry niches as varied as M-commerce to international call centres. KOM is home to blue chips such as Oracle, Hewlett Packard, Motorola, Microsoft, NCR, and Huawei, as well as dynamic hi-tech start-ups. KOM is an ideal environment to grow a hi-tech company, while enjoying the spectacular natural beauty and hospitality of Oman. 20,000 sq. m. of office and business incubator accommodation is already occupied and the Park is home to over 60 firms. KOM has recently extended its offer by constructing a further 30,000 sq. m. of distinguished Class A office accommodation.

Industrial and Innovation Centre

The Industrial and Innovation Center (IIC) is a joint efforts by the Research Council of Oman and the Public Establishment for Industrial Estates (PEIE) aimed at building a cogwheel toward industrial expansion and sustainability, by enforcing knowledge dissemination for capacity building by involving the Industrial community, the Research Community (academia and research centres) and Knowledge Brokers (local and international).

In essence, the industrial innovation assistance program through its jobs will create a research and innovation culture and function within Omani industries, while building capacity by incorporating new scientific and technological skills. More specifically, it is designed to:

- stimulate innovation (R&D) and transfer activities in industrial sector;
- strengthen the innovation capacity in Oman industries; and,
- enhance the competitive capacity in Oman industries.

ICT cluster development is also included as one of the key strategies to create a culture of innovation through research and development activities.

Oman Statistics Online

The increasing awareness of the importance of statistics and its many uses, has led many governments and non-governmental units in the sultanate to indulge in statistical activities that cover data collection, analysis and the issue of statistical bulletins and reports. The National Statistics Online is a flagship project and aims to present socio-economic indicators based on various criteria and timeline in a dynamic and graphical manner. Oman Statistics Online (http://www.ncsi.gov.om/NCSI_website/stats_online.aspx) is a free-access online database with quality data compiled and published periodically by the competent authority. Key economic and social statistics are available online from the National Center for Statistic and Information of the Supreme Council for Planning. The same data is now available as a free mobile app.

E-LERRNING



Higher Education Admission Centre (HEAC) System – Ministry of Higher Education

The Ministry of Higher Education (MoHE) developed the Higher Education Admission Centre (HEAC) System to unify the admissions process in all higher education institutions. The system seamlessly processes and allocates applications to higher education institutions based on the program of choices and students grades. The most important impact is in the increase in transparency of the admissions process where the system has given students the confidence that they are fairly placed in the program that best suits them and also based on merits. In 2013, the system offered 26,000 vacancies for students.

In the World Summit Awards 2007, the HEAC electronic system won the World's Best eContent Applications in the Category 'elnclusion' from among 160 countries.

ICT in Education

The Ministry of Education has made great strides in expanding access to computers in schools and in integrating e-learning in the curriculum. Information Technology is now taught in all schools as a separate subject from Grade 1 to Grade 10 in Basic Education. In Grade 11, the ICDL (International Computer Driving License) is a required course and each student has the opportunity to learn IT skills. Education plays a critical role in the two aims of e.oman - developing awareness and building capacity. The majority of the Sultanate's Higher Education Institutions (HEIs) offer programs in ICT or Computer Science, according to the ICT Higher Education Institutions survey conducted by ITA in 2011, and most higher education institutes offer ICT majors and the percentage of students enrolled in ICT majors is 19% out of all students enrolled in higher education institutes. The Oman Accreditation Board has developed a high end, state-of-the-art interactive web site and the Ministry of Higher Education (MoHE) is working on similar standards.



The Education Portal

The Education portal is the umbrella term to collate all the IT initiatives and services within the MOE IT Master plan which enables the Administration, Curriculum and Assessment, Content and Learning Resources, Physical & Technological Infrastructure and Human Capital Development.

The main objectives of the Education portal are to link all components of the educational system using a group of programmes and services through the internet, facilitates communication within the educational process and present it in an effective and attractive manner for students, teachers, parents and administrators and facilitates the administrative work within the ministry through a number of systems such as electronic requests and document archive.

