



# ARAB STATES

## REGIONAL WSIS STOCKTAKING REPORT 2016 ICT PROJECTS AND WSIS ACTION LINE RELATED ACTIVITIES IN ARAB STATES



# WSIS STOCKTAKING REPORT IN THE ARAB STATES

2014 – 2016

ISBN

978-92-61-21661-0 (paper version)

978-92-61-21671-9 (electronic version)



**Please consider the environment before printing this report.**

© ITU 2016

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

# Table of Contents

|   |    |
|---|----|
| Foreword  | v  |
| Introduction  | 1  |
| 17 Sustainable development goals (SDGs):  | 2  |
| The role of ITU in WSIS implementation  | 3  |
| Countries in the Arab States Region   | 4  |
| ITU contribution to the implementation of the WSIS outcomes: 2014   | 4  |
| ITU contribution to the implementation of the WSIS outcomes: 2015   | 4  |
| ITU contribution to the implementation of the WSIS outcomes: 2016   | 5  |
| C1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development | 6  |
| C2. Information and communication infrastructure  | 15 |
| C3. Access to information and knowledge   | 21 |
| C4. Capacity building   | 33 |
| C5. Building confidence and security in the use of ICTs   | 38 |
| C6. Enabling environment  | 43 |
| C7. ICT Applications  | 46 |
| E-government  | 46 |
| E-business  | 64 |
| E-health  | 69 |
| E-employment  | 74 |
| E-learning  | 79 |
| E-agriculture   | 86 |
| E-environment   | 87 |
| E-science   | 91 |
| C8. Cultural diversity and identity   | 93 |
| C9. Media   | 95 |
| C10. Ethics   | 96 |

|   |     |
|---|-----|
| C11. International and regional cooperation | 99  |
| Conclusion                                  | 101 |



Since October 2004, the WSIS Stocktaking Platform has served as a global repository for collecting and reporting on ICT-related projects that implement the WSIS Outcomes in accordance with the WSIS Action Lines. It has also proved to be an efficient mechanism for sharing best practices towards advancing development goals, a role that I am confident will add additional value by highlighting the linkages between the WSIS Action lines and the United Nations' Sustainable Development Goals (SDGs), the hallmark for global growth since 2015.

The outcome document of the UN General Assembly High-Level Meeting on the Overall Review of the Implementation of the Outcomes of WSIS recognized the importance of reporting and sharing of best

practices for the implementation of the WSIS outcomes by all stakeholders beyond 2015 and towards 2025, and thereby recognizing the WSIS Forum as a key platform for doing so. Moreover, the WSIS Overall Review called for close alignment between the WSIS process and the United Nations 2030 Agenda for Sustainable Development, highlighting the crosscutting contribution of ICTs to the SDGs.

During the WSIS Forum 2016, while noting United Nations Economic and Social Council (ECOSOC) Resolution 2015/26, the WSIS multi-stakeholder community expressed the need for customized regional WSIS Stocktaking reports highlighting the efforts made towards implementation of the WSIS Action lines at the regional level.

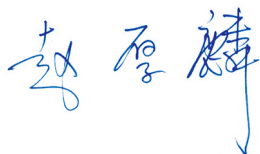
The WSIS Stocktaking Regional Reports of ICT Projects and Activities for the Period 2014-2016 for Africa, the Americas, Arab States, Asia and Pacific, CIS, and Europe are being diligently prepared. Continuing the collection of projects reflecting the linkages between WSIS Action Lines and SDGs, the WSIS Stocktaking Regional Reports showcase the impact these projects have on the ground at the regional level.

Until 2016, the global WSIS Stocktaking Reports reviewed more than 8,000 entries from around the world. In past reports one entry may have consisted of one or many actions carried out by international organizations, governments, the private sector, civil society or other stakeholders. I am pleased to note that the WSIS Stocktaking community now includes more than 200,000 stakeholders.

Through the WSIS Prizes contest, which has now been an integral part of the WSIS Stocktaking for the fifth year in a row, WSIS recognizes outstanding success stories from around the world for their part in building an inclusive information society. It is my pleasure to recognize the WSIS Prize 2014-2016 winners and champions from the Arab Region, and to applaud their dedication and commitment to the implementation of the WSIS Outcomes, while also honoring and awarding outstanding projects from the international WSIS community.

Since 2014, two hundred and forty-eight (248) were submitted from the Arab Region to the WSIS Stocktaking platform while forty-three entities from this region have been awarded WSIS Prizes as winners and champions since 2012. I use this opportunity to congratulate them again on their achievements and their ongoing dedication to the WSIS process. It is also with pleasure that I recognize the commitment of this region to the implementation of the WSIS Outcomes, including the commitment made to share best practices regarding the use of ICTs to help advance the SDGs.

I invite all stakeholders to fully use the WSIS Stocktaking platform and align the various ICT-related local, national and regional databases with our WSIS Stocktaking database for the world's mutual benefit. Your projects and initiatives will continue to be promoted at the regional and global level in a common endeavour to achieve the goals set out by global leaders at WSIS and taken forward in the WSIS Beyond 2015 and Sustainable Development Agenda 2030.



Houlin Zhao  
ITU Secretary-General



## Introduction

On the occasion of the World Telecommunication Development Conference (WTDC) 2017, special edition of the WSIS Stocktaking Report for the ITU Arab Region for the period 2014-2016 was produced as the information document for the Regional Preparatory Meeting taking place from 30 January to 1 February 2017 in Khartoum, Sudan.

The World Summit on the Information Society (WSIS), which was held in Geneva in 2003 and in Tunis in 2005, drew up an action plan to bridge the digital divide and build an inclusive, people-oriented information society. World leaders committed themselves to regularly review and follow up progress in implementing the action lines outlined in the WSIS Outcomes.

The United Nations Economic and Social Council (ECOSOC) resolution 2015/26 "Assessment of the progress made in the implementation of- and follow up to the outcomes of the World Summit on the Information Society", that reiterates the importance of sharing best practices at the global level, and, while recognizing excellence in the implementation of the projects and initiatives that further the goals of the World Summit, encourages all stakeholders to nominate their projects for the annual WSIS Prizes, as an integral part of the WSIS Stocktaking process, while noting the report on the WSIS success stories.

The outcome document of the UNGA High-level Meeting on the overall review of the implementation of the outcomes of WSIS recognized the importance of reporting and sharing of best practices for the implementation of WSIS outcomes by all stakeholders beyond 2015, recognizing the WSIS Forum as a key platform for doing it. In this context the WSIS Stocktaking process plays a strategic role in supporting WSIS Forum in its endeavor.

Moreover the WSIS Overall Review called for close alignment between the WSIS process and the 2030 Agenda for Sustainable Development, highlighting the cross-cutting contribution of ICTs to the Sustainable Development Goals. In this context also the WSIS Stocktaking evolves into the unique global process for collection of information on actions carried out in context of WSIS, while underlining their contribution to the implementation of the 2030 Agenda for Sustainable Development.

In the period 2014-2016, WSIS Stocktaking Reports have reviewed 248 ICT-related projects and activities carried out by international organizations, governments, the private sector, civil society and other stakeholders in the Arab Region, with those in 2016 highlighting the efforts deployed by stakeholders involved in implementation of the SDGs. WSIS Stocktaking reports are based on the multistakeholder approach, including input from stakeholders from all over the world responding to ITU's official call for stocktaking updates and new entries. The inputs from WSIS action line facilitators and co-facilitators also contribute to the reports.

Most of two hundred and forty-eight projects listed in this Report were also nominated for the WSIS Prizes contests in the period 2014-2016, while forty-three (highlighted in the gray boxes) were awarded with the WSIS Prize Winner or WSIS Prize Champion recognition. WSIS Prize is a unique global recognition for excellence in the implementation of WSIS outcomes. The contest is open to all WSIS stakeholders.

The WSIS Stocktaking community comprises of more than 200.000 stakeholders who are eager to contribute to the WSIS Process year after year. By identifying trends in implementing WSIS Outcomes, the WSIS Stocktaking Process makes a significant contribution towards building an inclusive Information Society.

The principal role of the WSIS Stocktaking exercise is to leverage the activities of stakeholders working on the implementation of WSIS outcomes and share knowledge and experience of projects by replicating successful models designed to achieve SDGs.

The WSIS action lines break down into 18 categories:

- 1) The role of governments and all stakeholders in the promotion of ICTs for development
- 2) Information and communication infrastructure
- 3) Access to knowledge and information
- 4) Capacity building
- 5) Building confidence and security in the use of ICTs
- 6) Enabling environment
- 7) E-government
- 8) E-business
- 9) E-learning
- 10) E-health
- 11) E-employment
- 12) E-environment
- 13) E-agriculture
- 14) E-science
- 15) Cultural diversity and identity, linguistic diversity and local content
- 16) Media
- 17) Ethical dimension of the information society
- 18) International and regional cooperation

### **17 Sustainable development goals (SDGs):**

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

**Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

**Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

**Goal 17.** Strengthen the means of implementation and revitalize the global partnership for sustainable development

We take this opportunity to extend sincere gratitude to all of the stakeholders from the CIS region who have been engaged in the WSIS Process, sharing their national advances on implementation of the WSIS outcomes since 2004. We would also like to invite all ITU Member States and Sector Members of the CIS region to continue engaging with the WSIS Stocktaking process by submitting projects relevant to WSIS Action Lines and the newly established SDGs, promote the WSIS Stocktaking process within their communities, and follow new developments of the WSIS Prizes 2017 contest.

### **The role of ITU in WSIS implementation**

It is important to stress here that ITU has been contributing enormously to WSIS implementation and follow-up from 2005 to the present. The tasks carried out by ITU at the operational and policy level cover all mandates assigned to it relating to the WSIS process, in particular:

- in its capacity as lead facilitator in coordinating the multistakeholder implementation of the Geneva Plan of Action (§ 109 of TAIS) and primary organizer and host of the annual event in May, the WSIS Forum;
- as facilitator for Action Lines C2 (Information and communication infrastructure) and C5 (Building confidence and security in the use of ICTs), as well as C6 (Enabling environment);
- as co-facilitator for Action Lines C1, C3, C4, C7 and C11
- as partner in Action Lines C8 and C9;
- as rotating chair and vice-chair of the United Nations Group on the Information Society (UNGIS) (§ 103 of TAIS);
- as lead partner on Measuring ICT for Development (§ 114 of TAIS);
- as facilitator of the WSIS Stocktaking process (§ 120 of TAIS);
- as organizer of World Telecommunication and Information Society Day (§ 121 of TAIS);
- as lead of the Connect the World Initiative (§ 98 of TAIS).

## Countries in the Arab States Region

- Algeria
- Bahrain
- Comores
- Djibouti
- Egypt
- Iraq
- Jordan
- Kuwait
- Lebanon
- Libya
- Mauritania
- Morocco
- Oman
- Palestine
- Qatar
- Saudi Arabia
- Somalia
- Sudan
- Syria
- Tunisia
- United Arab Emirates
- Yemen

### ITU contribution to the implementation of the WSIS outcomes: 2014

As at July 2014, over 6 000 updated entries had been registered in the WSIS Stocktaking Database, reflecting innovative activities including projects, programmes, WSIS thematic meetings, conferences, publications, training initiatives, guidelines and toolkits. Entries may contain information on more than one project.

The sixth edition of the WSIS Stocktaking Report was officially released during the WSIS+10 High-level Event in June 2014. The 2014 report reflects more than 500 WSIS-related activities submitted to the WSIS Stocktaking process for the period May 2013- April 2014, each highlighting the efforts deployed by stakeholders involved in implementing the WSIS goals.

In 2014, the WSIS Stocktaking Platform encompassed 33 000 stakeholders representing governments, the private sector, international organizations, civil society and others, and continued to constitute a major ICT for development (ICT4D) online platform.

One innovative component was the “World Café”, which provided an opportunity to promote the winning projects of the WSIS Project Prizes 2014 contest at the international level, share best practices and discuss the purpose and impact of the projects recognized for their excellence in the implementation of WSIS outcomes. Stakeholders highly appreciated the contest’s multistakeholder approach and highlighted the importance of continuing the platform as a mechanism for granting recognition to stakeholders for their efforts to implement WSIS outcomes.

### ITU contribution to the implementation of the WSIS outcomes: 2015

In 2015, the WSIS Stocktaking Platform has seen the biggest increase in new entries, including the number of stakeholders registered, reaching a total of more than 100 000 stakeholders representing governments, the private sector, international organizations, civil society and others. This has strengthened its position as the major ICT for development (ICT4D) online platform. As at April 2015, over 7 000 updated entries are registered in the WSIS Stocktaking Database, reflecting all manner of innovative WSIS-related activities.

The seventh edition of the WSIS Stocktaking Report will be officially released during the WSIS Forum 2015 (25 to 29 May 2015, in Geneva, Switzerland). It should reflect the more than 1 000 WSIS-related activities that were submitted to the WSIS Stocktaking process for the period April 2014- March 2015.

In addition, more than 300 international projects have been competing in the prestigious WSIS Project Prizes contest and are also to be included in the 2015 Stocktaking report. This marks an increase of 114 per cent in project nominations since 2014. The WSIS Project Prizes contest is part of the WSIS Stocktaking Process, and is a unique way of recognizing excellence in the implementation of WSIS outcomes.

More than half of the projects submitted this year were government initiatives, while 12 per cent originated from civil society, 11 per cent from the business sector, 10 per cent from international organizations, and another 12 per cent from other, mainly academic, entities. As regards geographic distribution, 31 per cent of the projects in 2015 were submitted by Arab States, 18 per cent were from Europe, 16 per cent each from the Asia-Pacific Region and the Americas, 12 per cent from Africa, and 4 per cent from the CIS, while 3 per cent came from international organizations and international NGOs.

The WSIS multistakeholder community was invited to participate and cast its vote for one project in each of 18 categories. The deadline for votes was 1 May 2015. The list of the 18 most appreciated/voted projects was identified and winning projects were announced officially to the public during the prize ceremony held during the WSIS Forum 2015. The success stories showcased examples of projects on the implementation of WSIS outcomes, emphasizing the achievements of stakeholders working towards achievement of WSIS goals, transferring experience and knowledge at the global level, and spreading and fostering WSIS values.

### ITU contribution to the implementation of the WSIS outcomes: 2016

As at April 2016, almost 8 000 updated entries are registered in the WSIS Stocktaking Database, reflecting all manner of innovative WSIS-related activities.

The eighth edition of the WSIS Stocktaking Report and the fifth edition of Success Stories 2016 will be officially released during the WSIS Forum 2016 (2 to 6 May 2016, in Geneva, Switzerland). It should reflect activities which were submitted to the WSIS Stocktaking process for the period March 2015 - March 2016.

While last year's contest was already a record-breaker in terms of the number of projects submitted, the **WSIS Prizes 2016** contest has hit a new high with a 15 per cent increase in submissions. Following a comprehensive review of the projects submitted, the ITU Expert Group nominated more than 300 projects and posted them online for public appreciation. The 311 nominated projects break down into 179 projects from the government sector, 41 from the business sector, 31 from civil society, 14 from international organizations and 46 from other entities (mostly academic). As regards regional distribution, 86 projects are from the Arab region, 73 from the Asia and Pacific region, 53 from the Americas region, 36 from the Europe region, 31 from the CIS region and 27 from the Africa region, while five nominated projects come from international organizations.

The members of the WSIS multistakeholder community were invited to participate and cast their votes for one project in each of 18 categories. The deadline for voting was 10 March 2016. The list of the 18 most appreciated/voted projects will be identified and winning projects will be announced officially to the public during the prize ceremony to be held during the WSIS Forum 2016. The success stories will showcase examples of projects for implementation of WSIS outcomes, emphasizing the achievements of stakeholders working towards the achievement of WSIS goals and SDGs, transferring experience and knowledge at the global level, and spreading and fostering WSIS values. Besides the 18 winners, an innovation in this year's **WSIS Prizes** contest is the **WSIS Prize Champions** category, which recognizes those contenders having emerged from the online voting phase with at least 245 000 votes from the WSIS community. Their projects are among those having received the highest number of votes and having gained the best reviews by the members of the Expert Group. Among the five projects selected in each of the 18 categories, one will be the Winner and the runners-up will be WSIS Prize Champions.

## C1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development

In **Algeria**, the *Iroley Smart Zone (ISZ)* project is part of the Djibouti Digital road map initiated by the Ministry of Communications in accordance with the country's "Vision 2035". The aim is for ISZ to become a showcase for the Ministry's vision of transforming Djibouti into a knowledge-based smart economy (**SDGs 10 and 16**). The smart sustainable zone will be dedicated to fostering a prosperous ecosystem, building ICT industry expertise and skills in a national Centre of Excellence, attracting international IT companies and also developing a start-ups ecosystem providing entrepreneurs with infrastructure, access and a dynamic working environment.

The *CNAC information system* is based mainly on employment- and management-related computer applications such as:

- RAC: computer system for management of the Unemployment Insurance Scheme
- SIPROC: computer system for device management support for the creation and expansion of activities
- SIGAPE: computer system for management of the incentive system and support for the promotion of employment
- SCRABBLE: integrated management of fixed assets, inventory and accounting
- "PAY" system
- "Administrative management" system

In **Algeria**, *Overview image on the monthly progress of projects (programs and projects housing) - Full web application* is the title of a web application project hosted on servers in the headquarters of the Department, the decentralized services of different provinces, and through the intranet (VPN/SSL), with access to the web portal of the Ministry (containing multiple applications). After authentication, users can consult the list of programmes notified by the application administrator (central office) and determine the consistency (number of houses) of each programme (**SDGs 1 and 17**). They can then send monthly progress reports on those programmes (number of houses outstanding, completed and launched), as well as divide the programmes into several projects and submit monthly progress reports on those projects.

In **Algeria**, the Ooredoo organization has launched the "*Oobarmijoo*" (Arabic for "I develop") project in order to support innovation within the community of Algerian developers. Specifically, Oobarmijoo works as a challenge/competition to stimulate the creation of local content by local publishers, such as mobile applications and innovative solutions in the IoT and ICT spheres, under the label "Made in Algeria". The project highlights the impact of ICT promotion for the purpose of encouraging innovation in Algeria.

As such, it relates to **SDG 9.5**, where the aim is to enhance scientific research and inspire the local innovation process.



In **Djibouti** *Pusat Layanan Internet Kecamatan Sentra Produktif* or *Internet Services Cluster for Productive Centers* is a government initiative to provide Internet services to facilitate the activities of small, micro and medium-sized industries in order to improve their productivity and economic growth in subdistrict areas (**SDG 1 and 10**).

In **Morocco**, the Ministry of Industry, Trade and New Technologies introduced the national strategy for the development of the information society and digital economy: *Digital Morocco 2013*. The Digital Morocco 2013 strategic plan is designed to make information technology a cornerstone of the economy, a source of added value for other economic sectors and public administration, and an engine for human development, with a view to positioning Morocco as a regional technology hub; thus contributing to **SDGs 5 and 10**.

The following four strategic priorities are identified in the plan:

- Provide individual citizens with access to broadband Internet and promote interaction and access to knowledge
- Sensitize the public administration about users' needs with regard to efficiency, quality and transparency, through an ambitious e-government programme
- Promote computerization in small and medium enterprises to improve productivity
- Develop local IT business potential by providing support for the creation and growth of local actors, as well as by promoting the emergence of areas of excellence with strong export potential.

The plan foresees two implementation imperatives:

- Ensure the availability of human resources, in terms of both quality and quantity, to meet the sector's needs
- Put in place the right conditions for cyberconfidence,

and two accompanying measures:

- Put in place overall governance



- Ensure the allocation of adequate financial resources.

In **Morocco**, the *Generalization of Information and Communication Technologies in the National Education (GENIE)* programme and the progressive integration of ICTs to support the national curriculum are two important steps in the implementation of the education reform (**SDGs 1 and 10**). The GENIE programme is a governmental project that aims to contribute to building a knowledge society and sustainable development in Morocco. Furthermore, in March 2005, the Moroccan government adopted a strategy aimed at the widespread use of ICTs in public schools. It has set up a programme to equip schools (at all levels) with multimedia rooms and/or media suitcases connected to the Internet, as well as other mobile devices.<sup>1</sup>

In **Oman**, the Information Technology Authority (ITA) has implemented the *e.oman* digital strategy, which sets long-term direction under six pillars: Society and human capital development; Enhanced e-government and e-services; ICT industry development; Governance, standards and regulations; National infrastructure development; and Promotion and awareness (**SDGs 10 and 17**). No fewer than 2 020 performance indicators (KPIs) have been defined and translated into annual milestones achievable through an integrated portfolio of national programmes and projects with annual measurement and improvement. Currently, more than 95 per cent of government entities are applying *e.oman*.<sup>2</sup>

The *Open Data Policy* is part of fulfilling **Qatar's** National Development Strategy 2011-16 mandate that requires the efficient and transparent delivery of public services in Qatar to achieve the goals of the Qatar National Vision 2030 for social progress, human development, sound and diversified economy and sustainable environment. The strategy also states that, in order to build a knowledge-based society, it is important in the long term for Qatar to create an open, transparent culture where knowledge bases are kept current and easily accessible, which, in turn, develops the capacity and culture for routinely processing, sharing and interpreting information.

This document outlines the approved Open Data Policy that will assist the State of Qatar in attaining its national development goals of efficient and transparent delivery of public services, and building a knowledge-based society by creating an open, transparent culture where knowledge bases are current and easily accessible (**SDGs 4, 8, 16**, etc.).

In **Qatar**, the *ICT Landscape Report 2014* released by the Ministry of Information and Communications Technology reveals that all segments of Qatar's population have access to Internet-enabled ICT devices—particularly mobile phones—with newer devices such as smartphones and tablets yet to fully penetrate.

The report is based on a large-scale study of ICT access and the usage behaviours and patterns of residents in Qatar. It also shows that the use of basic online services such as e-mail, Internet browsing, social networking and peer-to-peer file sharing is prevalent across all segments of society. However, advanced online services such as e-commerce, online banking, and transactional e-government services are employed much more frequently among people with higher levels of education, as well as among Qataris and westerners.

Thus, while broad ICT access has almost been achieved in Qatar, there is still much room for improvement when it comes to the sort of advanced usage that will drive future innovation and economic success (**SDGs 8 and 9**).

<sup>1</sup> Project nominated for a WSIS Project Prize 2015

<sup>2</sup> Project nominated for a WSIS Project Prize 2014





**Saudi Arabia** boasts five deserving governmental initiatives.<sup>3</sup>

*Leqa'a* is a videoconference service implemented by the Ministry of Education to serve all ministry users, including decision-makers, directorates, branches, and schools abroad, including both genders and taking into consideration religious rules and the culture of not mixing the genders (**SDGs 5, 10, 16, and 17**). *Leqa'a* is used mainly for meetings, training sessions, video streaming, recording and the yearly ministerial meeting. Among the benefits are use of the existing connectivity infrastructure, cost and time savings, and overcoming the difficulty of arranging meetings. Users can attend from the current meeting rooms or join the meeting using their PC, laptop or smartphone (BYOD) from inside or outside the network.

The *Correspondence Tracking and Electronic Archive Solution* project was developed by the Municipality of Jeddah for its HQ and 14 branches. The following solutions were implemented: archiving solution, correspondence tracking system and archive record management for physical location, document request and document retention policy, with the following modules: circulate, external user request, VIP, IPAD, task manager, follow-up notification tool, Outlook integration (**SDGs 10 and 16**).

The *Digital portal for tourist accommodation licensing services* is an online website designed to provide users with a virtual link to the Saudi Commission of Tourism and Antiquities (SCTA) for licensing services. The portal enables all stakeholders to access information with a view to promoting investment in the tourist accommodation sector (**SDG 10**). The portal was created through several partnerships in the governmental sector, including the Ministry of the Interior and the Ministry of Commerce and Industry, to enrich databanks and raise standards for all parties involved. The results have shown a 60 per cent reduction in processing times. The portal is flexible enough to accommodate any potential changes in the future.

The *Universal Service Fund (USF)* programme, launched in 2010 and scheduled for completion by 2017, will connect more than 20 000 rural communities in **Saudi Arabia** to the Internet with a minimum

<sup>3</sup> Projects nominated for a WSIS Project Prize 2015

speed of 512 kbit/s. It provides universal service to every user in communities with a population of between 100 and 5 000 (**SDGs 1 and 10**). For communities with a population of less than 100, universal access is provided through local Internet centres located within a range of 10 km from each community. The programme is technology-neutral. Universal service providers are selected through a competitive mechanism developed by USF. The programme comprises 14 projects, of which six have already been completed, five are in progress and three are to be released for competition later this year.

Recognizing the importance of capacity building and development initiatives for government sector personnel in respect of electronic government applications, and to support adaptation to and the acceptance of new changes, responsibility and continued improvement of performance, the *Qudoratak* programme is a capacity-building and development initiative which aims to disseminate information technology culture and bridge the digital divide in the basic use of computers in order to handle electronic services and manage their implementation with a high degree of skill and professionalism (**SDG 10**).

In **Saudi Arabia**, three projects are worthy of attention.

The General Organization for Social Insurance (GOSI) is a semi-governmental agency responsible under a national decree for providing social insurance coverage for private-sector workers, the self-employed, domestic workers and some categories of public-sector employees. GOSI's *e-Services* aim to efficiently and effectively serve its customers – 9.6 million contributors, 590 000 establishments and 307 000 beneficiaries – in a timely manner and with minimal demands on the customer, using technology to serve those needs (**SDG 10, 16, and 17**). GOSI enjoys administrative and financial independence. Its activities are overseen by an 11-member Board of Directors comprising the Minister of Labour (Chairman); the GOSI Governor (Vice-Chairman); three members representing the Ministries of Labour, Finance and Health; three members from highly-qualified contributors; and three members from employers. GOSI exercises its activities through its head office and 21 field offices located in a number of the Kingdom's regions and governorates.