The implementation strategy is based on the international benchmark in adapting ICT in education, so as to move MOE in the right direction of having a robust infrastructure that leads to having high quality performance which includes having a National IT Master plan for Education.

Ministry of Higher Education eLearning System

The Ministry of Higher Education (MoHE) has partnered with Edutech Middle East, a leading provider of technology-enabled information and learning solutions, to provide eLearning opportunities to six colleges across the Sultanate. The initiative has provided a centralised learning platform that is now facilitating information sharing and dissemination among 10,000 students enrolled across the geographically-spread colleges across the country. The 'Blackboard Learning System' enables the colleges to post their courses online and provide information to students about the various courses and programs offered across colleges, while the 'Blackboard Community System' allows administrators to build vibrant online communities and improve the flow of information to let students connect and learn outside the classroom.

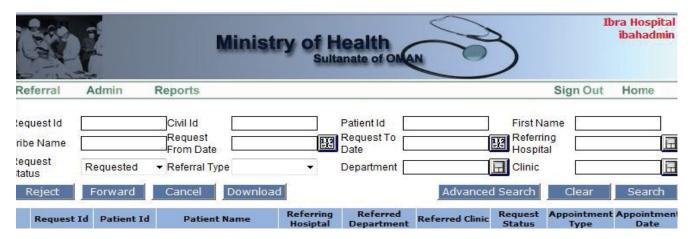
Sultan Qaboos University

The Sultan Qaboos University, the only government funded university in Oman, uses Moodle and WebCT as the backbone of their e-learning system. Course contents are available online for the students and lecturers can use the WebCT as their virtual classroom.

TRESS System – The Research Council

The Research Electronic Submission System (TRESS) is an open grant electronic submission system being developed by The Research Council (TRC) to process, issue and manage funds for research and facilitates opportunities for researchers to submit research proposals in areas allocated by TRC, with the ease of applying online and tracking the evaluation status of the proposal. Researchers from institutions affiliated with TRC are privileged to use the TRESS platform. TRESS is also used by those who are evaluating submitted research proposals, such as the grant committee, peer reviewers and institutional focal points.

E-HERLTH



AlShifa System

The eHealth application, also known as the AI Shifa System, from the Ministry of Health is one of the most advanced eGovernment applications. AI-Shifa is a comprehensive healthcare information management system developed as complete solution for a healthcare facility management from electronic medical records to Assets, Inventory, FA, and HR management. Developed by the Ministry of Health, Oman, this system has been installed in 200+ healthcare facilities of varying sizes and capabilities, including several non-MoH caregiver facilities. A fully integrated and easily accessible electronic medical record that provides a 360 degree view of a patient's history and clinical information needed for a point-of-care is the most crucial component of AI-Shifa.

The system is operational in over 80% of Ministry of Health healthcare institutions and some other Government healthcare delivery systems as well. The following modules can also be found in the Al Shifa System:

eReferral System

The eReferral system was developed as a response to solve the difficulties faced by the health institutions in the laborious manual processes involved in the workflows and data exchanges related to the patient referrals and referral backs and also related ancillary services like laboratory, radiology and other diagnostic procedures.

eNotification System

The eNotification system implements all the workflows related to public health surveillance in Oman and the exchange of the related documents between institutions. Health institutions (hospitals, clinics, labs, etc.) use the system to notify the central authority about cases detected in their institute. The system also provides the notifying centers updates and feedbacks related to the notified case.

Mother and Child Module

The module centers on providing a holistic primary care for pregnant mothers (pre-natal and post natal care) at all medical centers from conception to birth at the tertiary hospital. This programme targets the age group of 0-5 years of both genders, and also the mothers of these children, as it includes counseling services and educational services as well. IMCI (Integrated Management Childhood Illnesses) is a global strategy recommended by WHO and UNICEF, and was adopted and adapted by Oman. The main aim of the programme is to reduce childhood deaths, illnesses, and disabilities, and to contribute to the improved growth and development of children in Oman.