The graphic is a circular collage on a green background with binary code. It features eight service categories, each with an icon and a label in a yellow pill-shaped box:

- E-GOSI**: Icon of a hand holding a card with 'gosi.sa' written on it.
- E-Payment**: Icon of a hand holding a card over a payment terminal.
- GOSI Phone**: Icon of a white corded telephone.
- Data Exchange**: Icon of a person's hands holding a tablet.
- Proactive - Services**: Icon of a server rack.
- SMS**: Icon of a hand typing on a smartphone keyboard.
- E-GOSI Portal**: Icon of a laptop displaying a website.

At the bottom of the graphic are three logos:

- Logo of the General Organization for Social Insurance (GOSI) in Arabic and English: **المؤسسة العامة للتأمينات الاجتماعية / General Organization for Social Insurance / حؤنؤكم**
- Website and phone number: **www.gosi.gov.sa / 800 1243344**
- GOSI e-Service logo: **التأمينات الإلكترونية / راسؤنؤك من مؤنؤك**

The *Social Insurance Scheme* is an aspect of social cooperation and solidarity for citizens. The scheme covers private-sector workers and certain categories of public-sector workers. It enables contributors and their families to enjoy a decent life following the cessation of work due to retirement, disability or death; ensures the provision of medical care for contributors afflicted with work injuries or occupational diseases; and provides compensation in the event of occupational disability or death.

*Higher Education Degrees' Verification eService, Educational Credential Evaluation and SAFEER Graduates* are three programmes from the Ministry of Higher Education designed to facilitate the academic careers of students (**SDG 10**).

In **Saudi Arabia**, the Saudi Commission for Tourism & National Heritage (SCTH) has set up the *Digital portal for touristic accommodation licensing services*, an online website designed to provide users with a virtual link to SCTH's licensing services. The portal enables all stakeholders to access relevant information in the interests of promoting investment in the tourist accommodation sector. **SDG 16.10** has to do with ensuring public access to information and protecting fundamental freedoms, in accordance with national legislation and international agreements. Such is the case for this portal, which was created by establishing a number of partnerships in the governmental sector, including the Ministry of Interior and Ministry of Commerce and Industry, to enrich databanks and raise standards

for all parties involved. The results have shown a 60 per cent reduction in processing times. The portal is flexible enough to accommodate any future changes.

In **Tunisia**, Tunisian Post has developed the *Mobile Payment* mobile money platform in partnership with network operators in the market, having launched mobile services in 2010. The Mobile Payment services can be accessed from any mobile phone, including the most basic feature phone, and on any network technology. The platform enables users, through their mobiles, to recharge GSM credit, transfer money, cash money orders nationwide, cash Western Union transfers, pay bills, pay microcredits with microfinance institutions and pay micro-insurance premiums, as in the case of micro-health insurance for students.

Mobile Payment is directly related to ICTs and the corresponding **SDGs** by promoting inclusive and sustainable economic growth, employment and decent work for all, and revitalization of the global partnership for sustainable development.

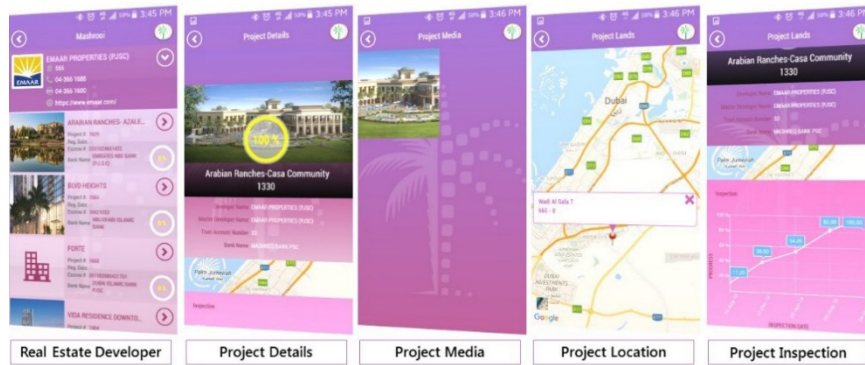
In the **United Arab Emirates**, the Telecommunication Regulatory Authority (TRA) initiated *Ana Electroni*. Ana Electroni (Arabic for “I am electronic”) is a broad promotional campaign aimed at educating the public about, and encouraging them to adopt, government e-services in UAE (**SDGs 10 and 16**). The campaign aims to demonstrate how the e-services save the public time, effort and money compared to traditional over-the-counter services.

In the **United Arab Emirates**, TRA introduced the *Mobile Government* initiative. The aim of the initiative is to incite government entities to work out creative solutions for providing services efficiently through simple and transparent procedures that meet customers' expectations round-the-clock. It also stresses communication with customers, in order to provide a high quality of life for UAE nationals and expatriate residents, in line with the UAE Vision 2021. The new initiative will exploit mobile phones, mobile devices and other advanced technological tools to deliver services and information to the public. It supports the establishment of a mobile innovation centre, national trusted service manager (NTSM), government mobile app market, mobile payment, mobile identity and many more creative and innovative applications<sup>4</sup> (**SDGs 5 and 10**).

The **United Arab Emirates (UAE)** initiated three projects within this category.

*Mashrooi* is a smart application launched in 2015 by the **Dubai** Land Department for the real estate community, to provide it with a secure and authentic marketing platform for all real estate investors, both local and international, on which they can find relevant information about real estate projects at different phases and milestones (final façade and related videos, final inspection pictures, cadaster information and trust account details). It is a unique reference for government and stakeholder participation in the promotion of ICT for development, taking into account local, regional and international needs and concerns. It is sustainable over the generations to come and is supported by the Executive Council of the Government of Dubai. The purpose of this mobile application is to enable the building of resilient infrastructure, fostering innovation and the strengthening of global development.

<sup>4</sup> Project nominated for a WSIS Project Prize 2014



The UAE Government invites the most innovative and creative minds to find solutions that will improve people’s lives and provide positive technological solutions to modern day issues. Within this context, the *Drones for Good Award* is designed to offer people from all parts of the world an opportunity to make a genuine difference. With a commitment underlined by the significant prize fund, the Drones for Good Award is considered the first and largest of its kind, rewarding the best practical implementations of drones for the benefit of humankind. Its aim is to serve as a hub for innovators worldwide to demonstrate their prototypes, network with stakeholders and investors, and explore opportunities for collaboration. It consists in an international competition (award of USD 1 million) and a national competition (award of AED 1 million). By establishing strategic partnerships with Microsoft, Samsung, Indra and IEEE, the award attracted over 800 submissions from 57 countries in its first cycle, and 1 017 submissions from 165 countries in the second cycle.

By triggering international implementation and the promotion of country engagement, the Drones for Good Award relates to a **large number of SDGs**.

To achieve the vision and initiative of *Smart Government*, the UAE’s Ministry of Interior (MOI) introduced a qualitative shift in service delivery channels by transitioning from e-Government to more advanced and innovative Smart Government concepts, in line with the ambitious UAE Vision 2021 goals – “We want to be among the best countries in the world by 2021” – as well as with **SDGs 3, 16 and 17**, as it deals with ensuring healthy lives, promotion of well-being for all and revitalization of the global partnership for sustainable development. It has involved the development of an intelligent application that enables MOI to deliver its services around the clock, irrespective of location, via smartphones and other handheld devices. Its approach is characterized by innovation, excellence and the application of international service standards.





## C2. Information and communication infrastructure

In **Algeria**, the Ministry of Vocational Education and Training has introduced *high-speed Internet access* for all training institutions and administration departments, supporting **SDGs 9 and 11**.

In **Algeria**, the *Data Centre and Cloud Computing Infrastructure* (IT ecosystem) is at the core of the digital economy. The data centre provides a secure environment and high-availability network access for IT and telecommunication equipment. The advent of cloud computing gave birth to the "cloud centre" concept for extreme flexibility and scalability. The project supports **SDGs 8, 9, and 11** and is aimed at meeting the current needs of the Sales Intelligence business and anticipates future growth in a fully innovative way by:

- providing hosting services that ensure very high availability
- ensuring fast, reliable and secure access to the data stream
- reorganizing offers of an information system.

In **Algeria**, a project entitled *Automatic Radio Web Portal* has been established. Automatically fed by regional radio station websites through RSS feeds via the Internet or via the Menos system, the portal can collect and automatically publish information from all sub-websites (**SDGs 9 and 11**). In the case of the Menos system, no Internet connection is needed to view the portal as it accessible through data received by satellite.<sup>5</sup>

The National Fund Unemployment Insurance (CNAC) has set up *Interconnection of all sites in the CNAC through HDSL links (specialized lines) and ADSL: Setting up a secure extended national computer network (Wide Area Network through VPN)*, connecting the headquarters of the Directorate General for Regional Agencies (of which there are 13) and Wilaya agencies (of which there are 48), facilitating exchanges between the different organizational levels and enabling all CNAC managers to use the intranet/Internet services setup (**SDGs 1 and 8**). At the end of 2014, more than 940 computers were using intranet services via the wide area computer network.

The project *Intranet Health* enables the interconnection of all health facilities at the national level via an intranet known as Health-Algeria (684 health facilities are interconnected with optical fibre). A project to build a network for 270 local health facilities was launched in 2014 with the aim of improving access to care for patients at the national level and supporting health professionals in the provision of quality services (**SDGs 3 and 9**).

Algeria Telecom Mobile (Mobilis) also launched a project that is part of the national e-strategy and fully in accordance with WSIS Action Line C2 "Information and communication infrastructure: an essential foundation for the information society". It consists in the *deployment of a broadband network infrastructure 3G ++* with the aim of enabling digital inclusion, enabling access to information and knowledge, and bringing ICT within the reach of everyone, nationwide (**SDGs 1, 9, and 11**). The deployed network also provides connectivity to remote and poor areas. Spread over three years (2013-2015), the 3G++ mobilis network aims to cover all of Algeria's territory and effectively participate in the building of a society based on knowledge.

<sup>5</sup> Project nominated for a WSIS Project Prize 2015

In **Algeria**, Algérie Télécom decided to follow, as from 2013, the Government's direction in terms of the generalization of broadband access and initiated the *Connect every 1 000 inhabitants locality to optic fibre* project. To this end, it drew up a list of 2 000 localities to be connected by the end of 2017. As at October 2015, the number of fibre-optic connected localities has reached 1 271. The project aims to provide Internet access to individuals and companies in the country's far south. Algérie Télécom charges the same Internet connection rates countrywide, and access for primary schools is free of charge.

Being totally financed by Algérie Télécom's own funds, the project triggers a number of SDGs, in particular **SDGs 9 and 10**, by developing quality and reliable infrastructure, promoting sustainable industrialization and reducing inequality within the country.

In **Jordan**, the Ministry of Information and Communications Technology has launched the *National Broadband Network (NBN)* programme, a fibre-optic, open-access data network being developed in the Kingdom. The network is based on IP/Ethernet technologies and currently connects up to 680 public schools, eight universities, 174 government entities and 88 healthcare centres with a bandwidth capacity of 100 Mbit/s per site, with a view to providing high-speed broadband access to increase universal access and universal coverage and contributing to the efficient and effective development of e-service delivery, quality and performance in Jordan, particularly in relation to the country's education and healthcare systems. This network contributes to **SDGs 1, 8, 9, and 11**. Future plans are being studied to utilize the network to support the business sector in Jordan and increase access in underserved areas in response to greater demand brought about by the accelerated spread of technology.

In **Kuwait**, the Central Agency for Information Technology implemented the *Kuwait Information Network (KIN)*, one of the early projects for the communication infrastructure needed to support the implementation of efficient and integrated nationwide e-services (**SDGs 8, 9, and 11**). KIN was intended to integrate the networks of all government entities in order to enable future integration of isolated information systems and develop electronic services.<sup>6</sup>

In **Kuwait**, the Central Agency for Information Technology (CAIT) has been running two projects in the domain of access to knowledge and information.<sup>7</sup> *Environmental Monitoring Information System of Kuwait (eMISK)*, an ambitious system initiated by the Environment Public Authority (EPA) of Kuwait, aims to establish, build and maintain a comprehensive geo-environmental database for Kuwait, together with an enterprise-level GIS system for accessing, updating and analysing the environmental data (**SDGs 9 and 11**). This database is made available through eMISK to the decision-makers and stakeholders within EPA, outside agencies and the public at large. The main goals of eMISK include making all levels of Kuwaiti society more aware of environmental issues, and placing authoritative scientific information at the centre of decision-making.

<sup>6</sup> Project nominated for a WSIS Project Prize 2014

<sup>7</sup> Project nominated for a WSIS Project Prize 2015



## THE DISPOSITION OF PROPERTY ELECTRONIC AUCTION

Small and medium-sized business level of prosperity characterizes stability level of the nation's economy. Open up for business sector development, reduce government participation in the economy, including asset development.

Eliminate adirect contact possibility of a seller and direct buyers, possibilities of corrupt practices allow auctions on-line- the disposition of property electronic auction <https://e-auction.gocce.gov.kw>. It is a form of auction to sell objects of the government property, quasi-government sector and non-government property where participants announce their propositions.

Integration data system of the government property register with other systems government agencies allows to minimize documents presented by buyers.



CAIT was established in 2006 as a government initiative. Its main responsibility is to develop and implement the e-Government programme of **Kuwait**. It partnered with an international consultant to establish its e-government strategy for the next five years (**SDGs 9 and 11**). *Kuwait Information Network (KIN)* was one of the early projects designed to provide the communications infrastructure that paved the way for efficient and integrated nationwide e-services implementation by integrating the networks of all government entities to enable future integration of isolated information systems and the development of electronic services<sup>8</sup>.

Led by the Central Agency for Information Technology in **Kuwait**, the *Creation of Discrimination Center for Innovation in Information Technology* project aims to promote knowledge and experience among the State of Kuwait institutions (**SDG 16**). The project focuses on the role of the technology industry management system as mediator between the actor and the invention, production and presentation to the gentlemen officials in the Council of Ministers to make laws and decisions necessary for the establishment of this center and procedures.

In **Kuwait**, the Central Agency for Information Technology (CAIT) was established in 2006 as a government initiative responsible primarily for developing and implementing the country's e-government programme. It partnered with an international consultant to establish its e-government strategy for the next five years. The *Kuwait Information Network (KIN)* is one of the early projects, set up to provide the communications infrastructure that paved the way towards efficient and integrated nationwide e-services implementation. KIN was designed to integrate the networks of all government entities to enable the future integration of isolated information systems and develop electronic services.

This is in line with **SDG 17** on revitalization of the global partnership and enhancement of international support for ICT implementation.

In **Lebanon**, the government is seeking to democratize *access to educational and entertainment content* and allow young people greater access to new information technology, contributing to **SDGs 1, 8, and 11**. The Ministry of Education aims to replace books with tablets in the long run, and to

<sup>8</sup> Project nominated for a WSIS Project Prize 2015

bring about a radical change in teaching methods by taking advantage of new technologies. The first stage of the project will provide the Ministry of Education with the 1 500 tablets needed to complete the pilot phase.

In **Oman**, the Information Technology Authority (ITA) is enhancing the national knowledge society by providing digital devices en masse and empowering citizens (**SDGs 8 and 9**). A Royal Grant of USD 51 million was issued by His Majesty the Sultan in support of the *eOman strategy*, bestowing free PCs on specific segments of Omani society and making PC ownership affordable by subsidizing the cost and providing added-value training courses. Since the strategy's launch, more than 115 000 PCs and 75 000 free Internet modems have been provided to families, students and teachers. As a result, the national PC penetration rate increased to over 66 per cent in 2013 from less than 20 per cent in 2003. Internet penetration has also increased, to more than 70 per cent.

In the **Sultanate of Oman**, Muscat Municipality launched *Muscat Contact Center (MCC)* to be a customer-centric organization providing essential services to some 780 000 citizens and residents living in Muscat, the capital of the Sultanate of Oman. MCC is focused on the gathering of feedback and complaints from customers through various channels (call centre, mobile app, e-mail and social media channels) in the interests of achieving a higher quality of service (**SDG 11**). Different target customers such as tourists, citizens and expatriates will be able to obtain information and services through various channels. In 2014, some 94 000 items of feedback/complaints were received, with some 91 000 having been resolved. The centre is integrated with other several government entities.

In **Qatar**, IctQATAR's Digital Incubation Center (DIC), with its *Tech Startup Incubation* programme, was created to boost ICT innovation, particularly among young people at the critical early stages of launching or growing a technology-related business. The Center's objectives are to:

- help young entrepreneurs transform innovative ideas into viable businesses;
- provide incubation programmes that nurture and help grow new businesses by offering expertise, professional guidance, and services – including access to, among other things, space, business planning, education and training and legal advice – throughout the phases of the start-up's development.

The Digital Incubation Center is looking for entrepreneurs capable of harnessing emerging technologies to create innovative products, solutions or services that will contribute to Qatar's digital economy. The programme meets a considerable number of objectives of the WSIS Action Lines and SDGs in terms of economic growth, employment, quality education, lifelong learning opportunities, etc.

In **Saudi Arabia**, the project *IT Portfolio Management Solution* will assist efforts to run the ARABSAT organization more efficiently, on the basis of dynamic business conditions. This is an enterprise IT management solution which provides robust portfolio management capabilities complemented with rich resource demand management functionality. There is a major business need to identify a prospective technology-based solution that will further improve the management of ARABSAT projects through the entire life cycle, from investment to delivery, and provide constant visibility into each individual project: project status, project performance, and alignment with strategy (**SDG 9**). For that, ARABSAT, through this project, is looking for the best-of-breed solution to integrate with its IT environment in order to align IT efforts and resources with the priorities of the business.

The Solution will enable the organization to achieve the following:

1. Alignment of IT with business goals
2. Significant enhancement of operational effectiveness
3. Optimization of the OPEX/CAPEX ratio

#### 4. Fewer project failures.<sup>9</sup>

The *Schools Connectivity Project* is part of a broader programme to establish a complete virtual network covering all Ministry of Education (MoE) departments, offices and schools, further to a decision by the ministry to adopt a step-by-step approach to building such a network in the interests of achieving its goals (SDGs 4 and 11). Four years ago, it launched a unique initiative to establish some 50 smart schools scattered all over the Kingdom. On the basis of the outcome of that initiative and the lessons learned, the decision was taken to adopt a simpler approach to introduction of the Internet as an educational tool, thus resulting in the launch of this project. The short-term objective of the project is to provide all schools with fast and reasonable connections, with priority being accorded to high schools. The long-term goal is to have a reliable and expandable infrastructure that meets the connectivity needs of each individual school. Large and/or advanced schools may be equipped with higher bandwidth in order to meet their needs, while smaller schools will likewise receive the bandwidth they require. The main goal in the future is therefore to transfer the existing access technologies to form part of the MoE's private cloud.

The *Muqem e-portal*, an Elm service, provides establishments with a link to the General Department of Passports and to its various services that enable the issuance, extension and cancellation of exit/re-entry visas and issuance of final exit visas, as well as the consultation of up-to-date information concerning persons under the establishment's sponsorship and checking of their status (SDGs 8 and 11).

In **Sudan**, the *National Information Network* is a government intranet that connects government agencies at both the central and state levels (SDGs 8, 9, and 11). It is an L3VPN that uses the backbone of the two main telecom operators, Sudatel and Canar (two links from each operator for redundancy purposes). The core of the network is a government datacentre that has been designed to host government applications, databases and websites. The main services running on the network are e-mail, VoIP, videoconferencing and Internet browsing. The network connects government agencies, hospitals, police headquarters and judiciary offices throughout the country. The National Information Centre pays the initial cost for connectivity plus the running cost for one calendar year, with the unit paying the monthly recurring charge thereafter.<sup>10</sup>

In **Sudan**, the *Gedaref Digital City Organization (GDCO) Sudan e-Education Project* addressed a number of problematic issues relating to such SDGs as ensuring healthy lives, inclusive and equitable quality education, access to water and sanitation, affordable and modern energy for all, as well as achievement of gender equality and empowering of all women and girls, etc. (SDGs 3, 4, 5, 6, 8, 10 and 17). The most important among these problematic issues in Sudan are:

- large digital divides: rural/urban, women/men, people with/without disabilities
- education missed by many children because of travelling with their families due to climate change, looking for better grazing areas and water resources for their animals
- the e-infrastructure problem of Gedaref University: over 16 per cent of the population are people with disabilities, who, being poor, cannot afford to access ICTs
- illiteracy and poverty among women, who represent a vulnerable group and are not equally connected.

These are challenges that GDCO and its partners felt obliged to tackle.

The **United Arab Emirates** set up three initiatives in the information and communication infrastructure domain.

The *SMART* project seeks to improve economic life and the ecological, educational and health systems in the UAE (SDGs 3, 4, 7, 8, 11, 12 and 16). The SMART Service Stations will provide world-class self-

<sup>9</sup> Project nominated for a WSIS Project Prize 2015

<sup>10</sup> Project nominated for a WSIS Project Prize 2015

service facilities that conform to international hygiene, safety, security and eco-friendliness standards. The stations will offer enhanced designs and integrate innovative technologies such as RFID-based authorization and payment, NFC readiness, as well as mobile and B2B/B2C e-commerce platforms – all designed for the comfort and convenience of our customers and partners, providing them with innovative and convenient ways to pay for their purchases. Our SMART customers will be able to manage their accounts from anywhere, at any time, using computers or tablets, and top up their accounts as well as access their account statements online.

Building on the foundation established by the National ID Card system, the *National Validation Gateway* project represents one of the key programmes launched under the strategic plan to support the evolution of e-government in the UAE. The Gateway enables the National ID Card to be used for facilitating improved business services to all public and private organizations and government agencies within the **UAE** by providing real-time identity verification and validation and strong user authentication capabilities for digital transactions. It also provides a strong boost to local businesses by providing them with a range of new value-added services, such as legally binding digital signatures that accelerate the secure transition from paper-based to electronic transactions.

The project's goals are in line with **SDGs 1, 8, 9** and **11** as they relate to such issues as fighting against poverty, stimulation of economic growth, employment and making the UAE's cities safe and sustainable.

In **Dubai**, the aim of the *Dubai Electricity Control Centers* project is to establish four state-of-the-art power control centres with substation automation systems and telecommunication networks (two for power distribution and two for power transmission) in three new buildings of 24 000 m<sup>2</sup>, controlling Dubai's unmanned electricity substations and power-generation plants, with a system capacity of 500 high-voltage substations and 100 000 medium voltage substations, a suite of advanced energy management applications and smart grids, and a dispatcher training simulator. The sizing and the smart applications are designed and delivered to accompany the ambitious growth of Dubai and the transfer of knowledge to the national workforce.

The overall aims of the project coincide with **SDGs 7, 9** and **12**, having to do with the provision of access to affordable, reliable, sustainable and modern energy, the building of resilient infrastructure, and ensuring sustainable consumption and production patterns.



### C3. Access to information and knowledge

In **Algeria**, the Ministry of Vocational Education and Training has launched a project to development *telecentres*, contributing to **SDGs 4, 9, 10, and 11**. In total, eight telecentres were established under the terms of a partnership between the ministry and Germany's Gesellschaft für Internationale Zusammenarbeit (GIZ).

In **Algeria**, the Ministry of Education and Vocational Education's *Information for pensioners by SMS* project informs retired persons of any developments regarding their situation, especially further to the annual revaluation of pensions, and enables them to order administrative documents (**SDGs 8 and 16**); while the Ministry of Fisheries and Fishery Resources' *e-Service: Consultation of retired person's account* enables retired persons to consult their payment situation online (periodic statements of account) .

The Algerian National Agency for Supporting Youth Employment (ANSEJ) has been running two projects, namely the e-service *Tracking the liquidation of a pension file*, whereby pension applicants are able to enquire about the processing status of their pension files; and *Pre-registration and tracking platform online*, intended for project developers in the support system for the creation and expansion of activities by unemployed entrepreneurs between 30 and 50 years of age. It will enable them to make an appointment to file a folder at the CNAC, monitor their application and also track the status of their case after filing until the startup of their micro-business (**SDGs 4, 8, and 16**).

For its part, the National Employment Agency (ANEM), conceived the *International Conference on the Use of Information and Communication Technology for Management of Disasters (ICT-DM'2014)*, held from 24 to 25 March 2014 at the Research Centre on Scientific and Technical Information (CERIST). The event was organized by CERIST's Theory and Information System Engineering Division for the purpose of demonstrating the potential of ICT in disaster management by bringing together academics and practitioners involved in emergency services, emergency planning, disaster management and public security/safety (**SDGs 4 and 17**).

The Algerian National Pension Fund (CNR) has five projects. The first, *RH-Health (human resources information system)*, is a web solution for managing the careers of all health employees at the national level (**SDG 8**). This solution will be upgraded to a system whereby employees will be able to consult their files via the Internet. The second, *Websites-DZ*, was launched by the Ministry of Health, Population and Hospital Reform as an operation involving the creation of a website for every health institution with the aim of facilitating communication between health professionals and citizens (**SDG 3 and 8**).

The *Social insurance for self-employed website* operated by the National Social Security Fund for Non-Salaried Workers (CASNOS) constantly monitors developments and provides up-to-date information on various types of support (PCs, tablets, smartphones, etc.). This information is in the form of (**SDG 8**):

- Simulations – calculation of contributions, pension allowance, death capital, etc.
- Data consultation – affiliate statements, payment dates, repayment records, etc.
- Documents to order – updated certificates, statement of receipt of a pension benefit, etc.
- E-declaration – activities and revenues.

The *Proximity e-center mobile* is an educational space for training and mobile information in the form of a bus equipped with ICT tools (**SDGs 4, 9, and 10**), whose functions include:

- Facilitating access to information and training for citizens in difficult circumstances, particularly in rural areas
- Reducing the isolation of citizens through the provision of local support services for those seeking employment and economic integration
- Promoting the use of ICT.

*Management of Economic and Social Data (GDES) - Management of the Educational System (GSP)* is a project developed on SharePoint to bring about, on the one hand, an improvement in the management and processing of data, and, on the other hand, automation of the transmission of socio-economic statistical data between the centre and the provinces, and between the centre and the different training institutions for educational information. The main objective is to improve the sectoral statistical information system (**SDG 8 and 9**).

The CASNOS website serves the following purposes:

- Presentation and popularization of the ANSEJ tools
- Use of web technologies to enable young people to gain remote access to agency services
- Communication and exchange of information with young people.

It will also house the following web applications:

- A pre-registration application for young project leaders
- A project status tracking application
- A public procurement application, accessible to public bodies wishing to make a bid. It enables them to see the list of micro-enterprises created under ANSEJ and to benefit from 20 per cent of the market share, according to the code governing the Algerian public market.

In **Algeria**, the *Mobile ICT Centers (Télécentres de Proximité Mobile)* project aims to ensure healthy lives and equitable quality education, promote economic growth and reduce gender inequality by empowering all women and girls in the country (**SDGs 3, 4, 5, 8, 10 and 16**). The Mobile ICT Centers are five ICT-equipped buses intended to provide remote rural populations, especially women, with proper access to ICTs so that they can obtain training, information and new opportunities for communication and access to networking in order to improve their living conditions and level of qualification and give them more employment opportunities. As part of the first phase of the project, five of these fully functional buses are already operational in five southern Algerian regions, namely Adrar, Illizi, Tamenraset, Naama and Djelfa.



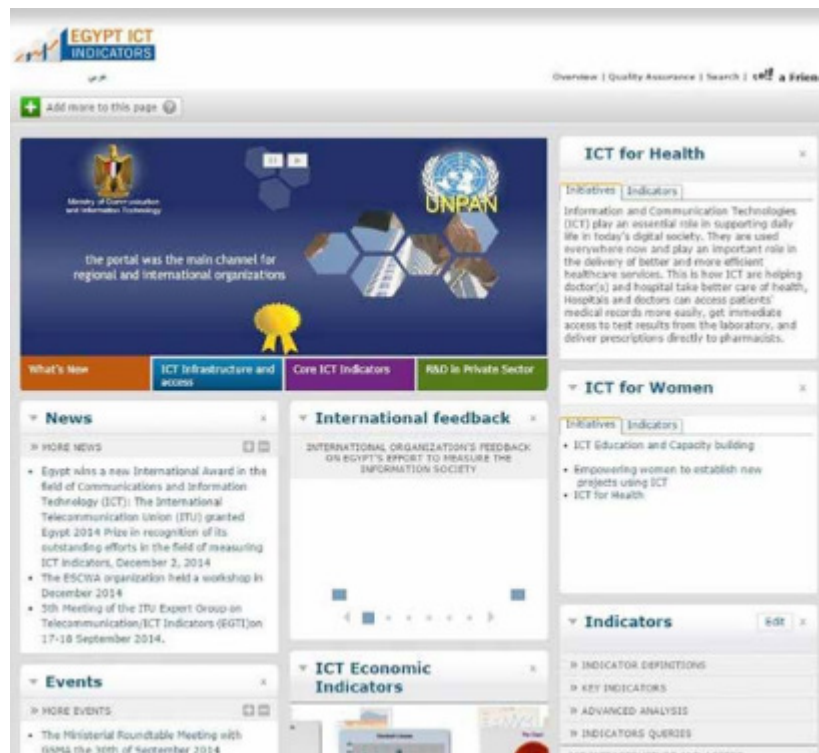


*Bend* is an innovative mobile application launched in **Algeria** that uses image processing techniques to change Latin characters in Braille. It will enable blind people to search by keywords in books or documents in Braille. Involving international implementation, this revolutionary application will facilitate research and reading for the blind.

The project contributes to several SDGs, ensuring equality and promoting healthy lives, well-being and lifelong learning opportunities for blind people, as well as inclusive societies for sustainable development (**SDGs 3, 4, 10, 16** and **17**).

In **Egypt**, the Ministry of Communications and Information Technology introduced the *Innovation Competition for Developing Software and Mobile Applications for People with Disabilities* (Tamkeen). Tamkeen (“Empowerment”) is an annual innovation competition aimed at encouraging individuals and companies to develop software and mobile applications which help people with disabilities carry out their daily activities and provide them with better education and employment opportunities. Persons with disabilities themselves were involved in identifying the themes of the competition. Prototypes that were submitted and passed the technical assessment were then evaluated for usability by people with disabilities, before being accepted for funding. Tamkeen also provides technical and financial support for developing the prototypes selected. The goal of the competition is to empower persons with disabilities in Egypt and the Arab world by providing them with affordable and customized assistive technologies (SDGs 3, 8 10, and 17).

In **Egypt**, the *Egyptian ICT Indicators Portal* provides necessary and accurate data about the country’s ICT sector. It measures ICT usage in different fields, including households, businesses and government (SDGs 4 and 16). It also pools sets of hard indicators that are updated monthly, quarterly and annually. It is a source of information for a range of beneficiaries, including international organizations, policy-makers, researchers, academia, media and investors. The project has proven its success as a decision support mechanism for ICT policy-makers by helping them in establishing policies and strategies and defining digital gaps. This success has been extended both regionally and internationally by being a best practice model in public policy decision-making through innovative mechanisms.<sup>11</sup>



In **Kuwait**, a project was launched for the electronic maintenance and handling of *parliamentary documents* (SDGs 4 and 16). This has resulted in highly complex tasks that used to take days or even months of work now being achievable in a single day and with a high level of quality.<sup>12</sup>

<sup>11</sup> Project nominated for a WSIS Project Prize 2015

<sup>12</sup> Project nominated for a WSIS Project Prize 2015



In **Kuwait**, the Public Authority for Civil Information has developed and launched the *Kuwait Finder* project as part of its GIS programme. Kuwait Finder was released to provide the country's population with a localized GIS-based search engine that supports searching for an address up to the flat level, and searching by establishment name and type of business (**SDG 8**). The application provides the following functions:

- Search using building computer number
- Search using area name, block number, street name or house number
- Search for points of interest such as hospital, shop or mall
- Quick search through shortcuts representing different categories of entity such as shopping centres, schools, or other activities and crafts
- Routing function between two points, with display of the directions
- Saving of favourite places
- Sharing of locations via Facebook, Twitter or e-mail.<sup>13</sup>

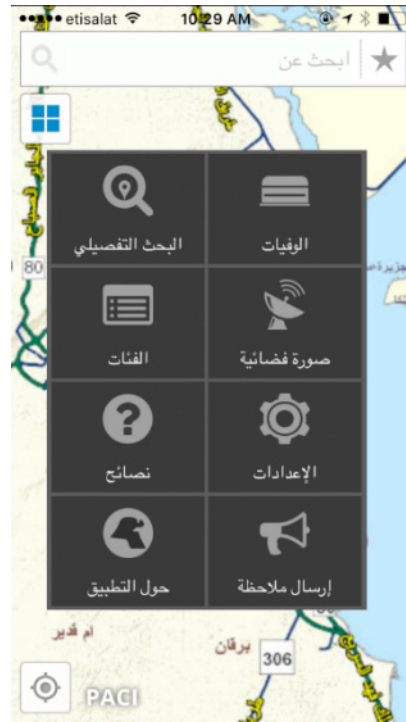
In March 1998 in **Kuwait**, the Awaqf Public Foundation started a *special information centre (Waqfic)* aimed at serving and supporting decision-making and the special interests and concerns specific to Al Waqf (endowment) and its crucial developmental role in Islam. Waqfic includes a special library serving all the foundation employees and researchers who have a special interest in Al Waqf issues in all the Islamic world according to what the legislative code relating to the rules and disciplinary procedures of those services allows (**SDGs 4 and 8**). The library includes a collection of titles related mainly to Al Waqf, in addition to the non-profit sector, charity and developmental subjects. It also library hosts some titles related to the various activities at the Al Waqf Foundation. The library houses more than 5 000 titles, including reference materials, books and documents. It also includes an audiovisual collection and copies of Waqf documents.<sup>14</sup>

In **Kuwait**, the Public Authority for Civil Information (PACI) has launched the *Kuwait Finder Project* as part of the GIS programme in PACI. Kuwait Finder was released to provide users in the State of Kuwait with a localized GIS-based search engine, thereby meeting **several established SDGs** related to the provision of access to information and knowledge. The programme supports searching for an address down to the individual apartment level, and can search by establishment name and business type. The Kuwait Finder application was developed by PACI to serve users' needs with the following functions:

- Search using PACI electronic numbering for a given building, apartment, etc.
- Search using area name, block number, street name or house number
- Search for points of interest such as hospitals, shops or malls, etc.
- PQuick search via shortcuts representing different categories of entity such as shopping centres, schools or other activities and crafts
- Turn-by-turn voice navigation, with directions in both Arabic and English
- Saving of favourite locations
- PInformation on social activities and their locations
- PFunctionality for displaying both vector and satellite maps
- SLocation-sharing via Facebook, Twitter or e-mail

<sup>13</sup> Project nominated for a WSIS Project Prize 2015

<sup>14</sup> Project nominated for a WSIS Project Prize 2015



In **Lebanon**, the Ministry of Telecommunications launched the *Free Internet in Public Gardens* initiative, which is intended to equip all public gardens in Lebanon with a free Wi-Fi service. The ministry will install the infrastructure, while the Société de Développement des Télécommunications du Liban s.a.l (Sodetel) will provide the service, and the Association of Banks will bear the costs arising in some gardens. So far, three public gardens have been equipped with the service: Sioufi and Sanayeh in Beirut, and Menchiyeh in Tripoli. In order to extend the project to other gardens, the Ministry of Telecommunications is currently conducting negotiations with several sponsors to provide the necessary funding and services. This initiative supports **SDGs 4, 9, and 11**.

In the **Sultanate of Oman**, the National Center for Statistics & Information (NCSI) developed *The National Portal of Information* with the aim of enhancing knowledge and information sources to provide government entities, commercial establishments and the public, through a website and mobile app, with maps of Oman integrated with official statistics and information to help them in their decision-making (**SDGs 8 and 16**). The portal provides publicly-available, location-based information in the easiest, fastest and most accessible way. It gives a full picture and comprehensive information about all utilities across the country, together with demographic information for each region.<sup>15</sup>

An increasing awareness of the importance of statistics and their many uses has led many government entities in the **Sultanate of Oman** to focus on data collection, data analysis and statistical bulletins and reports. The *Data Portal*, launched and managed by the National Centre for Statistics and Information, is a flagship project which seeks to present socio-economic indicators in a dynamic and graphical manner based on a wide range of criteria and timelines. It includes a powerful map-based tool to portray spatial data about any socio-economic indicator published since the 1970s.

The website provides the population of Oman with the necessary information and knowledge, thereby ensuring well-being for all, economic growth and social development of the society, in line with **SDGs 3 and 8**.

<sup>15</sup> Project nominated for a WSIS Project Prize 2015



In **Saudi Arabia**, there are ten projects involving access to information and knowledge.

The *Business Intelligence Project* within Arabsat will enable the management to have an end-to-end view of the organization’s technical and business data (**SDG 8**). The project’s data mining/mart module will provide the executive with excellent reporting capabilities, with a 360° overview of the organization’s data in real time contributing to timely and appropriate decision-making.<sup>16</sup>

The *Safeer Application* is an integrated online system that enables students wishing to pursue their studies abroad to apply to the King Abdullah Scholarships Programme, for which applications are open once a year for a limited period (**SDGs 4 and 8**). The number of applicants, both male and female, for the programme now stands at 47 000, whence the need for online applications and their electronic processing in the interests of streamlining the entire scholarship process. The Safeer Application contributes, together with other systems inside and outside the ministry, to the automation of procedures which reduce the time and effort to be expended by applicants to the scholarships programme.<sup>17</sup>

The *Rasd Project* is a result of the development drive witnessed in several sectors of Saudi Arabian society, and the higher education sector in particular, where it became imperative to consolidate the efforts of partners and concerned organizations with regard to the documentation of academic material and recommendations for academic events held within the Kingdom. The need arose for an institutional effort aimed at organizing the process of assessing the sustainable development achieved within the sector (**SDGs 4 and 8**). Also necessary was the creation of a reference information source to support the decision-making of leaders in the higher education sector.<sup>18</sup>

The purpose of the *Single sign-on application* for the web is to enable users to access multiple applications while providing their credentials (such as username and password) only once (**SDG 8**). It also enables web applications to authenticate users without having access to their security credentials, such as passwords.<sup>19</sup>

The *Saudi Electronic University Portal* project, based on SharePoint, is a web application framework and platform developed by Microsoft. First launched in 2001, it integrates intranet, content management and document management, and is for the most part used by medium-size businesses and large departments (**SDG 8**). SharePoint 2013 offers a simplified user experience and added enterprise social capabilities, which expand on the capabilities previously offered. It enables administrators and power users to move, copy and restructure SharePoint content with a few simple clicks. Any type of object – from entire sites and site collections, lists or libraries, down to individual documents and

<sup>16</sup> Project nominated for a WSIS Project Prize 2015

<sup>17</sup> Project nominated for a WSIS Project Prize 2015

<sup>18</sup> Project nominated for a WSIS Project Prize 2015

<sup>19</sup> Project nominated for a WSIS Project Prize 2015

items – can be moved within or across SharePoint farms with full fidelity. Full fidelity means that the moved content retains its essential metadata values, such as created/modified by, when created, explicit permissions, settings and configurations.<sup>20</sup>

The Ministry of Foreign Affairs has launched a new version of its portal, *MoFA Portal*, to cope with increased public demand for information and services by harnessing the benefits of technological progress (SDGs 8 and 16). The development and enhancement of the new version applies all of the standards expressed under the e-Government Programme (Yesser): <http://www.yesser.gov.sa/en/ProgramDefinition/Pages/Overview.aspx>. In this document, we capture its key objectives, main features and achievements, as well as the challenges faced and lessons learned by the ministry team.<sup>21</sup>



*Investment Atlas* is a mobile application designed by SAGIA to help promote available opportunities in the Kingdom (SDGs 8 and 12). It displays figures and numbers that reflect the strength and stability of the Kingdom’s economy, categorizes the available opportunities in a range of sectors, provides insightful information and facts on every sector, explains how investments impact the economy and showcases current and potential opportunities in each sector.<sup>22</sup>

The Majmaah University is running a project involving an *electronic control system* (SDGs 8 and 11) that is linked via the Internet with PDA devices carried by field teams whose task it is to evaluate the quality and progress of construction projects and operational/maintenance works, and to monitor compliance by the university restaurants with food safety requirements.<sup>23</sup>

The primary task of the Saudi Commission of Tourism & Antiques’ *MAS Centre* is to collect and disseminate tourism-related information and data to internal and external users (SDG 8). The Centre’s

<sup>20</sup> Project nominated for a WSIS Project Prize 2015

<sup>21</sup> Project nominated for a WSIS Project Prize 2015

<sup>22</sup> Project nominated for a WSIS Project Prize 2015

<sup>23</sup> Project nominated for a WSIS Project Prize 2015

website is the main tool for disseminating the information, which is available to everyone at any time and in any place, in both Arabic and English. The MAS Centre wishes to develop and improve its website and e-portal to provide the best service to visitors, through enhanced performance, the application of better search techniques and harnessing of the properties and features of the SharePoint technology.<sup>24</sup>

In **Saudi Arabia**, two websites have been created in the interests of achieving an equitable quality education and promoting lifelong learning opportunities – **SDG 4**.

King Saud University launched the *Makhtota* website featuring more than 11 000 manuscripts – the written works of scholars. Manuscripts are considered a valuable treasure of mankind that must be preserved. It is for this reason that the website enables visitors to browse and read manuscripts on Shari'a Law and Tafseer, as well as other fields of science. The manuscripts also include poems in a number of languages, such as Turkish and Persian. King Saud University provided these manuscripts to assist researchers and establish a procedure for finding rare manuscripts easily.

The screenshot shows the Makhtota website interface. At the top, there are logos for King Saud University and the Makhtota project, along with social media icons for Facebook, Google+, Twitter, and Arabic. A navigation menu includes Home, Browse Manuscripts, Search, Statistics, Sitemap, Help, and Feedback. Below the menu, there are four featured sections: Most Popular, Most Referenced, Most Visited, and Selected Manuscripts. Each section lists manuscript titles, counts, and authors. At the bottom, a detailed table lists manuscripts with columns for Manuscripts, Author, and Pages.

| Manuscripts  | Author  | Pages |
|--|---|-------|
| Brief summary explanation of the Qazwini                   | Saad Taftazani, Ben Omar Masood                               | 230   |
| Courses incomprehensible to revise the canons of Islam     | The second martyr, Zine El Abidine Ben Ali                    | 209   |
| Shifa Mustafa definition of rights                         | Ayaz bin Musa bin Ayaz bin Imron Aleihsbi Sabti, Abou El Fadl | 336   |
| Evident in the ways parents attic                          | Alsouti Jalal, Abdul Rahman bin Abi Bakr                      | 14    |
| Mirror of assets in explaining the stepping stone to reach | Mlakhosro, Mohammed bin Vramern                               | 260   |
| A footnote to explain the book offers                      | .   | 33    |
| Explanation grammar  | Azhari, Khalid bin Abdullah bin Abi Bakr ibn Muhammad         | 30    |
| System Lakhdari  | Lakhdari, Abdul Rahman bin Mohammed                           | 12    |
| Illuminated lights explained                               | Abdul Latif Bin Abdulaziz King                                | 282   |

The Ministry of Education has developed *Rasd Al Fa'aliat Al Ilmiah – Observatory on Scientific Events (Rasd)* that constitutes a one-stop shop for all academic and scientific events and life-long learning programmes in **Saudi Arabia**. Its *raison d'être* lies in the need to consolidate the efforts of partners and concerned organizations with regard to the documentation of academic material and recommendations for academic events held in the Kingdom, as well as for an institutional tool that can be used to assess the level of sustainable development within the sector.

*MAS Website* is the Arabic acronym for Tourism Information and Research, and is an important department of the **Saudi Arabia** Commission of Tourism and National Heritage (SCTH) which is responsible for collecting tourism data and conducting research and related studies. The main task of MAS Center lies in the collection and dissemination of tourist information and data for both internal and external users. It uses the MAS Center website as a tool for the dissemination of this information and makes it available to everyone at any time and from any location, in Arabic and English. The

<sup>24</sup> Project nominated for a WSIS Project Prize 2015

MAS Center intends to develop and improve the website and e-portal to provide the best service for visitors to the website.

The goals of the website are to:

- Provide data and tourism research of high quality
- Measure the economic, social and environmental impacts of tourism development
- Build capacity in statistics and the Tourism Satellite Account
- Provide access to a wide range of knowledge-oriented materials and tourism information database
- Develop, improve and enhance the quality of electronic services provided by the MAS website.

In this spirit, these goals intertwine with SDGs by relating to equal access to information, reduction of inequality, and promotion of well-being all as well as contributing to the economic growth of the country (**SDGs 3, 8, 10**, etc.)

In **Sudan**, the Gedaref Digital City Organization (GDCO Sudan) has set up *telecentres*, as a means of connecting the unconnected, providing ICT support, and empowering the establishment of strong communities through skills development in order to facilitate lives in marginalized, underserved and disadvantaged areas (**SDGs 4, 8, 11 and 17**). Telecentres serve as a tool for bridging the digital divide and reaching everyone, based on a “win-win” public-private partnership. GDCO has shared its knowledge, experience and best practices with others, and telecentre networks can bring best practices from other parts of the world to Sudan. GDCO Sudan has developed many initiatives with its partners to help the government speed up the provision of e-services to the community. This project includes e-agriculture, e-education, telemedicine, children not attending school, and people with disabilities.

In the **Syrian Arab Republic**, the government launched the *Salamieh Telecentre* initiative. By providing access to *telecentres for people with disabilities*, the initiative leverages ICTs to offer e-learning opportunities for students with disabilities, an objective that is very high on the political agenda (**SDGs 4, 9 and 10**). The aim of the project is to develop an effective strategy to enhance ICT and IT skills among students with disabilities, use technology to improve education and digital literacy and expand the social support and information opportunities available to them. In this context, the Syrian Arab Republic has deployed significant efforts to develop conceptual knowledge and manage the content of learning activities in pedagogical settings.<sup>25</sup>

In the **United Arab Emirates**, the *National Index* (Emirates Catalogue of Libraries) was established to link all libraries across UAE. This is part of an initiative to support the library sector and encourage the culture of reading and research among the national population. A national index will help researchers and students to access the resources at hand and easily track down other sources of information they require (**SDGs 4 and 10**). The search process will be simplified by the introduction of an e-search function that will enable those interested to trace the various books and documents they require, through an online database linking all libraries. It will save valuable time that would otherwise have been spent in searching for a publication in different libraries.

In the **United Arab Emirates**, the *Abu Dhabi Blue Carbon Portal* contains all outcome materials from the Abu Dhabi Blue Carbon Demonstration Project, which delivered local data-sharing, supported regional adaptation and contributed to international knowledge on Blue Carbon (**SDGs 10 and 15**). Featured in the portal are publications, images, videos and other multimedia elements including the Blue Carbon Mapping Tool, which allows users to learn about the important role of coastal marine ecosystems and their ability to absorb and store atmospheric carbon dioxide. Simple to use, it provides an approximate overview of the carbon stock value for a selected area, and users can also explore the contribution of each ecosystem to the total carbon stock within that area.

<sup>25</sup> Project nominated for a WSIS Project Prize 2014



Also interesting is the *Dubai Real Estate Market (eMart)*, an online portal especially designed for real-estate professionals to list their properties for sale and rent in Dubai.<sup>26</sup>

The TRA-ITU (*Telecommunications Regulatory Authority – International Telecommunication Union*) *ICT Discovery Museum* is a place of wonder located within the premises of ITU in Geneva, **Switzerland**. Sponsored and designed by the **United Arab Emirates**, it offers its visitors – academics and students, the public and tourists, telecom/ICT stakeholders, including ITU members/delegates – a (re)discovery of the past, a better understanding of the present and an exciting glimpse of the future, in a dynamic, engaging fashion. ICT Discovery is also about the contribution that ITU has made to all the progress in ICT, from 1865 right through to the present and on into the future. Through interactive exhibitions and educational programmes, ICT Discovery’s mission is to entertain and educate the public by portraying the evolution and exciting future of ICT together with the role of ITU in connecting our world and facilitating the transformation of people’s lives everywhere. ICT Discovery is also an excellent education centre for students, who can explore the fascinating world of ICT and learn about its evolution while broadening their interest in the field of science and technology. Last but not least, ICT Discovery can serve as an original backdrop for social events and presentations.

These are some of the challenges that ICT Discovery faces after four years of operation:

- ICT Discovery to become a self-sustaining facility without any dependence on the ITU budget.
- Ideas to be generated for the effective utilization of space at ICT Discovery and for possible revenue-generation concepts such as group-pricing strategy, sponsorships, voluntary contributions, etc.
- Opportunities for collaboration with leading ICT museums worldwide and with the Museum of Future Government Services and upcoming Museum of the Future, both in Dubai, for enhancing the scope of ICT Discovery through the inclusion of future innovative services.
- Opportunities for collaboration with academic institutions and with ITU Sector Members.

The challenges are perfectly in line with **SDGs 4, 8** and **17** since they have to do with equitable quality education, sustainable economic growth and the global partnership for sustainable development.

<sup>26</sup> Project nominated for a WSIS Project Prize 2015





## C4. Capacity building

**Algeria** is a country characterized by its large area, more than 70 per cent of which is desert. The introduction of a public healthcare policy offering high quality throughout the country requires significant use of technology. Hospital information management, connecting disadvantaged areas through reliable and high-quality means of telecommunication and upgrading local expertise all require the use of telemedicine.

With the aim of transferring technology to the socioeconomic sector, researchers of the Centre for the Development of Advanced Technologies (CDTA) have led the *Telemedicine service to remote regions in Algeria* project (**SDGs 3, 4, 12, 16, and 17**), resulting in a mini-telemedicine pilot network linking Birtararia hospital in Algiers, Ouargla hospital (800 km south of Algiers) and Hadjira health centre (900 km south-east of Algiers).

In **Egypt**, the Information Technology Institute (ITI) has introduced *Industry-based IT Human Capital Development*. Human capacity building is a central part of ITI's mission, and a number of initiatives and programmes have been set up to develop professional capabilities, support new technologies and forge partnerships for innovation (**SDGs 4 and 17**). These programmes are aimed at bridging the gap between the academic world and industry so as to enable young people to break into ICT markets and to create more employment opportunities, thereby contributing to Egypt's economic development and enhancing capabilities to leverage Egypt's ICT global competitiveness.

**Egypt's** national human capacity-building initiative for ICTs, *Education Development for Universities in Egypt* (EDUEgypt), is a training initiative implemented in 16 Egyptian universities spanning 57 faculties (**SDGs 4 and 17**). EDUEgypt is the result of a cooperation protocol signed between the Ministry of Communications and Information Technology and the Ministry of Higher Education in December 2007. EDUEgypt aims to bridge the gap between university students' skills and the competencies required by the ICT job market by using interactive learner-based training techniques during students' senior academic year. EDUEgypt has been implemented for 7 years, benefitting 43 500 students in 16 governorates.<sup>27</sup>



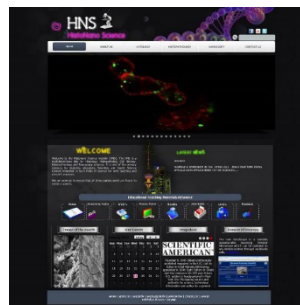
Following a needs assessment conducted by Ministry of Communications and Information Technology, a second Egyptian project, entitled *Training and Qualifying for Employment (TQE)* and focusing on the needs of persons with disabilities, was launched by the Ministry (**SDG4**). The programme's main objective is to help persons with disabilities to find better job opportunities by building their ICT capacities. TQE, which is a public-private partnership programme, offers two grants with the aim of eradicating IT illiteracy, opening new communications and knowledge acquisition channels, and providing job-specific training as well as job opportunities in the ICT private sector, thereby supporting independence and empowerment.<sup>28</sup>

<sup>27</sup> Project nominated for a WSIS Project Prize 2015

<sup>28</sup> Project nominated for a WSIS Project Prize 2015



In **Kuwait**, the *Histonano Website* (HNS) serves to educate readers interested in specific nanotechnology-related subjects of particular value to scientists and researchers, thereby corresponding to **SDGs in the educational, economic and social domains**. Ever since its inception in 2012, the website's maintenance and updating is an ongoing process. The HNS attempts to identify and certify in-depth information, which it then provides to researchers, together with the latest textbooks, journals, graphics and videos to enhance users' knowledge. The results of published papers concerning the HNS are currently in the process of being incorporated.