Through this specialized module, Oman has achieved the 4th MDG and has reduced Childhood mortality rate for children under 5 years of age from 181 per 1000 live births in 1970 to 9 in 2011. Infants' mortality rate reached 7 per 1000 live births in 2011 compared to 118 in 1970.

This project was recognized by UNICEF in the middle of the 1990's for the continual reduction of child mortality. In 2012, this project was awarded 2nd Prize in the UN Public Service Award in the 'Promoting Gender-responsive Delivery of Public Services' category. The same project also won a WSIS Project Prize for the category e-Health.

E-EMPLOYMENT



Civil Service Human Resource Management System

The recruitment of civil service personnel is done efficiently and effectively and most the recruitment is done totally based on the merits of the applicants. Capitalising on the high mobile penetration rate, the Ministry of Civil Service (MoCS) introduced a new system of recruitment which utilized the Short Message Service of the mobile phone. In August 2007, the new recruitment system using SMS was introduced enabling job seekers to apply for jobs in the Civil Service by sending an SMS with their Manpower Registration.

Electronic Manpower Registration System

In early 2000, the Ministry of Manpower implemented the electronic Manpower Registration System to manage the employment of foreign workers in the Sultanate. The system provides end-to-end application process pertaining to the management of foreign workers. The system contains an Electronic Data Management System (EDMS), which ensures archiving every official document with a quick and efficient retrieval capability.

In addition, the system is highly integrated to more than ten ministries by providing efficient G2G application. The information provided to different government sectors helps to expedite the related services of citizens and residents. The Manpower Registration System' won in the 'Improving the Delivery of Public Services' category of the 2010 UN Public Service Awards. This is a prestigious award, which is testimony to the effectiveness of the system.

Recruitment Through SMS Applications System of The Royal Court Affairs (RCA)

This novel solution, developed by the Royal Court Affairs (RCA), uses mobile technology and an integrated system between RCA and the Ministry of Manpower to enable Omani citizens to apply for job advertisements, by sending an SMS and get the first response within seconds. The new system has reduced the process cycle time to 5-10 seconds and has significantly brought down the cost of processing to only 10 Baiza through automated sorting of applications. In addition, the solution also helps the Ministry of Manpower to maintain information accuracy and promote transparency in the recruitment process ensuring equal opportunity for all.

This innovative solution won the World Summit Award in the eGovernment category in 2009. It also won the Best eContent Award among the Arab Region under the World Summit Award programme.

CULTURAL DIVERSITY AND IDENTITY, LINGUISTIC DIVERSITY AND LOCAL CONTENT

Oman Encyclopaedia Project

The Ministry of Heritage and Culture have developed a unique project called the Oman Encyclopaedia. It is a national project that aims to publish a comprehensive reference work on Oman and its people. It will bring together all the major knowledge on Oman in a refereed encyclopaedia that is expected to be produced in a multi-volume book with thousands of entries. These entries cover major humanistic aspects about Oman like history, culture, politics, economics, sociology and ethnology, as well as natural aspects such as biology, archaeology, geology, engineering, astrology, and so on.

The project deals with hundreds of national and international academic intellectuals, editors, researches, translators, photographers, IT specialists, and administrative and financial teams. After editing the entries and their supporting non-textual data, final design of the encyclopaedia was carried out using the most modern technology available prior to its printing. The encyclopaedia's fourth draft was released at the beginning of 2012, including eight volumes with thousands of entries and related data. With the electronic version, the digital contents from this project provide contents for information and education purposes in both English and Arabic.