The ICT SME Toolkit by **ictQATAR** provides Small and medium-sized enterprises (SMEs) with the knowledge they need as they adopt web presence, e-commerce and cloud service technologies. Building on the progress made over the past years, Qatar Digital Government is focused on providing benefits to the people of Qatar. The drive to make Qatar's Government more efficient, effective and customer-centric is driven by the Qatar Digital Government 2020 Strategy, which is built around three main strategic objectives:

- Better serve individuals and businesses
- Create efficiency in government administration
- Develop a more open government with enhanced participation of citizens and residents.

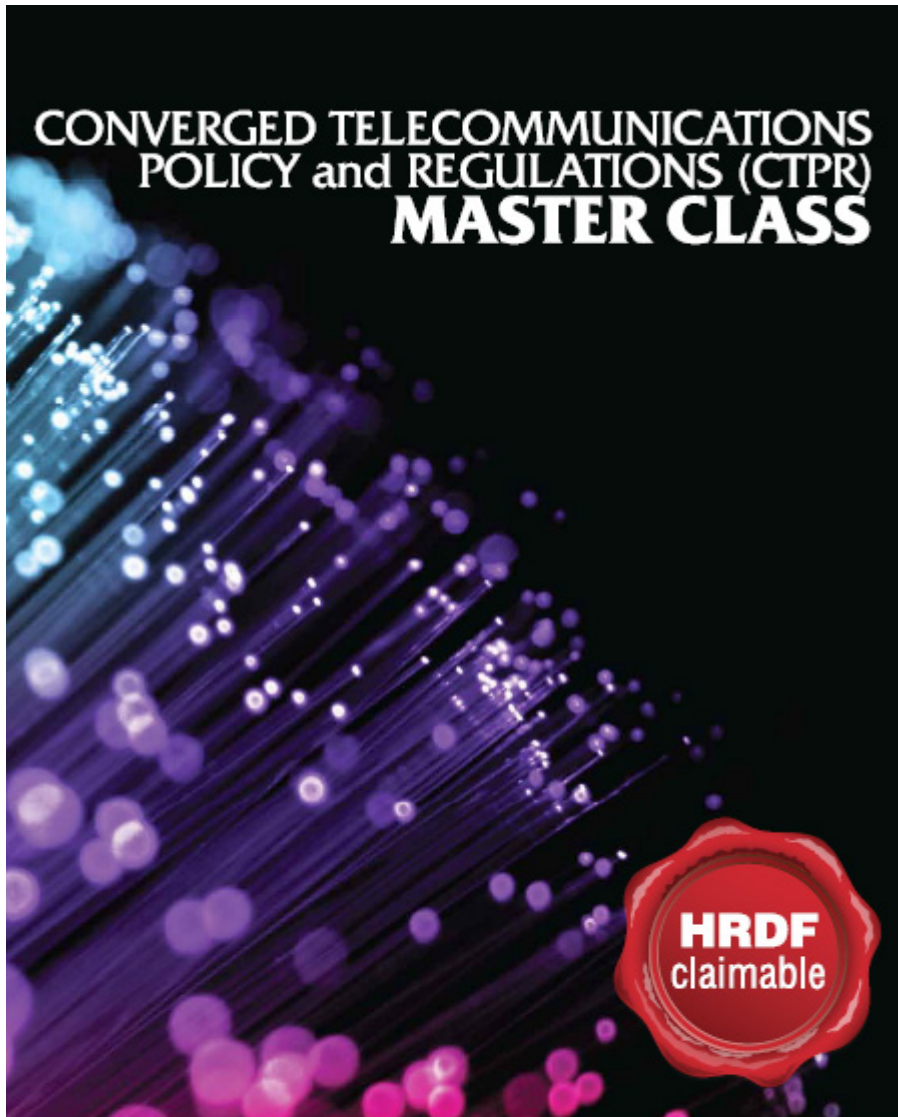
The ICT SME Toolkit thus promotes economic growth, employment and decent work in Qatar (**SDG 8**).

In **Qatar**, the Ministry of Transport and Communications launched the *Better Connections Program* project, which is a collaborative framework for employers and contractors to establish ICT facilities

and provide training to their transient workers within the worker accommodation. This initiative provides the beneficiaries with:

- refurbished hardware free of charge
- tailored training content available in five languages
- training and coordination support from the volunteers.

The Better Connections Program facilities are equipped with hardware enabling transient workers residing in Qatar to access the Internet and various ICT tools and thereby take part in the ever-changing digital world.



The project is working to reduce inequality in the country (SDG 10).

In **Saudi Arabia**, the Human Resources Development Fund (HRDF) has funded the *National e-Training Programme*. HRDF is the Ministry of Labour branch that focuses on upskilling and preparing the Kingdom's national workforce for public- and private-sector employment purposes (SDG 17). In order

to achieve its goals, the fund continues to invest in state-of-the-art ICT infrastructure and projects. The National e-Training Programme is an easy-to-use learning and content-management platform provided on a pre-scheduled basis (**SDG 4**). The platform currently provides 46 training modules to an average of 100 000 candidates per week.

In **Saudi Arabia**, Arabsat, together with the IT department, has embarked on a plan to implement an IT service management solution with a view to achieving ISO/IEC Certification 20000 for its IT Service Management division. The processes defined are in line with the ITIL best practice framework, and the automated IT set-up should enable Arabsat to accomplish its end goal of ISO 20000 Certification. Arabsat has engaged Wipro Consulting Services to assist in the development and implementation of the above IT setup (**SDG 12**). The main and most important ITIL processes to be implemented are incident management, problem management, release management, configuration management and change management.<sup>29</sup>

In **Saudi Arabia**, the e-Government Programme "Yesser" is keen to support the change that accompanies the implementation of e-government projects. Such change requires soft skills in addition to technical competencies to move forward successfully. To this end, "Yesser" has launched multiple programmes under its *Capacity Building and Development* initiative, which aims to build and enhance IT competencies in order to deal with implementations involving a high level of skills and professionalism. As at January 2016, over 42 000 government employees have been trained in areas ranging from basic computer usage to professional IT certifications and workshops for CIOs.

The programme relates to **SDGs 1, 4, 5** and **8** as it addresses such issues as poverty, education, equality of people and economic growth of the country.

In the **United Arab Emirates**, the *Mohammed Bin Rashid smart learning project* (MBRSLP) aims to transform the educational system in the Emirates and keep pace with the latest global developments in education by creating a new advanced unified electronic learning environment in all public schools. Contributing to **SDGs 4 and 16**, the environment will take the form of "smart classes" in which every student will have an electronic device and access to learning resources via high-speed networks. In addition, the project will enable teachers, students, parents and administrators to collaborate on a student-oriented educational system that identifies students' individual learning styles, intelligence, strengths and weaknesses, and enhances their skills according to their abilities based on interactive teaching and learning.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2014

<sup>29</sup> Project nominated for a WSIS Project Prize 2015

In the **United Arab Emirates**, the *Dubai Smart Training Initiative (DSTI)* is one of the Dubai Government Excellence Programme's initiatives aiming to enhance the capacities of Dubai Government employees in government excellence knowledge and applications through the latest electronic and smart technology platforms. It thus relates to **SDGs 4, 5, 8, 9, 11** and **16** as it addresses education, gender equality, economic growth and sustainable industrialization, etc. The training content is presented in a well-designed structure and flow, making the training more effective and enjoyable, and offers alternatives to suit and accommodate the user's preferences. DSTI offers training in both e-learning and smart app channels. The smart channel of this initiative utilizes mobility, interactivity and connectivity capabilities and smart mobile features to offer the convenience of training on a 24/7 basis from anywhere in the world.



In the **United Arab Emirates**, the *IPv6 Roadshow* provides hands-on training in IPv6 deployment. Working with governments and industry in the Arab region and technical experts from around the world, it provides practical capacity building to network operators. Launched in 2011, the Roadshow is a joint initiative of the RIPE NCC (Ripe Network Coordination Centre) and MENOG (Middle East Network Operators Group). A total of 30 events have been held in nine countries across the region, providing instruction to some 1 000 participants. A "train the trainer" programme (whose first graduate delivered an IPv6 Roadshow in November 2015) will see the initiative evolve to meet the growing demand for IPv6 capacity building and empower local technical communities.

The programme provides quality education, promotes sustainable industrialization and fosters innovation (**SDGs 4** and **9**).





## C5. Building confidence and security in the use of ICTs

In **Algeria**, the Centre for the Development of Advanced Technologies has developed the *Topographic Geographic Information System for ICT Networks*, a web-based topologic geographic information system for monitoring ICT networks (access, transport and distribution) for national ICT operator Algérie Télécom (**SDGs 8, 9, 11, 16, and 17**). The *Digital mapping platform on the Internet* is a platform that will enable the citizens of various countries to find points of interest (schools, universities, municipalities, hospitals, museums, hotels, etc.). It will explore different cities, regions and sites, and allows each country to create road network and communication channels.

In **Lebanon**, the *Responsible Citizen in Cyberspace* project is being implemented in order to build a sustainable platform to help increase awareness of the risks of interacting in cyberspace and provide suggested tools, methodologies and best practices to address these risks (**SDGs 8, 9, 16, and 17**). In order to help the Lebanese become responsible cyberspace citizens, a three-pronged project has been implemented that is aimed at reaching the full community, including:

1) Building a national awareness website ([www.e-aman.com](http://www.e-aman.com)):

Internet safety has been a major concern for parents, teachers, NGOs, ministries and other stakeholders in Lebanon for many years. Various roundtables, projects and activities were initiated, all revolving around finding solutions that best suit the Lebanese community. The Telecommunications Regulatory Authority (TRA) is a main partner with many stakeholders working to protect children in cyberspace, notably Himaya, which has put in place a dedicated e-helpline ( [www.himaya.org](http://www.himaya.org) ), and World Vision, in celebrating Safe Internet Day and creating dedicated Facebook page (<https://www.facebook.com/SaferInternetDayLebanon>) and a dedicated Twitter and Hash account (@SIDLebanon Hashtag: #SIDLB13), and helping with the production of a dedicated book on online safety to be used from grade 5 to 9 in all public and private schools, which was officially launched by the Centre of Educational Research and Development (CERD) at the Ministry of Education and Higher Education.

One of TRA's main objectives relates to increasing awareness of the risks that the community faces when surfing online. It has thus established a *dedicated national website* offering comprehensive tips and exhaustive information to help the community avoid Internet risks, and reflecting all the measures undertaken with all Lebanese stakeholders to date in this regard. The website targets the Lebanese community as a whole, including parents, youth and teachers. It aims to help Lebanese citizens become more responsible in cyberspace. Adults need to be aware of the many options they have to secure their Internet access. They also need to understand the potential risk areas, so as to act responsibly online. The website provides general tips and principles for the community to act conscientiously online, while providing tools for specific audiences, for example on child online safety. The website was launched in February 2013, and publicized through a mass SMS campaign.

2) Drafting a request for proposal (RFP) for the Young Safe Internet Ambassadors (E-Ambassadors) project:

The RFP for the *E-Ambassadors* project relates to a new regional initiative for empowering young people to promote safe Internet awareness among peers and in the community as a whole. Many different approaches have been adopted by various countries around the world for promoting awareness as a critical tool to protect children online. Some have chosen the option of empowering parents and teachers and encouraging them to take an approach involving filtering and restrictive access, while others are focusing on educating minors for responsible use and providing them with toolkits of resources. There is now plenty of information- and many excellent tools- made available online by ITU-D and the industry. E-Ambassadors proposes an alternative approach to influence parents,

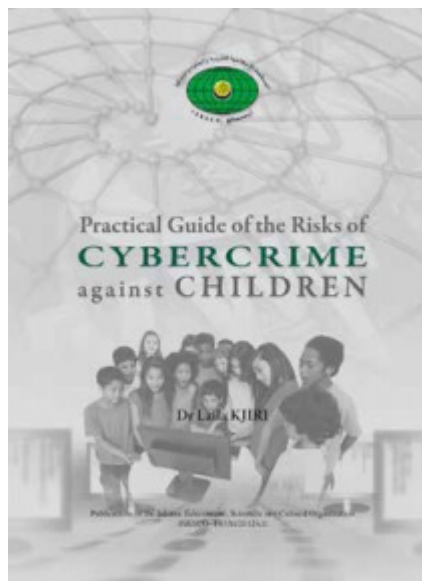
teachers and minors directly through relevant NGOs, ministries, service providers, vendors, media and schools, offering awareness training on online safety dispensed by young people. A dedicated training model encourages users, both young and old, to join a positive online environment, to share both knowledge and wisdom, and to support each other when things might be risky or go wrong.

The RFP contains three distinct requirements:

- evaluating the level of knowledge on online safety, and developing a training curriculum tailored to the need of the community;
- piloting this exercise in order to select a training model;
- selecting, training and supporting E-Ambassadors to quickly raise awareness for implementation, while evaluating and reporting progress in public and private schools.

3) Drafting a Code of Practice for Internet service providers:

Within its mandate as a member of the Arab Regulator Network (AREGNET), TRA conducted a study among all Arab countries on their national child online protection efforts. Following the survey, a draft *Code of Practice for Internet Service Providers* was prepared by TRA and shared among all AREGNET members for their feedback. The code of practice was then finalized, after incorporating all AREGNET members' comments, the document was approved and adopted, and it is now under final review before becoming binding on all ISPs in Lebanon, who will thus be required to install parental control features in their systems and make all their existing and future clients aware of the risks faced in cyberspace.



The Islamic Educational, Scientific and Cultural Organization (ISESCO) in **Morocco** has participated actively in the WSIS process (2003–2005). Within the framework of its Action Plan 2010-2012, it gave priority interest to programmes and activities aiming at highlighting the ethical and cultural dimensions of ICTs in the Islamic world (**SDGs 4, 11, 16, and 17**). In view of the responsibility which it assumes in coordinating common Islamic action in several fields, including that of ICTs, and convinced of the need to prepare a reference document likely to help in sensitizing children to the ethical, cultural and criminal issues inherent in the use of the Internet, ISESCO has developed a *Practical Guide of the Risks of Cybercrime against Children* as a contribution to the child online protection initiative.<sup>30</sup>

<sup>30</sup> Project nominated for a WSIS Project Prize 2015



In **Oman**, the Omani National Computer Emergency Readiness Team (OCERT) has established the *Regional centre for cybersecurity for the Arab region* (SDGs 9, 11, 16, and 17). In December 2012, OCERT was designated to serve as the regional centre for cybersecurity for the Arab region. Recognizing the leading role played by the Information Technology Authority (ITA), represented by OCERT, an MoU was signed with OCERT, in cooperation with both ITU and IMPACT. One of the main objectives for establishing the regional centre in the Sultanate is to localize ITU-IMPACT's cybersecurity services in the Arab region. Through localization, services will be able to be delivered based on the regional language, culture and other features. It is also expected that the creation of such a regional centre will encourage information sharing. Furthermore, by situating the regional centre in Oman, cybersecurity capacity and capabilities will be enhanced through regional collaboration and cooperation. Other aims of the centre include assisting the developing countries in their cybersecurity initiatives and encouraging research and development in the field of cybersecurity in the Arab region.

In **Oman**, *Oman Public Key Infrastructure (Oman PKI)* is a national initiative that establishes the infrastructure needed for all government entities to provide e-services in Oman. It serves to enable online transactions for citizens while raising the level of security and authenticity of electronic paperwork. It allows for the secure exchange of information through the high level of confidentiality obtained by using eID, mobile ID or USB Token. Oman PKI aims at providing a secure technology for information, documentation, electronic credibility and identification and user authentication as well as online transaction signature using electronic ID.

In this way, it ensures access to information and protects fundamental freedoms, in accordance with national legislation (SDG 16.10).

The Ministry of Manpower of **Oman** created the Ministry of Manpower e-identity (e-authentication) service for the ministry's employees in a bid to benefit from the e-services that were activated in 2015. The new service is related to the e-nomination of job seekers, e-licensing and e-authentication of Omanis' employment contracts. The service ensures high quality of security, accuracy and credibility, thus contributing to economic development, employment, etc. (SDG 8). The e-payment and upload services have been made active for 334 well-performing organizations of which 265 pay the fees electronically through the e-payment portal without the need to report to the ministry.



In order to provide educational opportunities to every citizen of learning age and to facilitate these opportunities by providing the appropriate infrastructure and services, to design and execute projects that cater to the requirements of the Ministry, and to improve the curriculum and constantly upgrade the general education system, the Ministry of Education of **Saudi Arabia** has launched an initiative known as *FARIS* that aims to implement government resource planning within the Ministry (**SDGs 8, 16, and 17**).

In **United Arab Emirates**, the Child Protection Centre (CPC) built a mobile app designed to help families and to provide instant communication with family members, along with their locations. It even supports family safety alerts for emergencies. The *CPC Mobile App* enables parents to know where their child is at all times (**SDGs 4, 9, and 16**). The application is available on iPhone, Blackberry, Windows and Android.<sup>31</sup>

In the **United Arab Emirates**, the Ministry of Interior has developed a *project to enhance information security culture at the Ministry of Interior* (**SDGs 4, 16, and 17**). Employee interaction with information resources is often the weakest link in protecting information security, and researchers have called for the information security culture to be embedded within an organization's strategy. While considerable progress has been made in this area, it is essential to adopt the highest levels of security. This project is aimed at evaluating security levels in the Ministry of Interior. The results of the study show some areas of weakness which need proper attention. The study also shows the work done to raise awareness of information security among Ministry employees<sup>32</sup>.

A remarkable project in the **United Arab Emirates** is the *Smart Investigation System*, a smart electronic system that will move the country's investigation sector from the conventional manual method to smart investigation (**SDGs 8 and 9**). The system relies on a set of intelligent procedures during its operational stages and adopts a matrix of risks based on world-class standards specifically developed to combine 39 factors affecting the stability of the jobs market. These factors consist of internal influences and factors obtained through the Ministry's systems and external influences and factors obtained from external authorities related to the Ministry. The system will then analyse all the data and sort them into categories according to the intensity and probability of risks. These categories range from level 1, the least dangerous, to level 5, the highest level of danger.<sup>33</sup>

In the **United Arab Emirates**, the Dubai Electricity and Water Authority (DEWA) began implementing the DEWA Smart Power Plant System (SPP) Project in January 2016 with the aim of establishing a centre to gather data in real time from isolated power stations in order to establish a Generating Power Plants Distributed Control System using real-time and historical data to provide a holistic view of the operational, technical and economic condition of each plant/unit. Plant data can be accessed on the move via smart devices, PCs and laptops equipped with online plant monitoring, evaluation, reporting, performance calculations, dashboards, KPIs, and SMS/e-mail to support the decision-makers.

The project seeks to ensure reliable, sustainable and modern energy and the building of resilient infrastructure, and fosters innovation (**SDGs 7, 9 and 11**).

Launched by the Telecommunication Regulatory Authority of the **United Arab Emirates** (UAE), the *Cyber Blackmail Campaign* seeks to educate users in the UAE on the risks and potential consequences of careless Internet use and raise their awareness of the need for caution when sharing data on the web, especially with the remarkable growth and development of the online spaces made possible by modern technologies – spaces which unscrupulous users take advantage of in order to harm other people, violate their privacy and then use their personal data and pictures to obtain illegal financial gain.

<sup>31</sup> Project nominated for a WSIS Project Prize 2014

<sup>32</sup> Project nominated for a WSIS Project Prize 2015

<sup>33</sup> Project nominated for a WSIS Project Prize 2015

As they help to build security in the use of ICTs, the campaign's goals reflect **SDGs 5, 11, 16** and **17** by addressing gender equality, promoting a peaceful society and encouraging the global partnership for sustainable development

الابتزاز الإلكتروني  
احذر أن تكون التالي..

لا تكن ضحية سهلة  
عبر وسائل التواصل الاجتماعي

للإبلاغ 800 4888  
خدمة سرية لتوصيل المعلومات

بمعاينة  
du  
بال تعاون مع شرطة دبي

لمعرفة المزيد، الرجاء زيارة موقع الأمين على: [www.alameen.ae](http://www.alameen.ae)  
#معا ضد الابتزاز الإلكتروني

## C6. Enabling environment

In **Algeria**, the National Unemployment Insurance Fund has devised the *Design and implementation of a decisional support system (data warehouse)* project. Its main features are the design of a data warehouse that draws employment-related information from national computer systems and uses certain information provided by regional structures (**SDGs 8 and 10**). The aim is to standardize the source of statistical data, facilitate the production of statistical reports and feed the decision support system. The system is also intended to encourage the design and implementation of tools for multidimensional dynamic analysis and the development of predefined reports.

Also in Algeria, the National Fund for Paid Leave and Bad Weather Unemployment for the Building, Public Works and Hydraulic Sectors (CACOBATPH) manages the *TASRIHATCOM e-declaration portal*. The launch of the portal is part of the modernization strategy framework established by CACOBATPH to develop and strengthen relations with its digital consumers (**SDGs 8, 16, and 17**). Through the portal, users have the opportunity to file their DAC and DAS declarations and consult their account statements online. Available 24 hours a day, seven days a week, the portal allows users to make their CACOBATPH declarations safely without needing to visit their branch. TASRIHATCOM offers a positive alternative to the traditional paper-based system, providing a clear added value to the relationship between the Fund, its member companies and their employees.

In full cooperation with the persons with disabilities community, a number of prominent NGOs and the CIT Chamber of Commerce, the Ministry of Communications and Information Technology (MCIT) in **Egypt** launched a *Lifelong Learning (LLL)* programme to help persons with disabilities find job opportunities. Such persons are currently not offered the kinds of training programme that enable them to meet job-market requirements and are consequently experiencing high levels of unemployment. The LLL programmes on offer range from basic IT and soft skills to specific technical skills that are specified by IT companies interested in hiring persons with disabilities.

The programme thus tackles such problematic issues as poverty, quality education, employment of specific people, etc. (**SDGs 1, 4, 8 and 16**).

In **Kuwait**, the *Kuwait Direct Investment Promotion Authority (KDIPA.gov.kw)* cooperates and coordinates with various governmental institutions nationwide to offer the best possible services and whatever facilities are required by foreign direct investors (**SDGs 8, 10, and 17**). Such efforts will serve to attract reputed foreign investors and overcome any obstacles to their business activities in Kuwait, as well as creating attractive job opportunities for Kuwaiti national workers, ensuring full diversification of economic structures, achieving better management of scarce economic resources and applying both modern technologies and expertise locally.<sup>34</sup>

In **Kuwait**, *Tasdeed* has been designed jointly by the Ministry of Finance, the Central Agency for Information Technology and the private sector. It allows individual customers (Kuwaiti citizens and residents), corporations and government entities the option of making payments to government agencies (service providers/invoicers) by various electronic means (payment channels/points of sale): integrated point of sale, payment through Internet (payment gateway), self-service machines and electronic stamps (**SDGs 8, 9, 10, and 17**). The service is supplied and managed by a payment service provider. *Tasdeed* makes it possible for government customers to pay easily from anywhere at any time by electronic means. It is hoped that *Tasdeed* will improve the management and increase the value of non-oil revenues.<sup>35</sup>

In **Kuwait**, the *Tasdeed* website is a service that was jointly designed by the Ministry of Finance (MOF), Kuwait Government Online Portal (CAIT) and a third party from the private sector. It is a convenient

<sup>34</sup> Project nominated for a WSIS Project Prize 2014

<sup>35</sup> Project nominated for a WSIS Project Prize 2015

tool for collecting amounts owed to the government by individuals/entities (Kuwaiti citizens, other residents, corporations). The following goals have been achieved by Tasdeed as a service-oriented tool:

- The ability for individuals/entities (Kuwaiti citizens, other residents, corporations) to effect payments to government agencies (service providers/invoice departments) irrespective of time of day or location, simply and by various electronic means
- An increase in non-oil revenue

Tasdeed was introduced to enhance accounting receivables for services provided by government agencies. It has taken the lead in MOF Enterprise Resource Planning (ERP) implementation and has been rolled out in 42 government agencies.

In **Lebanon**, the *Digital Zones* project was implemented to support and facilitate the creation of digital zones to be developed throughout the country. The concept is simple: a real-estate developer joins forces with an incubator or accelerator and submits their project to the ministry, which makes sure that it meets the eligibility criteria. Then, the ministry will act as a facilitator and support the development of the zone by laying leading-edge infrastructure and intervening with the other administrations such as Investment Development Authority of Lebanon (IDAL), municipalities and other ministries (**SDGs 8, 9, and 17**). An example of the pilot project is the *Beirut Digital District*. It was inaugurated on 3 September 2012, with 5 000 m<sup>2</sup> initially, eventually rising to cover 40 000 m<sup>2</sup>. The objective is to support startups, as well as companies wishing to use Lebanon as a regional platform to export their services.

In **Oman**, the Information Technology Authority (ITA) launched “*Sas*” - an Arabic concept that refers to any solid foundation. Hence, the *Sas* programme is designed to provide the foundation for creating a new and vibrant ICT industry, thereby fostering an entrepreneurial spirit in the ICT sector in Oman. The programme supports **SDGs 4, 8, 9, and 17**. Targeting small and medium ICT businesses, students and jobseekers of any age interested in starting a business, the *Sas* programme seeks to develop an internationally competitive ICT industry in Oman, attract more foreign and local investment in the ICT sector, encourage and support innovation by contributing to the introduction of new technologies to create innovative products, solutions and services, and encourage young graduates to create their own businesses.<sup>36</sup>

<sup>36</sup> Project nominated for a WSIS Project Prize 2014

In **Saudi Arabia**, the Ministry of Justice's *Remote Litigation Service* is a trial in accordance with the requirements of legality and statute for a convict already in prison (**SDG 16**). The judiciary sits in the courthouse and the trial is held through an electronic link via closed-circuit television. A trial held on this basis is as if it were in the courthouse in front of the judiciary. This electronic court also ensures that the convict in this trial enjoy all legal and statutory rights. It results in the possibility of litigation from a distance and provides an easy line of communication between the convict and the judiciary without the need for transportation and what that entails in terms of secure escort and risk.<sup>37</sup>

In the **United Arab Emirates**, the Khalifa Fund for Enterprise Development launched the *Khalifa Fund E-Space* project- a change-management project with the objective of securing an e-presence in the small and medium-sized enterprise (SME) community that offers four platforms for four audience segments. Each platform plays a role in offering platform spaces, hence none of the platforms' strategies can be created in isolation, and every platform has to be aligned with overall Khalifa Fund strategy. The first platform is the *SME Toolkit UAE*, targeting all entrepreneurs nationwide, and providing information, guides and tools for starting up and operating an SME in UAE. The second platform is the *Khalifa Fund Website*, targeting Emirati entrepreneurs, and offering information about programmes, funding benefits and services offered by the Khalifa Fund. The third platform is the *Knowledge Management System*, targeting Khalifa Fund applicants and members; it is a research engine for an online library with reports and statistics relevant to SMEs in UAE. The fourth platform is the *Khalifa Fund Gateway*, targeting Khalifa Fund members, and providing online support, business linkage and access to government tenders. The project is supporting **SDGs 4, 8, 9, 10, and 17**.

In the **United Arab Emirates**, *UAE-IX* is a neutral Internet traffic exchange platform that interconnects global networks and, above all, network operators and content providers in the Gulf Cooperation Council (GCC) region; supporting **SDGs 10, and 17**. The UAE-IX is built on a fully redundant switching platform located in a top-class secure data centre in Dubai. Initiated by UAE's Telecommunication Regulatory Authority (TRA) and managed by DE-CIX, the world's largest Internet exchange, based in Frankfurt, **Germany**, UAE-IX delivers a highly available local alternative for regional traffic exchange, localizing Internet content. UAE-IX will reduce latency times by up to 80 per cent and costs by up to 70 per cent for GCC providers. Moreover, UAE-IX will improve IP-network resilience and robustness, and will also help to provide reliable connectivity within the GCC.

<sup>37</sup> Project nominated for a WSIS Project Prize 2015

## C7. ICT Applications

### E-government

In **Algeria**, the Ministry of Commerce has started work on *intranet infrastructure* and an *interconnected network* for the administration and its external departments (**SDGs 9 and 16**). The intranet network of the commerce sector aims mainly to establish secure computer infrastructure to upgrade the administration of commerce, improve communication and inter-structure exchanges, and convey all information in real time for better decision-making. The main activities revolved around the following:

- implementation of a data centre at the Ministry of Commerce;
- installation of 60 local computer networks at the commerce directorates in the *wilayas* (provinces), at regional directorates and in port/border inspection units;
- establishment of secure interconnection infrastructure via intranet for all the above-mentioned data centre structures.

**Algeria** has three interesting projects in the field of e-government. Two of these are managed by the National Fund for Unemployment Insurance (CNAC) and one by the Ministry of Housing, Planning and the City.

The project *Implementation of electronic services for the citizen* provides services such as (**SDGs 8, 16, and 17**):

- Presentation and extension devices
- Provision of documents and forms to download on all devices managed by CNAC
- Provision of services for unemployed developers and other recipients including:
  - Online simulations for calculation of bank and CNAC financing structures and repayment schedules
  - Form for gathering citizen requests, as part of a “social listening” initiative
  - Online tracking of recipients’ records
  - Research activities funded by CNAC
  - Pre-registration and monitoring of the progress of online files
  - The Winsendjel service, which facilitates provision of information on the site where the file is deposited
  - Paths for establishing a micro-business
  - Discussion forum and FAQs.

The services provided by the second project, *Provision of electronic services through the website for authorized users*, include (**SDGs 4 and 17**):

- Services for downloading statistics
- Contracting services (implementation of the provision for reserving 20 per cent of public procurement) to download the file for national micro-enterprises created under the aegis of the CNAC
- National Agency for Supporting Youth Employment: provision of ANSEJ, a service consisting of an online research module for developers enrolled in the CNAC national register, to enable them



to identify potential applicants in time and combined with aid granted by the State. This service is aimed at strengthening and improving control tools.

The Ministry of Water Resources and Environment of **Algeria** initiated the *SIGMA project*, which is a geographic information system (database) for the water resources sector, covering dams, wastewater stations, etc. The aim of the project is to make information about water resource infrastructures accessible to the public and enable concerned individuals to submit comments or rectify errors by sending requests to the Administrator. The SIGMA project relates to such issues as sustainable agriculture, healthy lives, access to water and sanitation as well as inequality within the country (**SDGs 2, 3, 6 and 10**).

A web-based *National housing* application is hosted on servers in the central administration. The decentralized housing services of different provinces, through the Intranet, access the ministry's web portal (**SDGs 10, 11, and 17**). After authentication, the list of housing applicants is submitted to the central administration for filtering. This list remains pending until confirmation is sent, at which time the administrator can see the list, perform additional filtering (national scale) and submit the results. After allocation of housing, the decentralized services send the list of persons who have obtained housing to the administrator to update the national housing database. **Egypt** has launched a *national three-digit emergency number*, 122, for easy and instant communication from members of the public on road conditions and situations such as road traffic collisions and traffic gridlock (**SDG 16**).

In **Kuwait**, the government has launched *Kuwait Government Online* (KGO), a government portal that provides a web-based, easy-to-use, mobile-enabled, one-stop, multilanguage single entry point to user-centric Kuwaiti government information and e-services (**SDGs 9, 16, and 17**). The portal is available round the clock. It is the gateway and first point of visit for citizens (G2C), businesses (G2B) and visitors wishing to find information and e-services provided by the Government of Kuwait. Multiple access channels have been established through the web, mobile and other tools of communication to ensure KGO portal users can benefit from information and services. To maintain top usability, performance and security rates, the developers designed KGO according to international technical standards.<sup>38</sup>

In **Kuwait**, the Ministry of State for the National Assembly has launched *www.mona.gov.kw*. Through this site, the ministry seeks to put parliamentary life in Kuwait on view. The general public and relevant professionals can follow all the sessions of the National Assembly, accessing documents such as minutes of meetings, minutes of agenda items, proposals made by the House of Representatives, laws and regulations, interviews, discussions of interest to citizens, and interesting documents of entities in other governments (**SDG 16**). They can use this information to make appropriate decisions and retrieve past information precisely and transparently, whereas in the past access was restricted to certain destinations.<sup>39</sup>

In **Kuwait**, the Central Agency for Information Technology has been running two deserving e-government projects.<sup>40</sup> *Kuwait Government Online* (KGO) is a government portal which provides a web-based, easy to use, mobile-enabled, one-stop, multi-language, single-entry point to the user-centric Kuwaiti Government information and e-services (**SDG 16**). This portal is available 24/7. KGO is the gateway and first port of call when citizens ("G2C" services), businesses ("G2B" services) and visitors wish to find government information and e-services. Multiple-access channels through the web, mobile devices and other communication tools are established to ensure that KGO portal users can benefit from information and services. To maintain the highest usability, performance and security, developers designed KGO according to international technical standards.

The second project, the *Public Institution for Social Security (PIFSS)* web portal is an official online gateway providing an array of services regarding retirement information and social security information for Kuwaiti and Gulf Cooperation Council citizens (GCC). The rules and policies for retirement and

<sup>38</sup> Project nominated for a WSIS Project Prize 2014

<sup>39</sup> Project nominated for a WSIS Project Prize 2014

<sup>40</sup> Projects nominated for a WSIS Project Prize 2015

contributions, as well as electronic documents and forms, are available on the website (SDGs 11 and 16). The PIFSS web portal also provides a wide range of resources including links to electronic services for individuals and employers, an unemployment registration page, and retirement and commutation calculators. News, instructions and advertisements are also part of the PIFSS portal.

Three projects from **Kuwait** enable access to secure information and promote rules of law (SDG 16).

The Minister’s Office of the State for the National Assembly has created the *Ministry Website* in order to reflect parliamentary life in Kuwait. All the general public and professionals in this area can follow all the sessions of the National Assembly, including consultation of the minutes of the meetings, minutes relating to agenda items, proposals made by the House of Representatives, consequent laws and regulations, interviews, discussions. The information provided will help appropriate decision-making and the retrieval of past information with the utmost precision and transparency, which in the past was restricted to certain destinations.



**KGO - Kuwait Government Online** - is a government portal which provides a web-based, easy-to-use, mobile-enabled, one-stop, multi-language, single entry-point to user-centric Kuwaiti government information and e-services. Available 24x7, KGO is the gateway and first point of visit when citizens (G2C), businesses (G2B) and visitors wish to find information and e-services provided by the Government of Kuwait. Multiple access channels via the web, mobile and other communication technology tools are established to ensure that KGO portal users can benefit from information and services. To maintain highest usability, performance and security rates, developers designed KGO according to international technical standards.



The initiative *Sahem fi Altashreea* was started by the Speaker of the **Kuwait** National Assembly (KNA) in order to extend public participation and was executed in-house by a team of KNA employees. One of the main goals of Sahem is to deliver citizens’ feedback to members of parliament via an easy mechanism and friendly format. Citizens are directly involved in policy making and changing the outcome of important discussions inside KNA committee meeting rooms. In addition, the entire Sahem process helps to enrich the democratic experience through direct interaction and sharing of opinions. Also, citizens find it very informative with regard to major upcoming projects discussed.



In **Morocco**, the State pension fund, the *Régime Collectif d'Allocation de Retraite* (RCAR), has implemented *Agylis plus*. About 10 years ago, the fund's top management decided to modernize its management system (**SDG 16**). One of its strategic orientations was the enhancement of customer capital. In concrete terms, a programme to create value projects using ICTs was launched in order to provide citizens with greater access to information. The portfolio of projects was customer-oriented and should facilitate the RCAR e-community's relations with its business partners and diversify client channels for all e-government retirement services on offer.

*MASSAR*, an ICT system developed by the Ministry of Education and Professional Training of **Morocco**, provides utilities enabling school managers to perform their operational activities more easily and effectively (**SDGs 4 and 16**). These include managing students' subscriptions and mobility, monitoring students' grades, and managing school sessions. It also provides e-services for students and parents to help them track academic performance and communicate with school administrations. Finally it helps managers at all levels (central, regional and local) to monitor the education system and provides reliable information for better planning and decision making.<sup>41</sup>

In **Oman**, the State Audit Institution (SAI) has initiated programmes to bolster government transparency and citizen participation through enhanced information exchanges using an *e-complaint window* (**SDGs 16 and 17**). SAI is the key government agency combating corruption and ensuring greater accountability, transparency and fairness in government performance. Since it launched the e-complaint window, there has been a dramatic (100 per cent) increase in the number of complaints. The e-complaint window logs and categorizes feedback and complaints before channelling them to the department/party concerned. It has activated online channels to enhance the process, and partnered with the public to ensure transparency and efficiency in government. In 2010 and 2011, around USD 2.6 billion of public funds were recovered and saved using the e-complaint window.

In **Oman**, the *Injaz Hall – One-Stop-Shop Services* initiative perfectly attests to the government's efforts to enhance its customer services in rural areas. The challenge of serving remote villages and communities in vast undulating terrain, coupled with the lack of connectivity, did not deter the Ministry of Regional Municipality and Water Resources from providing quality customer services to those living in the interior. Powered by a pervasive IT system, Injaz Hall has standardized, streamlined and united

<sup>41</sup> Project nominated for a WSIS Project Prize 2015

municipal services in the interior (**SDG 9**). With standardized information from all 44 municipalities in the country's nine governorates, data collection and knowledge sharing are simplified and provide accurate input for the ministry's further planning and strategic development. The increased number of licences and permits processed and issued are evidence of the initiative's success. The most remarkable achievement is the multifold increase in government revenue collected from such services. By strengthening Oman's efforts to provide quality services to rural communities, this initiative has successfully bridged the digital divide between the country's cosmopolitan townships and its rural communities. It has also met the overall objectives of the national digital strategy and fulfilled the vision and mission defined by the ministry's management.

In the **Sultanate of Oman**, there are two deserving governmental initiatives in the area of e-government.<sup>42</sup>

Since the introduction of the *e-Complaint Window* in October 2012 by the Public Authority for Consumer Protection (PACP), more than USD 1.9 million worth of goods have been seized and about 32 000 complaints received (compared to 1 725 in 2009). PACP leverages ICTs and pervasive mobile technology through the e-Complaint initiative, which encompasses the entire business process and system architecture to empower consumers by enabling them to lodge complaints and provide feedback and suggestions concerning violations of consumers' rights from anywhere at any time. PACP has been named one of the six best practices around the world and adopted as a road map by Arab countries (**SDGs 10, 16 and 17**).

The second project, *MOE Portal*, established in 2007 by the Ministry of Education, is a portal providing services, educational and administrative products, as well as programmes and activities for different sectors, for large segments of society such as students, guardians, teachers and educational directorates (**SDGs 4, 8, and 17**). MOE Portal is a pilot project that is unique in terms of the e-services provided. It includes more than 3 000 web pages, more than 600 e-services, and comprises more than 100 subsystems. Nearly 250 000 electronic transactions were completed by the end of 2013, including 60 000 leave requests and 18 000 internal and external transfer requests.

The Ministry of Justice in **Oman** has launched the *fingerprint reader* service at public notary offices in a step towards digital transformation. As many as 54 devices were put into operation in the first stage, which will be completed later by providing more than one device in each of the Sultanate's 60 public notary offices. The system contributes to **SDGs 9, 16, and 17**, and is linked to the Civil Status Office at the Royal Oman Police (ROP), aims to provide maximum security for the official records issued by the public notary offices and to save time and effort when visitor data is codified, also enabling women not to be required to reveal their faces. The system is part of a package of electronic services that will link with 17 government entities, including the Administrative Affairs Council for the Judiciary, the ROP, the Ministries of Finance, Housing, Manpower, Commerce and Industry and Civil Service. It will involve computerization of the ministry's administrative and financial affairs, including tenders, procurement, recruitment, warehouses, and special services related to archiving official records issued by the Notary Public, some of which date back to the first half of the last century.

The Public Authority for Consumer Protection (PACP) of **Oman** leverages ICT and pervasive mobile technology through the *Tawasul* initiative, which encompasses the entire business process and system architecture to empower consumers by providing them with a way to lodge complaints and provide feedback and suggestions concerning any breach to consumer rights from anywhere and at any time. PACP was recognized as one of the best six practices around the world and taken as a road map by Arab countries.

The programme thus achieves gender equality by providing equal opportunities for citizens (**SDG 5**). It also contributes to safety in cities and promotes peaceful and inclusive societies (**SDGs 11 and 16**).

<sup>42</sup> Project nominated for a WSIS Project Prize 2015

The *e-Participation Policy* of **Qatar** aims at instituting the culture and practices of e-participation across government agencies and improving transparency and people's participation, thereby assisting the State of Qatar in achieving its national development goals.

The Government of the State of Qatar has always recognized the value of engaging the people in governance processes. Qatar's National Development Strategy 2011-2016 acknowledges that people are a country's most valuable asset and their participation in political, social and economic spheres will contribute to sustaining a prosperous society (**SDGs 11** and **16**). Engagement with their people allows governments to tap into wider perspectives, sources of information and potential solutions to improve decisions and services. It also provides the basis for productive relationships, improved dialogue and deliberation and, ultimately, better governance. The objective of e-Participation is to engage people in development policy and decision-making processes through use of information and communication technologies.

In **Saudi Arabia**, the National Information Centre (NIC) has set up the *NIC Hub*. Run by the Ministry of the Interior, NIC is not a mere data centre; it is the port of call for all e-government programmes in the Kingdom. All the Kingdom's e-government programmes operate using NIC's interface and data-exchange services; thereby contributing to **SDGs 9 and 16**. The centre stores the demographic information relating to all citizens and expatriates, against which other programmes can crosscheck their e-transactions. It is also developing and operating e-services that provide significant benefits to both nationals and expatriates, enabling millions of users to perform transactions at any time and from anywhere. This comfortable mode of interaction has specifically made it possible for women and people with special needs to perform government transactions as never before.

In **Saudi Arabia**, the Ministry of Higher Education has implemented the *Higher Education Degree Verification eService* (Moahhal); thus supporting **SDG 16**. The ministry has realized the importance of acting fast to facilitate a nationwide process of qualification and credential verification that is fully automated and electronic. Thanks to the implementation of Moahhal, the verification process is now instantaneous, accurate and free. Moahhal is available to public and private employers, who can verify online the accuracy of the academic information presented by a graduate. It also aims to compile an accurate and updated, complete national database of all graduates and conduct important business intelligence analyses on performance indicators.<sup>43</sup>

In **Saudi Arabia**, the General Organization for Social Insurance (GOSI) has introduced *Proactive Services*, a revolutionary delivery channel through which customers are offered a service before they even apply for it. For example, a female beneficiary will receive a marriage grant as soon as the marriage has been registered by the government body concerned. This represents a shift from the "ask-receive" to the "have the right to receive" approach.

In **Saudi Arabia**, there are 11 remarkable governmental initiatives in the area of e-government and one project developed by academia.

<sup>43</sup> Project nominated for a WSIS Project Prize 2014

The *Financial and Administrative Resources Information System (FARIS)* developed by the Ministry of Education (MoE) uses cutting-edge information and communication technology to achieve optimum use of the ministry's administrative and financial resources by transforming it into a digital society that allows it to carry out administrative and financial processes in accordance with best standards and practices applied in governmental bodies (**SDGs 8, 16, and 17**). Implementation of this system will lead to the following results:

- Elimination of costly and inflexible legacy systems, which will be replaced with one integrated ERP system for all functions and entities One single, integrated and centralized data source for all MoE employees (numbering 650 000)
- Standardized processes and reduced duplication across departments, with integration of financial HRMS and SCM modules and, in some areas of SCM, systems to replace manual operations
- Greater visibility and control of MoE resources
- FARIS to process payrolls for more than 650 000 employees under 46 different payroll headings.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2015

*Absher*, developed by the National Information Centre of the Ministry of the Interior (Moi), and one of the first projects to have implemented e-government strategy in Saudi Arabia (**SDG 16**), allows for a variety of services to the Ministry's various sectors (traffic, civil status, passports and so on) in electronic form, facilitating access to services at any time and from anywhere, through the Moi e-portal [www.moi.gov.sa](http://www.moi.gov.sa).<sup>44</sup>



The *Safeer Al-Jawwal* project developed by the Ministry of Education was launched by Safeer Workflow to facilitate procedures applicable to students studying abroad (**SDGs 4 and 8**). The system serves as an additional support for students by providing all online services on smartphones or other devices. The application has been designed in accordance with the highest standards adopted in smart device applications for service sectors, utilizing mobile properties, GPS, and smart device accessories for high-quality delivery. Using the application, students studying abroad can submit applications, upload attachments, follow the progress of applications, and receive instant notifications.<sup>45</sup>

The *eVisa service* of the Ministry of Foreign Affairs was launched in 2008 to address the increasing challenges of visa applications, particularly those relating to the *Hajj*, which exceed ten million annually, submitted through 116 visa application centres and over 3 000 Hajj and Umra agency centres across the world (**SDG 16**). The traditional approach to processing passports and visas has proven inefficient, particularly in recent years, owing to the number of stakeholders, the complexity and multi-departmental nature of visa processing, and differences in terms of legal considerations

<sup>44</sup> Project nominated for a WSIS Project Prize 2015

<sup>45</sup> Project nominated for a WSIS Project Prize 2015



for different visitors. Facing this challenge required an integrated and innovative solution to address issues of communication, coordination and ease of processing and access for ministry employees and visa applicants.<sup>46</sup>

The Ministry of Finance E-government Services' project is due to develop e-services with digital signature mechanisms for the most widely used core services provided by the Ministry of Finance, and will make those e-services available on the Government Service Bus (GSB) for all government agencies to use (**SDGs 8 and 16**). The following services are included in the project:

- Government budget services
- Government accounting services
- Government payment order services.<sup>47</sup>

*The Saudi Tourism Portal* of the Saudi Commission of Tourism and Antiquities was developed to market Saudi tourism in Arabic and English. It provides a number of tourism services and other valuable interactive integrated contents, such as tourist information, photos, short films and interactive maps to help tourists to pre-plan tours and interact with the site to learn more about tourist destinations, events, programmes, tourist tracks, seasonal offers and discounts. In addition, the tourist can benefit from reservation services for hotels, flights and car rentals through the site. It also offers a prompt and secure client service by receiving tourist complaints. The Saudi Tourism Portal is integrated with subsidiary sites, CRM, mobile applications and electronic information centres.<sup>48</sup>



The *Arab Voice Library*, a project of the Library and Information Association of **Saudi Arabia**, aims to enrich the Arabic audio content available on the Internet (**SDG 4**). The Library Association is seeking to produce more than 300 audio-hours as a first step in this area. The main aims of the projects are:

- Spreading the culture of listening to audiobooks in Saudi society
- Supporting Arabic-language audio content on the Internet and providing richer information content for blind people in the Arab world
- Increasing the number of individuals with access to audiobooks
- Providing users of smart devices, especially young people, with high-quality-content to discover and read
- Helping people to gain access to digital content on the Internet.

<sup>46</sup> Project nominated for a WSIS Project Prize 2015

<sup>47</sup> Project nominated for a WSIS Project Prize 2015

<sup>48</sup> Project nominated for a WSIS Project Prize 2015



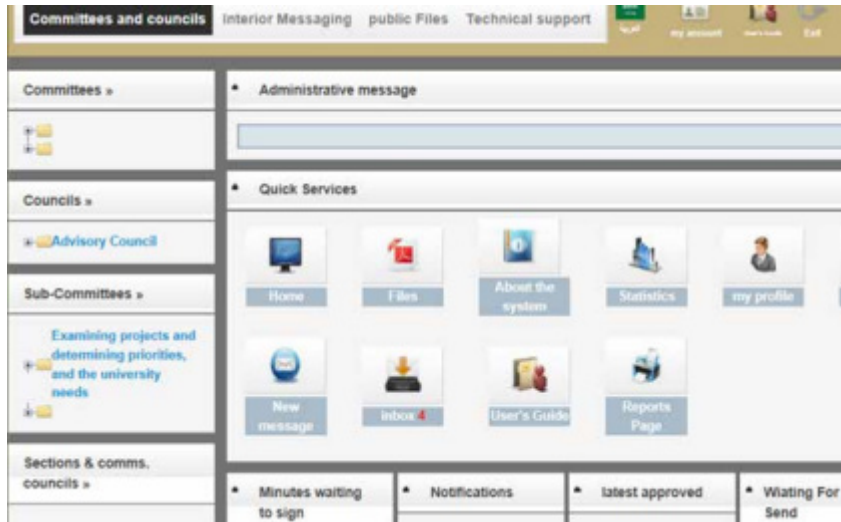
The *Noor System* is a comprehensive and integrated educational process. It promotes learning based on the most advanced technology in the field of educational administration, and covers all schools affiliated to the Ministry and its educational directorates and departments (**SDGs 4 and 8**). The system will provide many online services for students, teachers, parents and school directors. It will also contribute to the preparation of reports and provide timely and accurate information on the educational process through a central database linked with other systems present and future. These reports will provide information for each beneficiary at the level of the school and the Education Department and the Ministry's different bodies.

In launching the *King Abdullah Scholarship Programme (KASP)*, the Ministry predicted the potential need for electronic systems that serve KASP's students, facilitate their employment, and encourage an attitude of commitment to their education (**SDG 4**). The Ministry of Higher Education has therefore built a comprehensive electronic platform called "*SAFEER*" to offer several services to different beneficiaries. *SAFEER* offers its services through different products with the aim of facilitating work procedures and serving students studying abroad. With *SAFEER* today, students can carry out all the relevant procedures electronically, from applying to study abroad to using post-graduation services. This all happens within a technical environment that is fully controlled, transparent and accessible.

The *Commercial Registration document electronic service* of the Ministry of Commerce and Industry enables users, through an online government service, to start a business within three minutes, faster than anywhere else in the world (**SDG 8**). The user is issued with an official electronically certified commercial document. The service includes an electronic link with several systems, including electronic payment, the National Information Center and the Chambers of Commerce in the Kingdom. The service includes a mechanism for choosing a brand name, whereby the user can reserve a new name or select one from a proposed list of ready-to-use names (white list). The commercial register marks the beginning of any commercial activity, and the Kingdom took the lead in automating this service. Statistics show that around 4 000 requests are made daily through the online service.