National Records and Archives Authority (NRAA)

Established by Royal Decree No. 60/2007 in 2007, the Authority organises and manages documents and archives. The NRAA catalogues and stores a wealth of Omani records and written documentation, property that is deemed to be public property. The Authority is based in Muscat with plans to establish computer linked branches in the governorates and regions and is currently working on an ICT-based library system to manage the textual and non-textual archived materials. Currently, the Authority has a repository of more than 300,000 documents.

Omani Manuscripts

The Ministry of Heritage and Culture's Manuscripts Department has a collection of more than 5,000 manuscripts from Oman and elsewhere covering a diverse range of topics. The manuscripts on medicine, chemistry, Hadith, and Quranic sciences along with critical interpretation of the text have been catalogued as part of a scheme that aims to index all the manuscripts in the department's possession. The Manuscript Department offers facilities for scholars and post-graduate students to study the manuscripts in detail of its published and printed materials, which can be accessed through internet. Presently, users can only view, retrieve, copy and print the manuscripts in the library.

Encyclopaedia of Sultan Qaboos of Arabic Names

The Sultanate of Oman is always keen on enriching the cultural life and the Arabic library by providing valuable additions. One of these additions is the Encyclopaedia of Sultan Qaboos of Arabic Names. The original encyclopaedia came as a result of a personal initiative of His Majesty Sultan Qaboos bin Said. The implementation of the project began in October 1985. The new encyclopaedia is a result of extensive research carried out by more than 150 researchers from various Arab countries in many scientific fields. That comprised a wide range of linguistic, social, historical, political, literary researches that focused on nearly 7 million Arabic names by using the latest scientific and statistical methods. The Omani project is a historic scope that fills a vacuum in the Arab library. It also provides a model for outstanding cooperation among dozens of researchers in various fields who came from all around the Arab world.

Arabic Domain Names

Setting up Domain Name Management Function as per the Telecom act, the Telecommunication Regulatory Authority (TRA) is mandated to manage the country's '.om' domain name in both Arabic and English languages. The use of the Arabic language in domain names addresses will increase the number of users in the Sultanate and provide greater access. In addition, the language of domain names addresses is of vital importance in order to achieve the greatest benefits in enabling users to access fully Arabic content on the Internet via Arabic addresses without any language barriers.

The Media and its Role in The Information Society

Information access in Oman is relatively easy with a vibrant media industry. The media play an important role in the dissemination of information in the Information Society. In the Sultanate, the Ministry of Information was quick to embrace the new media channels. They formed the Oman Electronic Network which comprised of all the traditional media forms and converged them into a single information portal. In the rural areas, television, radio and newspapers are still the most effective means of information dissemination.

INTERNATIONAL AND REGIONAL COOPERATION

The Sultanate of Oman has actively participated in the World Summit on the Information Society (WSIS) from the beginning, in WSIS Summits in 2003 Geneva and 2005 in Tunis. ITA has been working with the ITU in different initiatives including WSIS-related activities and ICT Statistics. The ITA is also actively contributing to the WSIS Stocktaking Process, by providing regular reporting on national ICT related projects.

The Sultanate of Oman, ITA was the partner for Specific Activities for the WSIS Forums in 2011 and 2012. In 2013, ITA was the Government Strategic Partner for the WSIS Forum. For the third year, Oman also participated in the WSIS Project Prizes 2013 edition.



Oman is actively participating in the ICT activities and mandates in the Arab Region. The Gulf Cooperation Council (GCC) has set up a committee responsible for developing joint ICT venture for the region called the GCC eGovernment Executive Committee. Among its tasks is the establishment of the joint GCC eGovernment Strategy, which was suggested by Oman during the first GCC eGovernment Conference hosted by Information Technology Authority of Oman in 2009.

Oman also takes positive role in the League of Arab States meetings related to ICT at all levels including technical inputs and discussions in the areas of strategies and policies.

ITA along with stakeholders also participates in all activities related to the information society under the United Nations Economic and Social Commission for Western Asia (UN ESCWA). ITA provides inputs and actively takes part in all relevant meetings.