In **Saudi Arabia**, Majmaah University seeks to maintain quantitative and qualitative expansion in its processes and systems by finding solutions and applications that facilitate business monitoring and help to expedite transactions (**SDG 8**). From this came the Rector's recommendation to develop a system of "committees and councils" as one of the electronic transaction systems at the university which aims to standardize work procedures and accelerate decision-making mechanisms and facilitate work monitoring and archiving in an integrated electronic way, pursuing the goal of fully paperless operation in all its procedures. The *system of "Committees and Councils"* project allocates roles for committee staff according to their authority in a work tracking system, starting from the establishment of a new session and ending with the approval of the session by the authorized member, in addition to its procedures including adding agenda items, inviting members, adding files and direct comments, and preparing minutes for signature before being approved by the President of the Committee/Council and sent to the member in authority. It also includes statistical reports on committees.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2015

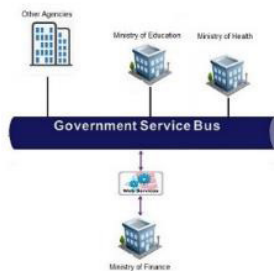


**Saudi Arabia** has boosted seven projects within this category.

The Ministry of Health initiated the *Online Toxicology Analysis Requests & Results System "OTARR"* project that aims to implement a fully integrated online toxicology analysis requests and results system that automates all services provided by the poison control and forensic chemistry centres across the kingdom, including installation, configuration and integration with the laboratories information management system (LIMS). In addition, the project includes implementation and integration with call centre and IVR systems as well as the provision of medical libraries related to toxicology to PCC staff.

Thus, the goal of the project is to ensure healthy lives and promote well-being (SDG 3).

Five hundred government agencies located across the country interact intensively with the Ministry of Finance (MOF) to submit financial requests or receive financial services regarding their budgets, accounts and payment orders. Paper-based and face-to-face communications have caused great exertion to stakeholders and increased challenges to controlling government finance. In compliance with the e-government programme, MOF has accomplished this prime and first-of-its-kind project (MOFES) and implemented the *MOF financial services as E-Services* with a digital signature mechanism and system-to-system process. Currently, all government agencies are able to use financial services effectively, efficiently and simultaneously, which contributes to the development of resilient infrastructure as well as economic growth (SDGs 8 and 9).



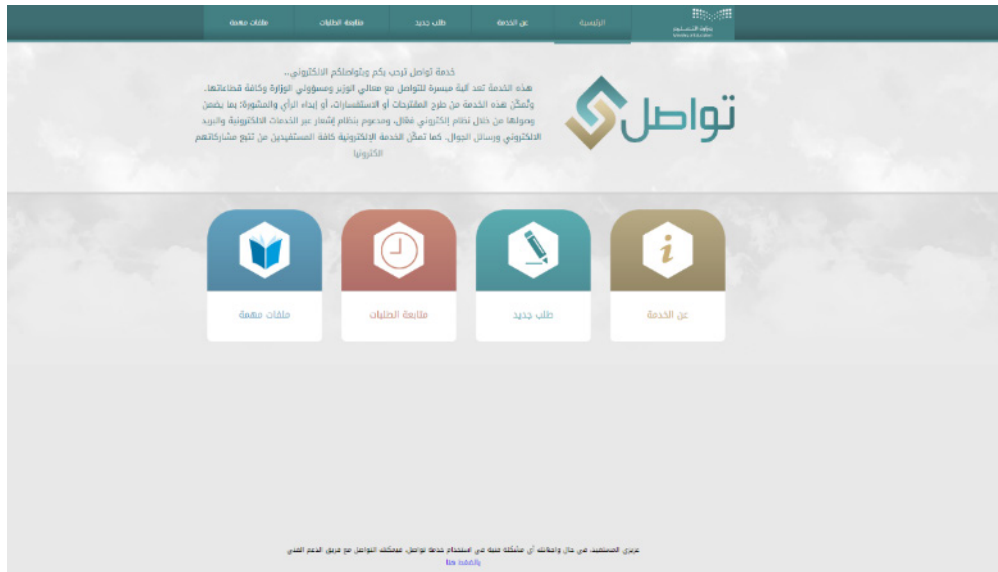
The Ministry of Commerce and Industry exerts best efforts to be a completely electronic ministry, with its customers benefiting from its e-services without visiting its premises. One of its significant e-services consists in issuing, renewing and modifying the *E-Commercial Register* electronically within 180 seconds; the register is dedicated to about 1.3 million private sector entities. This makes it the fastest e-service of its kind worldwide. Dependent on integration with related agencies, it is performed through highly developed processes that have been re-engineered to help customers benefit from the service with no human intervention. It also adopts sustainability and helps raise the national economy,

relating to such issues as gender equality, economic growth and the protection of ecosystems (SDGs 5, 8 and 15).



*Tawasul (E-Contact System)* is an electronic system that provides a reliable tool for communication between citizens, non-citizens and the Ministry of Education of **Saudi Arabia** in order to handle their complaints, requests or suggestions. These complaints and requests would be the subject of further study and analysis by the concerned departments at the Ministry of Education. The results would be conveyed to the submitters of the complaints or requests. It represents one of the most important e-services, allowing people to contact the minister and all levels of the ministry and be assured of a response within a given time-frame.

The creation of this system contributes to gender equality and the safety of cities and promotes peaceful and inclusive societies (SDGs 5, 11 and 16).



*Instant Tele-Trials* is the project launched by the **Saudi Arabia** Ministry of Justice aimed at the automatization of all e-services of the minister’s office, its branches, the courts and the notaries public in an expeditious and secure manner. Another part of the mission consists in activating linked services between the ministry and other sectors to provide modern technological services and exchange information and experiences. Private rooms for the Tele-Trials are prepared inside prison facilities and are connected with the data centre at the Ministry of Justice headquarters. Each Tele-Trial is executed under the supervision and management of the court in every city in order to ensure legitimate rights for the inmates and protect fundamental freedoms (**SDG 16**).

The *Saudi Tourism Portal* was developed by the **Saudi Arabia** Commission for Tourism & National Heritage, in order to market Saudi tourism in both the Arabic and English languages. It provides a number of tourism services and other valuable interactive integrated content, such as tourist information, photos, short films and interactive maps to help tourists pre-plan their tours and interact with the site to learn more about the tourism destinations, events, programmes, tracks, seasonal offers and discounts. In addition, the tourist can benefit from the reservation services for hotels, flights and car rentals through the site. It also offers a prompt and secure client service by receiving tourists’ complaints. The Saudi Tourism Portal integrates with sub-sites, customer relationship management (CRM), mobile app and electronic information centres.

By offering all these possibilities, the project contributes to the well-being of the concerned community and relates to the economic growth of the country (**SDGs 3 and 8**).



Un Sudan, the *full e-Government Project for Rural Locality from scratch Project*, developed by the rural East Nile Locality in Khartoum state, aims for full automation of processes and services as an e-government model in East Nile locality (**SDGs 8 and 16**). The project includes: A revenue management system (RMS)

1. PDA applications for surveyors and collectors (Android, Windows, mobile)
2. Full ERP and back-office automation
3. Auto collection and payment channels (machine, mobile, Internet, branches, POS)
4. Website (rich in Arabic/English, and starting in French)
5. GIS with more than 50 layers
6. Trouble ticket system (toll-free call center)
7. Monitoring system and dashboards for collection and other activities
8. SMS and e-mail systems

Other tools and applications (engineering, office automation, etc.)<sup>49</sup>

The second initiative in Sudan, the *States Information System (SIS)* by the National Information Centre, aims to establish a centralized database to serve decision-makers at all levels of government in Sudan (**SDGs 16 and 17**). SIS is divided into nine sectors: health, education, finance, social affairs, urban planning, agriculture and animal resources, sport and youth, culture and media, and local governance. SIS allows data to be fed in from its sources, the administrative units and localities that constitute the lowest level of governance in Sudan, and allows decision-makers to generate KPIs, reports, statistics, comparisons and mapping data. SIS also reflects Sudan's commitment to the MDGs and ensures equitable distribution of resources, as well as saving time and resources.

In the **United Arab Emirates**, the Ministry of Cabinet Affairs has set up the *e-Briefcase and Knowledge Centre*. The e-briefcase assigns each minister a portal through which to access data related to his or her portfolio (**SDGs 9, 16, and 17**). This integrated platform, which has unified electronic components and advanced applications, works as a provider and an information exchange for Cabinet sessions. It also facilitates electronic communication between ministers and accelerates decision-making in the federal government. The knowledge centre allows a minister to access his or her ministry's fiscal reports submitted by the State Audit Bureau and reports on best international practices and experiences in

<sup>49</sup> Projects nominated for a WSIS Project Prize 2015



similar ministries in other countries. It will also have sections on media reports and analyses, and provide the breaking news that ministers need to know.

The National Statistics Centre in the **United Arab Emirates** has launched the *UAE Statistical Atlas* for all government, local and federal authorities concerned and for scientific and research institutions, to enable them to conduct studies and issue recommendations with a view to drawing up economic, population, social, environmental and agricultural policies (**SDGs 9 and 16**). The statistical atlas is composed of a number of practical maps linked in a structured manner and supported with statistical tables and diagrams. The map presentation, which displays the digital statistical facts geographically, aims to meet the different needs of data users. In addition, it provides an updated comprehensive picture of the economic, demographic, social, agricultural and environmental situation in the UAE and a geographical description of the State.

Also in the **United Arab Emirates**, the *Government Service Bus* is considered one of the next-generation technological advances in Dubai e-government. It integrates systems, data and services, allowing all government departments and entities to exchange information and complete public transactions; thus supporting **SDGs 9 and 17**. It also spares customers the inconvenience of moving from one government department to another for stamps, approvals and information and procedures. This platform facilitates fully integrated electronic transactions, ultimately helping further enhance quality of life in the Emirate, in line with its main purpose.

In the **United Arab Emirates**, the Ministry of Justice has introduced *E-Notary*. This system enables members of the public to submit notarial requests online, around the clock and anywhere, by logging onto the system on the Ministry of Justice website (**SDG 16**). Each notarized document has several security features, including a watermark (in the form of a thick solid ring that detects and guards against photocopied and scanned documents), a microprint reference number that is only visible with a magnifying glass, a two-dimensional barcode that contains encrypted data and the electronic signature by the notary officer.

Emirates Auction, in the **United Arab Emirates**, developed an *E-auction* project to provide an online auction platform for charity and to connect government and public for auctions of forfeited assets (**SDGs 16 and 17**). It enables the government to sell assets via auction and to invite the public to participate for the benefit of a benevolent cause<sup>50</sup>.

The *Smart Statistics suite* is an integrated statistical solution that includes a set of subsystems as follows (**SDG 16**):

- “Indicators”: designed to enable senior officials and decision-makers to follow up the most up to date indicators and variables in the Emirate of Dubai
- “E-Sources”: this links various main and subsidiary statistical sources
- “Interactive Statistics”: designed for planners and specialists, providing them with a smart interactive mechanism to deal directly with a huge Centralized Statistical Repository and enabling them to compile complex statistical reports
- “Polls”: covers opinion polls and questionnaires, and guarantees high levels of accuracy and quality of opinion poll findings
- “GeoStat”: encompasses geographical activities for statistical purposes, based on the concept of merging geographical and statistical information systems.

The *E-Transformation Project* by the Ministry of the Interior of the **United Arab Emirates** focuses on the quality of organizational performance and is the outcome of ongoing development of services. Technology has always been a very influential tool in improving organizational performance and satisfying the needs of internal and external stakeholders (**SDGs 8 and 16**). The Ministry of the Interior

<sup>50</sup> Projects nominated for a WSIS Project Prize 2015

was aware that high-quality governmental services cannot be achieved without savings in time and effort on the part of clients, so it launched an e-transformation project through which it transformed traditional services that used to require time and effort on the part of customers. This has resulted in better services, greater customer satisfaction and better use of human and financial resources<sup>51</sup>.

In April 2014, the *General Authority of Youth and Sports* announced the commencement of work on leading smart services of the authority. These included its smart website, development of smartphone applications, and advanced text messaging services, in addition to the preparation of e-mobile stalls and development of youth and sports sectors in accordance with HTML5 techniques compatible with smartphones and enhanced services in the youth and sports sectors (**SDGs 8 and 16**). eHSmart applications launched by the authority serve all tablet devices that run on Android and different iOS systems supported in both Arabic and English.

The National Bureau of Statistics (NBS) of the UAE was established to satisfy the country's national development needs and to organize the work of the national statistical system. The NBS endeavours to use enterprise GIS to enhance and simplify the daily work of surveyors. As part of the solution, the NBS envisages the need of introducing a field solution that would consolidate statistical data within a single central database. With its strong understanding of business needs for statistical data, the NBS informed the surveyor teams in the field that enterprise field solutions would be built in a shorter period and would be tailored their specific needs. The NBS-statistical database collects data from all the emirates within the UAE.

In Dubai, **United Arab Emirates**, in order to comply with Dubai smart city strategies and increase customer satisfaction, the Roads and Transport Authority launched a project on *Implementing new payment means in Dubai taxis along with existing cash payment*. POS machines that support NFC, contactless and Swipe payments are installed and connected to existing taximeters to create an automated payment scheme (**SDG 9**). Customers can choose to pay taxi or other transport fares in the scheme (bus, metro, tram, water bus, parking) using "No!" cards or with debit/credit cards, reducing cash payments and cash management processes.<sup>52</sup>

The *Maqta Gateway* is a state-of-the-art "ports community system" (PCS) designed in line with international standards that will serve the port and trade community by interlinking all the relevant parties involved in Abu Dhabi's growing import and export trade business and facilitating information flow among them (**SDGs 8 and 17**). These organizations include exporters, importers, ports, shipping lines, customs offices and regulatory government agencies. Taking the "one-stop-shop" philosophy to a new level, the Maqta Gateway will offer ports, and eventually other trade channels, a single point of contact and real-time information at any time of the day, even via mobile devices, significantly enhancing processing times and communication procedures.

The *e-Fair platform* is an online recruitment exhibition that offers a gender-equal alternative to physical career fairs in which top Abu Dhabi employers frequently participate (**SDGs 5, 8, and 10**). The e-Fair project is an innovative technology solution proposed by Jobs Abu Dhabi (JAD), and the largest online recruitment portal or e-government initiative by the Government of Abu Dhabi. It focuses on the following objectives: The e-Fair project is an innovative technology solution proposed by Jobs Abu Dhabi (JAD), and the largest online recruitment portal or e-government initiative by the Government of Abu Dhabi. It focuses on the following objectives:

1. Unhindered, 24-hour, equal access for all job seekers - especially women and people with disabilities- to job opportunities in Abu Dhabi.
2. A safe, sustainable and globally applicable environment replacing costly, geographically-limiting physical fairs.

<sup>51</sup> Projects nominated for a WSIS Project Prize 2015

<sup>52</sup> Projects nominated for a WSIS Project Prize 2015

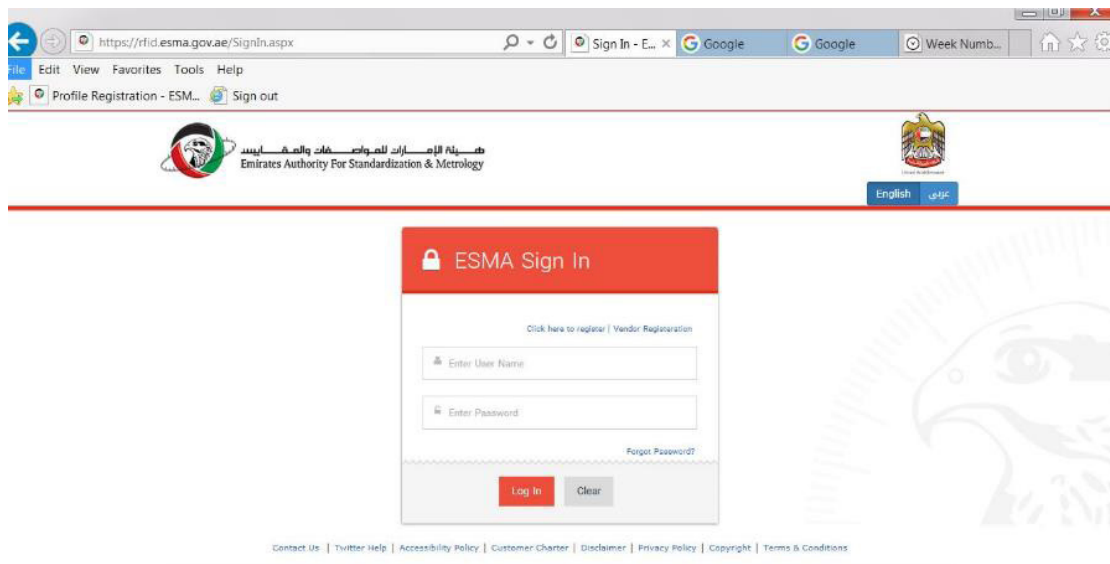


By moving from the conventional methodology to a smarter initiative, the Dubai Court in the **United Arab Emirates**, has allowed for ease of implementation in seizing assets. The *Smart Seize* project links the judge at his desk in the courthouse to the court agent performing the assets seizure on site. This has increased government efficiency and raised public awareness, encouraging interaction between various government departments (**SDGs 16 and 17**). It was one of the many successful e-initiatives launched by the Dubai Court to expedite the settlement and adjudication of cases in the interests of justice<sup>53</sup>.

The **United Arab Emirates** provided ten innovative projects within the e-government category.

The Emirates Authority for Standardization and Metrology (ESMA) is working on a number of new standards for the UAE for consumer goods sold in the country to ensure the safety of goods. The *Tires Safety Control System* and in particular tires RFID stickers ensure greater consumer protection by rooting out tampering and duplication in regard to tires. The sticker will have an RFID chip that will be damaged if the sticker is removed, making it impossible to reuse it. The sticker provided by ESMA will have all the specifications of the tire, including the brand name, country of origin, type of tire, temperature rating as well as traction rating and tread-wear figures. All the necessary details of the tire will be labelled on the sticker, including a barcode and a QR code which can be scanned using the app. A customer can check all the details of the tire by scanning the QR code using the app.

The project affords the development of effective and transparent institutions, ensures public access to information and protects fundamental freedoms – **SDG 16** of the WSIS action lines.



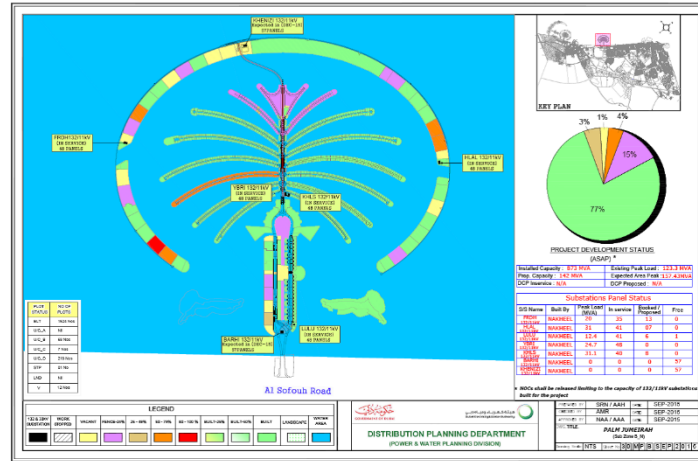
In line with its strategic objective, the **Dubai** Electricity and Water Authority (DEWA) is committed to providing sustainable and seamless high-quality services to all citizens and residents in Dubai. Through its smart services, DEWA meets all customer expectations and needs. The *DEWA smart application* aims to serve more than 750,000 customers by enabling all its services on the app; the app also serves all segments of society including customers, consultants, suppliers, job seekers, government entities as well as unregistered users by providing them access to general services.

The app responds to several SDGs, ensuring water access, modern energy for all and sustainable consumption and production patterns, the building of resilient infrastructure, as well as the taking of urgent action to combat climate change and its impacts (**SDGs 6, 7, 9, 11, 12 and 13**).

Initiated by the **Dubai** Electricity and Water Authority, the *Area Report* is a powerful, automated reporting system tool prepared in-house using available information technology tools within the authority, including the geographic information system (GIS), internally developed database and other information

<sup>53</sup> Projects nominated for a WSIS Project Prize 2015

technology tools currently under development. The Area Report serves as a proactive planning tool supporting the core business of the authority, which is the delivery of sustainable electricity services at a world-class level of reliability, efficiency and safety. The Area Report enhances electrical network expansion activities by providing more reliable information about the area under study with one click, thus ensuring access to affordable, reliable, sustainable and modern energy for all (SDG 7).



The Human Resources Information Management System in the Federal Government *Bayanati* is deemed an electronic/smart integrated system, providing self-services for employees and entities. All measures and procedures related to human resources in all federal entities are automated, according to the life-cycle structure of government employees: government performance management, financial management, training and development, transfers, irregularities, end of service and career planning.

The Bayanati System ensures inclusive, equitable, quality education, achieves gender equality, and promotes inclusive and sustainable economic growth as well as peaceful and inclusive societies (SDGs 4, 5, 8, 11 and 16).

The Sharjah Chamber of Commerce & Industry (SCCI) of the **United Arab Emirates** is keen to include in its membership all the companies and establishments practising an economic activity in the emirate, be it trade, industrial or professional. The Chamber follows the economic and civilizational development witnessed by UAE, regarding it as a matter that naturally requires change to the different services and activities of the Chamber. In order to provide efficient and effective services to its customers and alliances, it came up with the *Membership and Certificate of Origin System* project that offers a set of automated e-services through the currently in-place Jupiter application.

This new system relates to certain SDGs by building resilient infrastructure and promoting sustainable industrialization and peaceful societies (SDGs 9 and 16).

The *Directorate of Public Works (DPW)* project in Sharjah, **United Arab Emirates**, aims to ensure modern and sustainable urban development. It works very hard to achieve this objective through the electronic and smart transformation of procedures in order to provide the best services and keep pace with the latest global developments in building construction and maintenance. Thus, DPW developed a mobile application *Sharjah DPW* that contains the directorate’s information as well as two main services, the Hotline, and Projects Payments. This will support collaboration between the customer, contractor and DPW employee, and later sections will elaborate more on both services (SDG 17). The project also contributes to the building of resilient infrastructure and promotion of inclusive societies (SDGs 9 and 16).

The Federal Authority for Government Human Resources (FAHR) is the legislative authority of the federal government concerned with the development of laws, rules and regulations relating to the human resources jobs in the federal government. According to the directives of the country's wise leadership, and to keep up with the **United Arab Emirates** vision 2021, the *FAHR Smart Application*

emerged as an initiative to provide an integrated application that serves the human resources in the federal government and facilitates and helps the efficient conduct of the daily HR transactions and procedures around the clock. The application has achieved a 100 per cent smart transformation. Including 26 services (7 main services and 19 sub-services), it aims to provide different HR services and information and connect them to the HR information management system of the federal government “Bayanati” for the purposes of managing its operations and sequences of procedures efficiently and effectively through the “self-service” system.

In such spirit, the Smart Application provides quality education and gender equality, and contributes to the economic growth of the country, promoting inclusive societies and rules of law for everyone (**SDGs 4, 5, 8, 11 and 16**).

With the emirate’s desire to be one of the best countries in the world, the Sheikh Zayed Housing Programme (SZHP), **United Arab Emirates**, launched the *Zayed Complexes* project incarnating the idea of Zayed residential complexes in reaction to the recent but increasingly widespread recognition that with an increasing population there is insufficient land allocated for housing along with unstable construction material prices at country level. SZHP has therefore recently started to adopt the idea of building housing complexes as an alternative in support of UAE nationals. Residential complexes comprise groups of housing units built in a certain area and containing a set of basic services for residents, such as parks, mosques, schools and other service facilities. The Zayed Complexes application was developed on 24 July 2014 to provide a link between the applicant wishing to obtain housing assistance and the Sheikh Zayed Housing Programme through access to current and future projects, thus allowing the applicant to decide to choose and book his or her lifetime house.

Implementation of the project contributes to the building of resilient infrastructure and promotion of industrialization (**SDG 9**).

The *Emirates Vehicle Gate (EVG)* is an ambitious, innovative project in the **United Arab Emirates**. It provides all e-services related to drivers and vehicles by integrating government and private service providers together in one platform. The project supports the UAE e-government strategy and ensures that all government work is conducted according to a set of guiding principles that puts citizens first and promotes an accountable, lean, innovative and forward-looking government. EVG achieved a high level of impact and satisfaction by simplifying all processes, improving efficiency and strengthening relations with citizens at all levels. It meets the needs of citizens and businesses and achieved efficient allocation of resources, most importantly ensuring sustainability and business continuity.

Thus, EVG relates to a number of SDGs by fostering innovation, promoting peaceful and inclusive societies and revitalizing the global partnership for sustainable development (**SDGs 9, 16 and 17**).

The **United Arab Emirates** Department of Transport Abu Dhabi smart application traveler information system “Darb” is designed to provide multimodal, real-time information and route guidance using the web (upgrade of DARB), mobile phones (new mobile DARB app) and satellite navigation systems (in-vehicle and OEM). Darb provides the public with basic interactive maps, showing public transport routes and timetables within a fast and user-friendly experience. Furthermore, the smart app provides the public with live road conditions, covering construction works, traffic detours and accidents and congested roads. Moreover, the smart application provides various important services related to airports, such as the location of airport halls and flight schedules. Darb informs the public about parking lots and enables them to pay for Mawaqif services online. Among the distinctive services of Darb, the Book a Taxi feature allows the app users to book a taxi and set their pick-up location and destination directly from the smartphone.

All these services contribute to resilient infrastructure development, increased access to ICTs, and the fostering of innovation (**SDG 9**).

## E-business

In **Algeria**, the Ministry of Commerce has introduced the *Dangerous Products Early Warning Network* (SARA). The aim of this online warning system is to allow departments of the Ministry of Commerce to enquire, quickly and effectively, about the possibility of dangerous products presenting a particular risk for consumers entering the market, thanks to control operations or reports from reliable sources, and to take measures to withdraw such products (**SDGs 8 and 9**). The integrated early warning system is a computer system that will support the operation of SARA. It was designed on the basis of the European *Rapid Exchange of Information System* (RAPEX) and *Rapid Alert System for Food and Feed* (RASFF). It is a central system that provides the following:

- registration data about products/unsafe services (notifications);
- analyses, statistics and reports based on the stored data;
- notification archiving.

The computer system will also support a computer network comprising:

- the SARA administrative network;
- key stakeholders (economic operators);
- consumers (individuals and associations);
- other system users.

Also in **Algeria**, the Ministry of Commerce has started to implement an *interactive guide for consumer protection* that contains information and advice on consumer rights, enabling consumers to make informed decisions and protect themselves from unscrupulous merchants (**SDGs 8 and 9**). Consumers will find the basic information they need to know when they make purchases and sign contracts with suppliers.

In **Kuwait**, *Tasdeed* allows customers, corporations and government entities the option of effecting payment transactions with government agencies easily and round-the-clock, every day of the year, by electronic means, such as integrated point of sale, payment over the Internet, self-service machine, electronic stamp, supplied and managed by a payment service provider.<sup>54</sup> Thus, this project contributes to **SDGs 9 and 17**.

*Taw9eel* is a website developed by the Central Agency for Information Technology of **Kuwait** and was the first to introduce a full e-commerce hypermarket online, with over 15 000 products ranging from groceries to electronics, appliances, fashion, video gaming and wholesale with free delivery within four hours all day long. The Taw9eel website is constantly refreshing its look and performance (**SDGs 8 and 12**). It is keen to provide the best shopping experience to its customers online or on their smart devices. It provides its customers with three payments types: cash on delivery, credit card and direct payment from their banks. Taw9eel offers high quality customer service 24 hours a day, which includes the option of placing orders over the phone.<sup>55</sup>

The *Mobile Internet Ecosystem Project* is a new approach developed by the World Bank to support skills and entrepreneurship in client countries. **Lebanon** is the first country where this approach will be launched, jointly with Lebanon's Ministry of Telecommunications and in cooperation with other stakeholders, such as universities, industry clusters, startups, microenterprises, business incubators,

<sup>54</sup> Project nominated for a WSIS Project Prize 2014

<sup>55</sup> Project nominated for a WSIS Project Prize 2015

angel investors, venture capitalists, and government entities. The Project focuses on developing the national innovation ecosystem in Lebanon by offering incentives to Lebanese youth and talent to remain in the country, bringing local entrepreneurial skills to the level of international standards, and boosting the international competitiveness of the country’s traditional industries through ICTs and mobile Internet, in particular, as well as through open innovations (SDGs 1, 8, and 17). The World Bank and the Ministry of Telecommunications will provide USD 12.8 million of investment over four years for the Project’s implementation, which is planned to start in 2015. The Project is structured around four key activities: (i) co-creating a coordination mechanism among the main stakeholders – the Mobile Innovation Hub (MiHub); (ii) boosting entrepreneurial skills through a series of innovation competitions; (iii) developing skills for employability through the creation of a university–industry platform offering internships and hands-on experience to students and graduates; and (iv) supporting innovation within existing local industries by integrating these industries into the Mobile Internet Ecosystem.

In **Morocco**, Agoramediacom has launched *Jaoubnee*, a social network connecting individuals who need local services with very small enterprises, professionals or individuals who can provide them (SDGs 8, 9, and 17).

Authorized to disclose information on final goods and services, stating brands, prices, supplier name, offer and types of product, the Public Authority for Consumer Protection (PACP) of **Oman** has taken an initiative with the *Marsad* programme. The programme discloses the local, GCC and international prices of commodity items. Initially, the programme aimed to display 400 items for each supplier for consumers as well as key government officials. The number has been increased to 3 million now for government officials. Furthermore, the project aims to disseminate these prices to the public as well.

Thus, it meets certain SDGs dealing with economic issues, fighting against poverty and providing decent work for society (SDGs 1 and 8).

Carrefour :Rice - PE SINNARA BASMATI RICE - 20KG - Pakistan 13.68 OMR ▲ Carrefour :Rice -

Low Price ◀▶

Comparison Board Where is the lowest price? Lowest Price List Price Graph Food Reserve list

Consumables Price List [Share](#) 8 [Tweet](#)

Region : Muscat Governate Month: Jan 2016 Suppliers: K M

| Item  | Al Amri Centre | Almira | Carrefour | K M   | Khimjis | Lulu Hyper Market | Mars  | Maya  | Ramiz | Rawasco | Sultan Shoppin |
|---|----------------|--------|-----------|-------|---------|-------------------|-------|-------|-------|---------|----------------|
| Butter - AL KHAN BUTTER 2.5KG - 2.5KG         | 6.500          | 6.500  | 6.290     | 6.650 | 6.590   | 6.500             | 6.590 | 6.750 | 6.520 | 6.550   | 6.490          |
| Butter - LURPAK BUTTER UNSALTED 400GR - 400GR | 1.175          | 1.085  | 1.080     | 1.150 | 1.130   | 1.140             | 1.125 | 1.195 | 1.100 | 1.140   | 1.140          |
| Butter - Margreen caick (Veg) - 2.5KG         | 2.375          | 2.350  |           | 2.350 | 2.550   | 2.340             | 2.375 | 2.495 |       | 2.400   | 2.390          |
| Butter - MUSCAT SALTED MARGARINE 200G - 200GR | 0.210          | 0.205  | 0.200     | 0.225 | 0.225   | 0.205             | 0.225 | 0.250 | 0.205 | 0.220   | 0.200          |
| Cans - Acacia honey healing - g 250           | 2.190          | 2.450  | 2.110     | 2.265 | 2.400   | 2.250             | 2.250 | 2.395 | 2.200 | 2.350   |                |
| Cans - Acacia honey healing - g500            | 3.870          | 3.790  | 3.640     | 3.900 | 4.275   | 4.000             | 3.950 | 4.200 | 3.875 | 4.170   | 3.990          |
| Cans - AL MAZRAA BAKED BEANS - 400GR          | 0.190          | 0.190  | 0.190     | 0.200 | 0.225   | 0.190             | 0.200 | 0.225 | 0.190 | 0.210   | 0.190          |
| Cans - Alali jam orange - 400gm               |                | 0.710  | 0.640     | 0.700 |         |                   | 0.675 |       | 0.630 |         | 0.750          |
| Cans - ALMAZRAA CHINESE F.MEDAMMAS - 400GR    | 0.175          | 0.155  | 0.140     | 0.170 | 0.180   | 0.150             | 0.175 | 0.200 | 0.155 | 0.150   | 0.150          |

Another project *Invest Easy* is one of the showcase projects of **Oman** launched by the Ministry of Commerce and Industry. It is an outstanding example of using worldwide best practices and standards to develop the country's business environment (SDGs 8 and 16). It is a comprehensive collection of e-services aimed at providing investors and businesses with a single point of contact for their interactions with the government, from starting a new company to filing an annual report. The new simplified Invest Easy project has divided all the information and services into four areas; commercial registration, CR renewals, licensing and information availability.

*Atta'a System* automates the charities system in **Saudi Arabia**, converts them to electronic transactions and links them all in one system. *Atta'a System* offers several benefits and services for the Ministry of Social Affairs (the ministry responsible for charities in Saudi Arabia):

- Increase of the ministry's ability to supervise and follow up the work of charities
- Unification of the system used in all charities to ensure increased effectiveness of the procedures
- Construction of an accurate database for charities in the Kingdom of Saudi Arabia.

The overall objectives of *Atta'a System* are:

- Integrity – adjusts the disbursement of donations and charity funds and adjusts beneficiaries' relations to charities' staff.
- Justice - ensures the arrival of donations and charity to the beneficiaries. It aims to evenly distribute donations to beneficiaries according to the world standard of poverty percentage in the Kingdom of Saudi Arabia.
- Abstinence- reduces the difficulties that beneficiaries face so that they don't need to visit the charities frequently.
- Transparency- helps donors identify their money and find out to whom it will go, and helps the beneficiaries find out their share of donations.
- Reliability- contributes to increased trust in the community work of charities.
- The implementation of these goals governed by a framework of information security, privacy and confidentiality coincides with a considerable number of established SDGs related to WSIS action lines.





In the **United Arab Emirates**, various e-business activities have been undertaken to improve trade and encourage the flow of investment into the country (**SDGs 8, 9, and 17**):

- Dubai Trade introduced *Online Supply Chain Management*. As part of a new initiative by Dubai Trade to move services online, customers will be able to download software that will enable them to upload contracts and engage with business partners remotely. Starting with 80 services in 2006, Dubai Trade was launched as an independent department to accommodate 800 services accessed by over 57 000 registered companies, one of its main objectives being to persuade more customers to use online services. Dubai Trade has achieved substantial growth in the number of registered users and online transactions as more companies have joined its electronic platform. The new service will make trading easier, faster and cheaper for all stakeholders, enabling businesses to check the schedules and space availability of all the cargo companies in Dubai, obtain quotes, make bookings and track containers or shipments by reference number.
- The Dubai Statistics Centre (DSC) founded *the e-Statistics System*, seen as a pioneering electronic system in the global statistical field, its primary objective being to support planning and decision-making processes. The system will provide its users with specific databases on economic, demographic and social surveys and censuses conducted by DSC, with substantial added value in terms of the “smart tools” that users can employ to construct statistical reports according to their preferences; mechanisms for consulting the most current data and statistical registry reports issued by various government departments and institutions; and updated and accurate statistical reports directly accessible to users through DSC’s webpage.
- The Ministry of Cabinet Affairs introduced *Adaa 2.0*, a system which provides an effective mechanism for managing institutional performance. It serves all the different levels of an organization, making it highly integrated and comprehensive. It can also be accessed everywhere and on the go, for example on mobile and laptop devices. The system is designed as an electronic platform to support strategic decision-making within the federal entities, in addition to providing briefing reports to the leadership on the progress made towards achieving *UAE Vision 2021*. The new system promotes and supports internal management, while following up processes under the strategic and operational plans and reporting on their status.
- Dubai Customs has launched the *Virtual Account Project* as a new and innovative option designed to facilitate the payment processes used by the department’s various categories of client who use the Customs Duty Credit (CDR) account. The new system allows clients to execute their

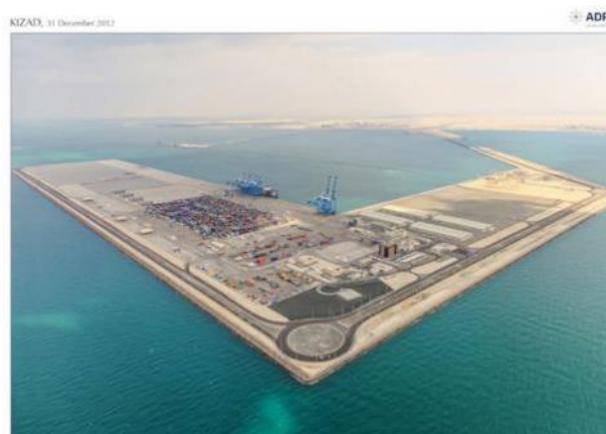
payment processes using a new banking system. The new electronic facility, which takes the form of a bank account number linked to the CDR account, has been developed as an alternative channel for the payment of instalments in an easy and comfortable manner. The project – an extension of Dubai Customs’ broad range of customer services – can serve as an important tool for improving the customs collection service. In addition, Virtual Account enables clients to complete their payment processes using 24-hour Internet banking services, as well as to make payments through bank branches or ATMs scattered throughout the country, thereby eliminating the effort involved in visiting the department’s counters to settle their financial obligations through the CDR account facility.

In the **United Arab Emirates**, the *Smart Navigation System* is an initiative that revolves around developing a smart indoor positioning and navigation (IPIN) mobile application and solutions whereby users can use their smartphone to receive indoor voice-guided navigation and location-based information alerts to easily find and explore places and items in premises like shopping malls, museums or other large buildings catering to the needs of visitors.

Under the UAE-based start-up Smart Navigation System, the project relates to certain SDGs aimed at ending poverty, promoting economic development and sustainable industrialization as well as revitalizing the global partnership for sustainable development (**SDGs 1, 8, 9 and 17**).

In the **United Arab Emirates**, *Maqta Gateway* is a state-of-the-art “ports community system” (PCS) that is designed in line with international standards and will serve the port and trade community by interlinking all the relevant parties involved in Abu Dhabi’s growing import and export trade business and facilitating information flow among them. These organizations include exporters, importers, ports, shipping lines, customs, and regulatory government agencies. Taking the “one-stop-shop” philosophy to a new level, Maqta Gateway will offer ports and eventually other trade channels a single point of contact and real-time information at any time of the day, even via mobile, significantly enhancing processing times and communication procedures. The Maqta Gateway is a crucial “bridge” for future business opportunities, both nationally and globally.

In such a way, the project meets a considerable number of sustainable development goals (**SDGs 4, 8, 10, 11, 16, 17**) on economic development, development of social life, business sector, global partnership, etc.



## E-health

**Algeria** is a country with a number of remote and desert areas that are cut off from adequate health services. The project *Telemedicine in Remote Areas of Algeria* will allow the Centre for the Development of Advanced Technologies (CDTA) to demonstrate the feasibility and benefits of telemedicine in the country (**SDGs 3 and 11**). The project consists of a pilot network connecting one reference hospital in Algiers with two hospitals in the Saharan south. The network provides consultation, medical education and diagnostic support in the area of paediatrics.<sup>56</sup>

*The National Electronic Cancer Registry* was established in 2014 by the Ministry of Health, Population and Hospital Reform (MSPRH) in order to determine the number of cancer patients. It allows the creation of a national databank for different cancers and their evolution, allowing identification of all types of cancer according to the age and sex of the patients (**SDGs 3, 4, and 17**). It also serves to provide exact figures concerning cancer prevalence at the national level. It is an important tool for assisting decision-makers in health planning, assessment of human resources requirements, pharmaceutical procurement and infrastructure construction, with a view to improving care for cancer patients. As regards the methodology, the implementation of this computerized information tool complies with international standards for cancer registries. The system can be used throughout the country's provinces (it is a centralized web solution which can be accessed by the registrar through the Health Intranet network).

Information in the medical domain is crucial for all medical application users seeking greater efficiency. The Health 2.0 package based on Web 2.0 involves enriching the traditional medical application and resources with new sophisticated solutions for mass and interactive uses in the age of collaboration and cooperation (**SDGs 4 and 9**). The Web 2.0, including blogs and RSS Social networks, attracts many Internet users with its simplicity, user-friendliness and usefulness. *The Reuse and Mining Health 2.0 Resources* project aims to integrate the technologies of data mining and analysis of Web 2.0 with a view to the efficient use of medical applications.<sup>57</sup>

In **Egypt**, Mobinil, the Egyptian Company for Mobile Services, has developed the *Vaccination Reminder Tool*, a simple SMS-based application that sends reminders to registered parents' mobile numbers about upcoming vaccinations (**SDGs 3 and 4**). It ensures that the official information is well delivered.

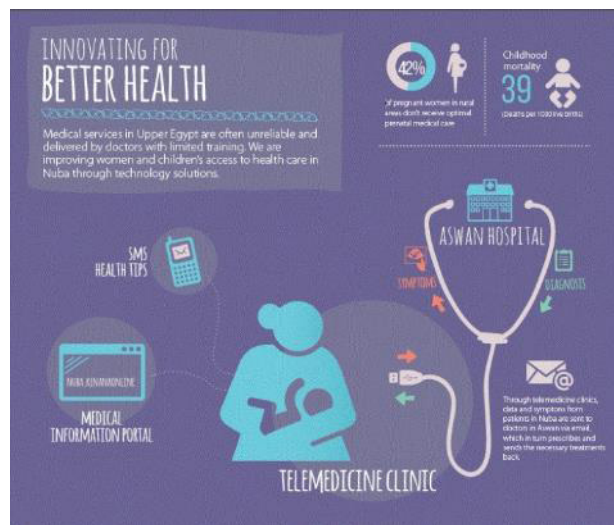
Also in **Egypt**, the Wireless Intelligent Networks Centre (WINC) of the School of Communications and Information Technology, Nile University, has established a cost-effective, cellphone-based *Patient Monitoring and Advice System – CellChek* (**SDGs 3, 9, and 10**). A novel concept of "cost-effective" mobile healthcare has been introduced, and a system prototype for remote patient monitoring and advice has been developed using widely available, affordable mobile phones. This system targets underserved communities around the world in places where healthcare services are either too costly or not immediately available. The CellChek system leverages the multiple wireless interfaces/services available today on most mobile phones (e.g. WiFi, 3G, SMS, MMS, Bluetooth). It utilizes Bluetooth-enabled medical devices and a novel wireless interface selection algorithm to upload patient data at minimum financial cost.<sup>58</sup>

<sup>56</sup> See promotional video on [y2u.be/yyVcmvgikCk](http://y2u.be/yyVcmvgikCk)

<sup>57</sup> Project nominated for a WSIS Project Prize 2015

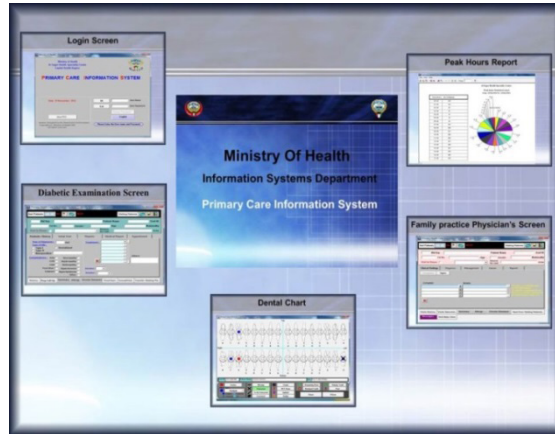
<sup>58</sup> Project nominated for a WSIS Project Prize 2014

The health sector in **Egypt** is facing many challenges, including a shortage of medical services and unequal resource distribution. Initiated by the Egypt ICT Trust Fund, the *Telemedicine Solutions* programme provides better healthcare services in remote areas through the *Telemedicine System*, which remotely connects isolated hospitals and clinics with a network of professional reference doctors. It aims to enhance the local general practitioners' skills with workshops and to strengthen citizens' health-awareness, focusing on women and girls (**SDGs 3 and 5**). The programme served the Siwa oasis (average population 23 000) and the Nubia area (average population 5 660), providing them with teleconsultation infrastructure and services. The project is now expanding its resources to cover all remote and border areas across Egypt (**SDG 17**).



In **Kuwait**, the *Primary Care Information System* has achieved the goal of having a single electronic patient medical record giving every primary healthcare provider access to complete and accurate patient health information. Its successful implementation in all 95 clinics in Kuwait has enhanced clinical research and decision-support systems, thereby helping researchers and policy-makers. The results are improved quality of patient care, enhanced productivity and clinical outcomes, and reduced administrative costs. Overcoming resistance from computer illiterates was a huge challenge. The patient electronic health record is made available to hospitals and tertiary health centres, and will subsequently be accessible via portals and smart devices.<sup>59</sup>

<sup>59</sup> Project nominated for a WSIS Project Prize 2014



In **Oman**, the *Reducing Child Mortality and Protecting Mothers* programme provides quality services to patients, such as SMS reminders to parents and pregnant woman about appointments and vaccination dates for their children; thereby contributing to **SDGs 3, 4, and 5**. The programme provides a comprehensive service for pregnant women and mothers and furnishes guidance and healthcare advice at home. It eliminates the use of manual patient files and retains the information throughout the patient's lifespan. The automated system enables patients to be examined systematically: the application of mandatory and restricted entry fields ensures that mandatory data are entered and that data, once entered, are not modified after a certain time, so that they do not lose authenticity. Patients are managed better because the system creates defaults and automatically sends SMS reminders for immunization and examination appointments. The information is shared and linked with other health programmes, such as school health and nutrition, which were previously recorded vertically. The system provides better monitoring of the child's health, because data are plotted on a digital growth chart. Mothers can now be assured they will receive quality medical care before, during and after delivery, thus reducing maternal mortality rates.

In **Oman**, the *e-referral system* is a national health system connecting more than 100 public and private healthcare institutions across the country, arranging inter-institutional appointments for inpatient/ambulatory services, laboratory, radiology and other procedures, promoting transparent information and process flows, allowing clinicians to communicate quickly and without "middlemen", avoiding redundant data entry, and facilitating patient tracking, results sharing and consultation, as well as clinical research (**SDGs 3, 9, 10, and 17**). The e-referral system notifies and reminds patients about appointments and allows them to reschedule appointments by SMS/e-mail.

The Ministry of Health (MOH) of **Oman** launched two projects that concern the health system of the country. They relate to such issues as economic development, equality in the country, contribution to sustainability and accountability of institutions and cities in the country (**SDGs 10, 11 and 16**).

The first project launched by the MOH, the *healthcare information system (HIS) "AL Shifa System"*, can be defined as a comprehensive, integrated information system designed to manage the operation of the medical, administrative, financial and legal services in a hospital or networked healthcare units. The MOH has a comprehensive healthcare services management system (*Al-Shifa 3plus*) automating most processes of healthcare delivery in MOH hospitals and health centres to the extent of almost making them paperless. There are currently 200+ public healthcare institutes adopting this system across the Sultanate, benefiting around 85 per cent of public healthcare seekers in Oman. This "great success" encouraged the decision-makers of the non-MOH governmental healthcare providers to adopt the system too (MOH, 2012b). The "Al-Shifa 3plus" HIS is a client-server system. It is a fully integrated graphical user interface application system for hospital management. The objective is to have a connected, consistent and cohesive national healthcare services management system working within a defined legal framework that regulates the confidentiality and privacy of e-health information.

Another project from the MOH of **Oman**, the *Ministry of Health Portal*, is part of the strategic plan for the digital transformation of the Ministry of Health. The ministry aims to keep up the Sultanate's trend to transform to e-government, as well as to develop the quality of the government health services. It also intends to reduce the digital gap and transform many services in order to ensure integration with various public and private institutions. The portal contains more than 100 e-services and is a joint cooperation between the Ministry of Health and the Information Technology Authority.

In **Saudi Arabia**, the government has implemented the patient referral programme *Ehalati*. The programme supports **SDGs 3 and 17** as it allows patient transfer requests to be submitted electronically and approved by the Ministry of Health. It covers hospitals and private hospitals throughout the Kingdom in 13 main regions and all their cities and villages. It encompasses all referral cases (life-threatening, emergency, inpatient or outpatient) and provides a means of facilitating communication between the parties concerned. The system provides Ministry of Health management with dashboards, key performance indicators (KPIs) and statistical reports for the purposes of decision-making, capacity planning and process improvement.

Also in **Saudi Arabia**, the *Online Toxicology Analysis Requests and Results* (OTARR) system automates all services provided by the Kingdom's Poison Control and Forensic Chemistry Centres, including installation, configuration and integration with the laboratories information management system (LIMS). In addition, the system works with call centres and interactive voice response (IVR) systems, and provides staff with access to medical libraries related to toxicology. The project is both an e-health and an e-government project (**SDGs 3, 4, 11, and 17**), since multiple government and semi-government agencies send requests to and check results through this integrated system (e.g. Ministry of Interior – for traffic control, police, narcotics control, prison service; Ministry of Finance, Ministry of Civil Services, Ministry of Justice, General Prosecution and Investigation Department, Industrial Safety Sector, Saudi Airlines, etc.).<sup>60</sup>

**Saudi Arabia** has two remarkable Ministry of Health projects.<sup>61</sup> The first is intended to implement a fully integrated *Online Toxicology Analysis Requests and Results System* that automates all services provided by the poison control and forensic chemistry centres across the Kingdom, including installation, configuration and integration with the Laboratories Information Management System (LIMS). In addition, the project includes implementing and integrating with call centre and IVR systems as well as providing medical libraries related to toxicology for the use of PCC staff (**SDGs 3, 8, 9, and 17**). The project can be regarded as both an e-Health project and an e-Government project since multiple government and semi-government agencies send requests and check results through this integrated system: these include the Ministry of the Interior (traffic control, police, narcotics control, prisons), Ministry of Finance, Ministry of the Civil Service, Ministry of Justice, General Prosecution and Investigation Department, Industrial Safety Sector, Saudi Airlines, and others.

The *Patients Referral Programme* system allows for e-submission of patient transfer requests and approval within Ministry of Health hospitals and private hospitals around the Kingdom in 13 main regions and all their cities and villages (**SDGs 3 and 8**). It covers all referral cases (life-threatening, emergency, in-patient or out-patient) and provides means to facilitate communication among all related parties. The system provides Ministry of Health management with dashboards, key performance indicators and statistical reports to help in decision making, capacity planning and process improvements.

<sup>60</sup> Project nominated for a WSIS Project Prize 2014

<sup>61</sup> Projects nominated for a WSIS Project Prize 2015



The Ministry of Health (MoH) of **Saudi Arabia** innovated the *Treatment Abroad* system that allows for the e-submission of treatment abroad requests from more than 24 agencies and approval by the High Medical Committee and Minister of Health. The system automates five main processes divided into 28 workflow steps and provides means to facilitate communication among all related parties. The system provides the MoH management with dashboards, KPIs and statistical reports to help in the processes of decision-making, capacity planning and improvements, thus providing quality access to the health system of the country (**SDG 3**).

In **Sudan**, the *Gezira Family Medicine Project* was initiated in 2010 as an in-service training model for Sudanese doctors enrolled in the project and training programme. The main objective of this programme is to improve the quality of health services at the primary care level (**SDG 8**). To achieve this goal around 300 Sudanese doctors are recruited, trained in family medicine in a two-year in-service Master's degree programme, and relocated to different urban and rural areas. To facilitate training and communication with the centre, telecommunication and information technologies are used in three important areas, namely 1) telemedicine, 2) distance learning, and 3) electronic filing systems.<sup>62</sup>



The *Gezira Family Medicine Project (GFMP)* was initiated in 2010 in **Sudan**, as an in-service training model for Sudanese doctors enrolled in the project and the training programme. The main objective of the programme is to improve the quality of health services provided in primary care (**SDG 3.8**). To achieve this goal, around 300 Sudanese doctors are recruited, trained in family medicine by means of a two-year in-service master's degree programme, and relocated to different urban and rural areas. The Gezira Family Medicine Project represents a modern model in family medicine training that responds to local needs. The project copes with the regional strategy for upscaling family medicine training. Information and communication technology is a cornerstone in performing such a mission. The GFMP will hopefully provide a suitable model for other low-income and middle-income countries that share healthcare challenges similar to those in Gezira state, Sudan.

<sup>62</sup> Projects nominated for a WSIS Project Prize 2015



Launched by the Ministry of Social Affairs of the **United Arab Emirates**, *Nomow* is a free smart application which detects any type of developmental delay in children aged five years or less, within five developmental areas: physical, mental, communication, social and daily life skills. It is applied by parents using a smartphone before the child's referral to specialists as part of an early-intervention programme. The idea of the application is to reach children who are under the risk of disability, in order to provide them with necessary services and then bridge the gap between their developmental skills and their ages, thus preventing any deterioration in their developmental skills at early ages.

The application relates to **SDG 3** by ensuring healthy lives for children, as well as **SDG 17** by revitalizing the global partnership for sustainable development.

## E-employment

In **Egypt**, the Information and Communications Technology Trust Fund (ICT-TF) launched the *Youth Employment Generation Programme*. This programme responds to the urgent need to address the prevailing youth unemployment figures in Egypt (**SDGs 4, 8, 10, and 17**). As business leaders express concerns that young people often lack the skills required by different industries operating in Egypt, the programme promotes empowerment based on three main pillars: the MSME (micro, small and medium-sized enterprise) component, which aims to improve the competitiveness and profitability of local MSMEs; the social entrepreneurship component, which seeks to inspire young people to become successful business leaders; and the vocational training and internship component, which focuses on setting up mechanisms to connect private companies with young people wishing to join the job market.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2014

The *Central Employment System* project by the Central Agency for Information Technology of **Kuwait** is a government-to-citizen (G2C) project aimed at providing job seekers, mainly fresh graduate citizens, with an electronic way to apply or be nominated for jobs in the governmental sector in a very transparent way and to trace applications electronically (**SDG 8**). The project was implemented on the Civil Service Commission's servers and is available through its website, the official portal of the state of Kuwait (e.gov.kw), and the mobile application for the official portal of the state of Kuwait on iOS and Android smart devices. The objective of the system is to save time and effort for the

Commission, new graduates (customers) and ministries, and to enforce regulation and equal job opportunity among customers.<sup>63</sup>

In **Kuwait**, the goal of the *Manpower and Government Restructuring Program (MGRP)* is to support and encourage Kuwaitis to work in the private sector, and find innovative solutions for the development of national employment (**SDG 8**). A further goal is to direct the national workforce towards approaching non-governmental organizations and supporting small businesses. Services provided include:

- Financial benefits for Kuwaitis who work in the private sector
- Summer training courses in private companies for students
- Nominating Kuwaiti job seekers and fresh graduates for vacancies in the private sector and paying them allowances until they work
- Opportunities for employees discharged from the private sector
- Free training courses for those willing to work in the private sector
- On-job training for private sector employees
- Specialized training upon private company's request
- Following up on the quota of Kuwaitis in the private companies to ensure that they have the maximum number of Kuwaitis.



In **Oman**, the Ministry of Civil Service (MoCS) is responsible for recruiting national jobseekers for government entities (**SDGs 8, 10, and 17**). The proposed *National Recruitment System* is an SMS-based system which exploits the country's high mobile penetration rate (above 170 per cent) and is linked to national manpower records. Jobseekers can apply for vacant positions, receive confirmations for exams and make interview appointments. The system has an interview records module, a random examination module as well as data validation and records, which have improved efficiency, accuracy and transparency. With 62 274 current subscribers, the system reduces applicants' travel costs and waiting times. The estimated saving for the government is USD 3 million annually, excluding SMS revenue.<sup>64</sup>

<sup>63</sup> Project nominated for a WSIS Project Prize 2015

<sup>64</sup> Project nominated for a WSIS Project Prize 2014

The Ministry of Manpower of the **Sultanate of Oman** has developed a system called *e-Employment Collaboration*, which has a critical role in human resources development in the country. The system provides information for almost 2 million employees working in some 203 000 companies in the private sector (**SDGs 8 and 10**). The system is electronically integrated with other government entities to avoid data duplication and increase coordination and data-sharing across the government. It provides reports and statistics for decision-makers to improve government functions and develop human resources capacities. The system enables job seekers to use services through its website or mobile apps and allows the private sector to access and interact with candidates' applications.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2015



In **Saudi Arabia**, the Ministry of Higher Education implemented the *Safer Graduates* initiative. The King Abdullah Scholarship Programme (KASP) has been effectively putting into practice the King's vision of transforming the country into a knowledge society by 2020, by providing unique opportunities for Saudi citizens to pursue academic and vocational training at the world's best universities. While many beneficiaries of the programme are already employed, many more have opted to focus on advancing their education before searching for a career (**SDGs 4, 8, and 10**). Safer Graduates provides a "one-stop shop" for all KASP students wishing to connect with employers even before returning home. The programme is not only a job-search facilitator, but a platform for the KASP community,

enabling participants to connect socially and exchange knowledge and opportunities. It offers equal participation opportunities for men and women, with special emphasis on helping citizens with special needs.

The Saudi Ministry of Labour, for its part, launched the *Nitaqat* project in **Saudi Arabia**, as an innovative policy supported by major ICT investment and e-tools. It addresses the issue of the growth of expatriate labour by encouraging employers to hire Saudi nationals in the private sector; thereby supporting **SDGs 8, 10, and 17**. *Nitaqat* was able to respond rapidly and effectively to the nation's unemployment problem, leveraging electronic services to maximize transparency, efficiency and effectiveness.<sup>65</sup>

Another project in **Saudi Arabia** was put in place by TVTC, a Saudi training corporation with about 260 colleges, institutes and training centres, which has set up the *Staff Gate* programme, which relates to **SDGs 4, 8, 10, and 17**. The main objective of the project is to shorten administrative procedures and allow monitoring of the status of applications from employees and trainers, without affecting the flow of approvals and authorizations. *Staff Gate* is the main communication channel between all TVTC employees (about 13 000 administrative employees and trainers) and the administrative departments wherever they are.<sup>66</sup>

In **Saudi Arabia**, we have four deserving projects in the e-employment category.<sup>67</sup>

The Ministry of Education launched *Safeer Graduates* to strengthen relations between educational sectors, students and graduates on the one hand and society institutions on the other (**SDGs 4, 8, and 17**). To build this partnership, the Ministry offers a channel by providing potential employers and training institutions with data on overseas graduates who are interested in uploading their CVs to the *Safeer Graduates* site. The programme receives two types of stakeholders: graduates and employers. It allows potential employers to search graduates' data in a very safe environment that protects privacy of information to a great extent.

The *Electronic Advanced Services for Enterprises* project of the Ministry of Labour is currently serving more than 11 million working citizens and expatriates (18 per cent of whom are female), who are supporting more than 1.8 million private sector enterprises in the Kingdom of Saudi Arabia (**SDGs 8, 10, and 17**). Since its inauguration in 2007, the project has increasingly offered a transparent, direct and easy-to-access communication channel for securing labour and employee rights. It has also helped to promote the ongoing developmental renaissance of Saudi Arabia, exemplified by an exponential increase of 723 per cent in female recruitment opportunities secured in the Kingdom by 2013.

The *Telework* initiative aims to create sustainable jobs in the **Saudi Arabia** market, targeting two main segments: women, and people with disabilities (**SDGs 5, 8, and 10**). In order to provide a solution to help them overcome social and physical barriers related to the office environment, the project aspires to create 10 000 teleworking jobs in the market by the end of its first year of operation<sup>68</sup>.

The project *myKKU* run by the King Khalid University (KKU) is a vital portal solution that is fully integrated with key KKU enterprise systems and provides a central gateway for KKU faculty, students and staff to access a wide array of e-services (**SDGs 4 and 8**). *myKKU* utilizes the concept of e-employment by enabling KKU's employees, regardless of nationality and gender, to access all KKU's e-resources from any place and to work at any time. Furthermore, *myKKU* has initiated a new method of organizing work at KKU, particularly within the IT department. Agile Scrum was new knowledge that came with *myKKU* and has led to an increase in teams' productivity and easier project management and implementation.

<sup>65</sup> Project nominated for a WSIS Project Prize 2014

<sup>66</sup> Project nominated for a WSIS Project Prize 2014

<sup>67</sup> Projects nominated for a WSIS Project Prize 2015

<sup>68</sup> Project nominated for a WSIS Project Prize 2015



The Ministry of Education of **Saudi Arabia** created the *#YourJob\_and\_YourScholarship Program* in order to address the critical need to create a partnership between the job market and Saudi students around the world. The third stage of Saudi Arabia's scholarships programme targets alignment of the job market, scholarship graduates and the Kingdom's vision of moving to a knowledge-based economy. It is a massive employment/scholarship programme to create over 50 000 job opportunities while advancing citizens' education to higher levels of knowledge and capabilities.

This effort was designed to further develop Saudi Arabia's information society commitment to gender equality, citizens' education and empowerment, and social justice among citizens (**SDGs 4, 5, 8, 9 and 10**).

وزارة التعليم  
برنامج خادم الحرمين الشريفين  
للإبتعاث الخارجي  
المرحلة الثالثة ١٤٣٦ - ١٤٤٠هـ

**#وظيفتك\_وبعثتك**

*Tamooha* is a talent-development platform in the **United Arab Emirates** that aims to empower Emirati women in the employment market (**SDGs 5, 8, and 10**). The platform will provide job opportunities that suit women's social norms and family responsibilities by enabling them to choose to work from, or near, their own home or in one of the Abu Dhabi Commercial Bank women-only operations centres in the city of Al Ain. The Tamooha process is quite simple. Upon acceptance into the programme, the successful applicant undergoes training at a Tamooha Centre. The Bank has a centre in Al Ain and has plans to expand in other regions in the near future. The Al Ain centre is conveniently located in the Boutik Mall. Once the initial training is completed, all employees will work at the Centre for some time to acquire relevant experience and skills. Once certified to work independently, the Bank provides employees with the option of working from home, working from the Centre or a combination of both, depending on individual preference.<sup>69</sup>



In the **United Arab Emirates**, the Dubai Police initiated the *Smart Recruitment* project which aims to provide a fully electronic mechanism for dealing with the entire job application process – from the department's vacancies, to submission of applications, posting of resumes, management of interviews, sending of job offers, tracking of applications, receipt of correspondence, setting of dates for interviews and finally the selection of eligible candidates.

<sup>69</sup> Project nominated for a WSIS Project Prize 2015



The project meets **SDG 8** by achieving productive and full employment in the country, providing the necessary conditions to contribute to its economic growth.

## E-learning

The *Ctrl/F* project from **Algeria** is a low-cost solution that uses image-processing techniques to convert a Braille pattern into natural language characters. It helps blind people to search for a keyword in a Braille book by spelling out the keyword, pointing and shooting (**SDGs 4 and 10**). The project involved a partnership between Algérie Télécom, STIC Laboratory and Bournemouth University, and will run from 2014 to January 2015.<sup>70</sup>

The *Supporting e-Learning for Hearing and Visually Impaired Students* project in **Egypt**, a programme developed by the Information and Communications Technology Trust Fund (ICT-TF), has as its principal objective to “Improve social inclusion of hearing and visually impaired students (HVIS), by improving their primary education and increasing their independence” (**SDGs 4 and 10**). *Results:*

- Upgrading ICT Laboratories in four schools
- E-kits in science, mathematics and IT
- Training of teachers and students
- Competition for best practices and online community.

### *Impact:*

- Better academic achievements of HVIS
- Community empowerment with positive attitudes towards HVIS.

### *Sustainability:*

- The partners continued with the second phase for Arabic and English subjects
- The Ministry of Communications and Information Technologies (MCIT) is scaling up the project to cover all primary-stage HVIS.

### *Partners:*

- Egypt ICT Trust Fund
- Islamic Development Bank
- Ministry of Education
- NGOs.<sup>71</sup>

Also in **Egypt**, *Hope gates in Education* is an Interactive website connecting the peripheral areas of the educational process and community learning, linking school and home, teachers and learners (**SDGs 4, 10, and 11**). The project aims for cooperation and involvement among the various parties to achieve educational quality. The initiative was launched in 2010 and will run until the end of 2016. More information can be found at <http://www.wadi-elmalekat.com/>.

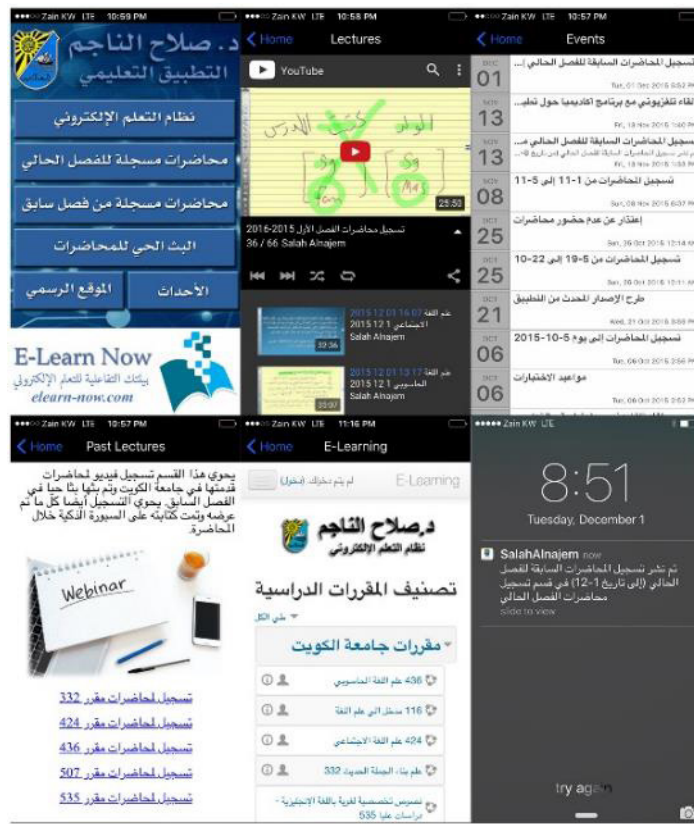
In **Kuwait**, The Office of Engineering Education Technologies (OEET) took the initiative of creating an *Online Class System* (OCS). OEET started small, with an open-source Moodle virtual learning environment, and very slowly started to add new courses every semester and to build a case study to show other instructors how using ICT in education has a positive impact (**SDGs 4, 8, and 17**). It had

<sup>70</sup> Project nominated for a WSIS Project Prize 2015

<sup>71</sup> Project nominated for a WSIS Project Prize 2015.

a clear strategy to extend the reach of ICTs to all instructors by conducting awareness workshops and an annual competition to attract more instructors to get involved in using OCS. Instructors started using tools and features in OCS that facilitate peer interaction and synchronous and asynchronous communication.<sup>72</sup>

*ETADREES*, developed by the Central Agency for Information Technology of **Kuwait**, is a supplier of online distance education courses based in Kuwait. It assists students worldwide in gaining professional education in an accessible and flexible way, and offers a wide range of online study courses delivered and supported by highly specialized tutors who are experts in various fields of study (**SDGs 4 and 17**). The flexible online study courses have been designed to enable students to learn anywhere, anytime, from the comfort of their homes, offices or colleges, and at any time that suits them. Course materials are available through the Learning Management System, where students can start a live visual session with a tutor using their unique student account, or alternatively view previously recorded live lectures. The programme is dedicated to ensuring that students' online study is convenient and flexible.<sup>73</sup>



Dr Salah Alnajem's *Educational mobile application* for iOS and Android smart devices provides a mobile tool which allows students and other users to join live and recorded lectures and webinars delivered by Dr Salah Alnajem at **Kuwait** University. The application allows users to participate and interact online in Dr Salah's lectures thanks to videoconferencing, e-collaboration and virtual classroom technologies using HD video and audio in real time, thus offering worthwhile learning opportunities (**SDG 4**). The application also gives students access to Dr Salah's learning management system (LMS), which allows them to download course materials, track grades, track attendance and sit online exams.

*Ikraa* is a computer program developed in **Lebanon** that eradicates Arabic language illiteracy in 35 hours or five working days (**SDG 4**). Its advantage lies in speeding up the learning process and thus making it possible, if adopted on a large scale, to achieve education for all millennium goals within any specified time limits. Its efficacy was proven in field trials in Lebanon, Egypt and Saudi Arabia, for

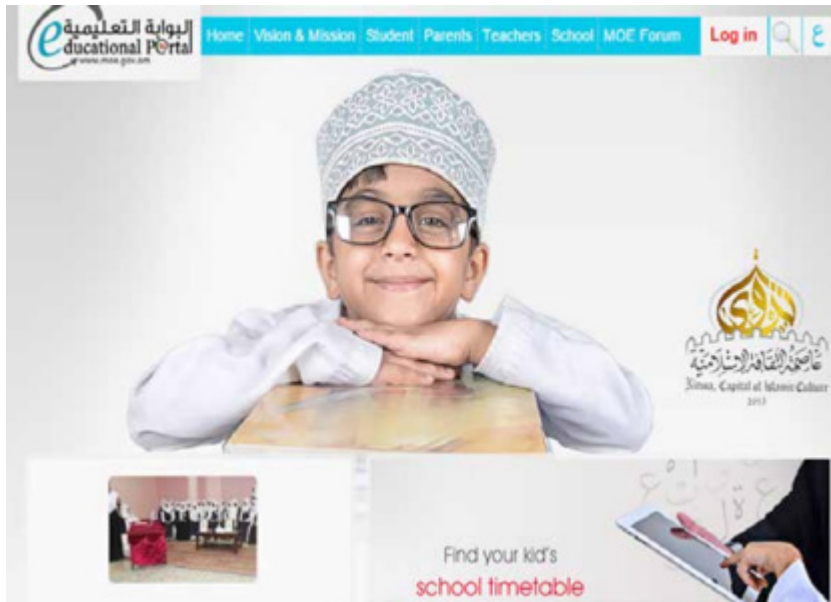
<sup>72</sup> Project nominated for a WSIS Project Prize 2014

<sup>73</sup> Project nominated for a WSIS Project Prize 2015

all age and gender categories, and was recently adopted by organizations in Morocco, Palestine and Kuwait. It is accessible to a vast international community via e-learning portals [www.ikraa.me](http://www.ikraa.me) and [www.learneraby.com](http://www.learneraby.com) and dedicated Ikraa online schools.<sup>74</sup>

In **Oman**, the Ministry of Education (MoE) established the *Sultanate of Oman Educational Portal*, which aims to gather users- administrators, teachers, parents and students- in one place (**SDGs 4 and 17**). It functions as a communication tool between users through learning applications, discussion platforms, social media, SMS services, archiving, finance models and other facilities. It provides transparency, accuracy, speed and availability and reduces costs. Currently, there are 14 046 teachers, 1 052 administrators and 180 991 students in 300 schools as well as 111 892 parents using the system to carry out daily transactions. The future plan is to connect every single school and user in the country.

*The e-marking project* developed by the Ministry of Education of **Oman** uses modern technology to correct and score a student's answers (**SDG 4**). This is achieved by using a specific technique that allows the exam papers to be printed, scanned and marked electronically, leading to the formation of a detailed database of student performance which can be used in the development of the teaching-learning process. The aim of e-marking is to raise the efficiency of the system of evaluating student performance, while reducing the source of potential errors that could be introduced during the process.<sup>75</sup>

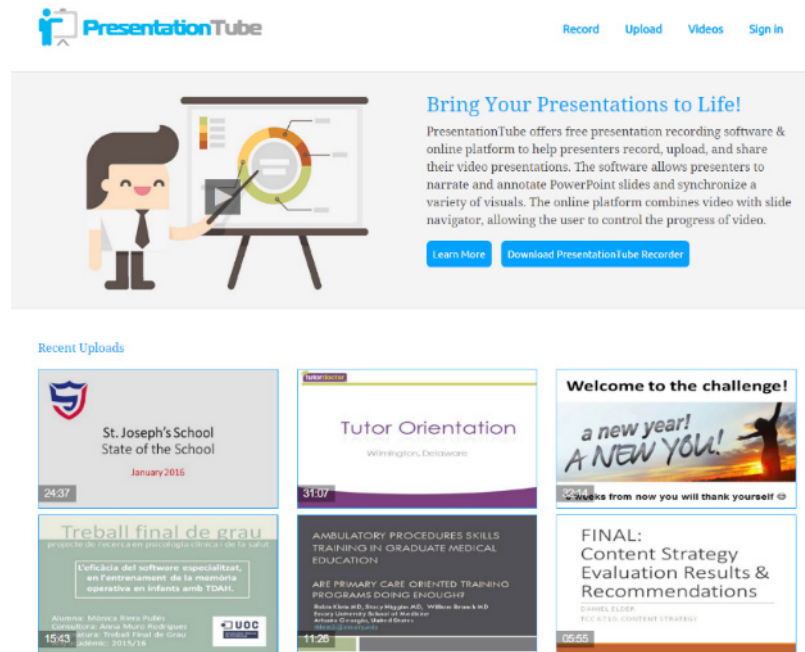


Launched by the Sultan Qaboos University, in **Oman**, *The PresentationTube: A Network for Producing & Sharing Video Tutorials* project aims to help teachers and e-content producers in Oman and many other countries to record and share quality video tutorials effectively. The project offers free presentation recording software and an online video sharing platform. The software allows educators to narrate and annotate slides and synchronize a variety of essential visual media. The online platform uses YouTube API technology to upload and stream video content. By the end January 2016, the PresentationTube project helped more than 15 000 educators and offered more than 3 500 quality video tutorials on various subjects and in many languages, including Arabic, English, Spanish, French and Malay.

Besides ensuring quality education, the project also contributes to revitalization of the global partnership for sustainable development (**SDG 17**).

<sup>74</sup> Project nominated for a WSIS Project Prize 2015

<sup>75</sup> Project nominated for a WSIS Project Prize 2015



In **Saudi Arabia**, the Ministry of Education (MoE) launched *Leqa'a*, which provides *videoconference services* (**SDGs 4 and 8**). *Leqa'a* is used mainly for meetings, training, video streaming, recording and the annual ministerial meeting. Users are able to use the current meeting rooms and to join the meeting from their PC, laptop or smartphone, inside or outside the network.<sup>76</sup>

Likewise in **Saudi Arabia**, the Human Resources Development Fund introduced the *National e-Training* programme (**SDG 4**), which offers an easy-to-use learning and content-management platform made available according to a pre-set schedule. The platform currently provides 46 training modules to an average of 100 000 users per week.<sup>77</sup>

In the **United Arab Emirates**, ICTs are increasingly used in the national programmes to improve the education system and the management of education (**SDGs 4, 10, and 17**):

- The *Smart Learning* programme is a key element in achieving the UAE Vision 2021, which seeks to ensure that all Emiratis have equal opportunity and access to first-rate education enabling them to develop into well-rounded individuals, enhance their educational attainment and achieve their true potential.
- The *Social Online Learning* (SOL) initiative encapsulates the crucial role of Hamdan Bin Mohammed Smart University (HBMeU) in shaping the future of education and learning through creativity and innovation, while significantly contributing to sustainable social and human development in the region and around the world. This initiative promotes world-class contemporary learning for UAE-based learners of different nationalities and age groups, by offering a convenient learning environment characterized by diversity and quality. SOL provides learners with an innovative social online learning experience through interactive communication that provides all the necessary support and academic guidance.

<sup>76</sup> Project nominated for a WSIS Project Prize 2014

<sup>77</sup> Project nominated for a WSIS Project Prize 2014

- The e-Citizen programme is a strategic initiative adopted by the Government of Abu Dhabi that aims to bridge the digital divide in society and to enable the target segment- persons lacking basic skills to use the Internet and e-services on a daily basis- to obtain information, products and services, as well as supporting e-learning. The government proposed this programme in order to achieve common goals in terms of enhancing skills levels in respect of use of the computer and the Internet in the Emirate of Abu Dhabi.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2014

**Saudi Arabia** has seen growing unemployment among its young people in recent years. In response, the Human Resource Development Fund has developed a large portfolio of projects to train and support the local workforce and raise employment rates; many of these projects are already under way (**SDGs 4 and 8**). After the launch of the highly successful “Hafiz” unemployment support programme, the continuing need to educate and train the large population of unemployed was revealed. In order to meet that need in a technologically advanced way, the National “*e-Training*” Programme was developed to improve job seekers’ skills and help them to find suitable jobs in the private sector.<sup>78</sup>

There are also two interesting projects managed by **Saudi** universities.<sup>79</sup> The Saudi Electronic University has adopted the *Learning Management System (SDGs 4 and 8)*, one of the most powerful e-learning systems in its educational system (Blackboard System). The university has based its approach on blended learning in its education strategies, using traditional (face-to-face) classroom methods (25 per cent) combined with e-learning (75 per cent).<sup>80</sup>

The Majmaah University in carries a very important message to society, for individuals and institutions. It is responsible for all institutions of colleges and deanships, and believes in community partnership as a key aspect of providing a high-level and high-quality education. Recognizing the importance of the *training and e-learning community* initiative represents a qualitative leap for all Saudi Universities in their efforts to provide a service reaching targeted groups in their places of residence, complementing their other roles serving the community by developing and rehabilitating the country’s citizens and institutions (**SDGs 4, 10, and 11**). This initiative comes at a time when the community is facing the IT revolution, technological progress in communications media, and the emergence of unconventional learning sources. Its use in achieving education progress is not a luxury but a necessity, a vital requirement for the quantitative leap in redesigning and developing the learning process. This initiative is providing training and promoting community e-learning units which can cater to the needs of individuals and promote advancement through the aspirations of the country’s leadership and patrons of education and in its role as custodian of the two holy Mosques.<sup>81</sup>

The idea of the *Technical and Vocational Training Corporation (TVTC)* plan is to develop the process of training by transforming it from a closed system of education and training to more open education and training. This project has come about through integration within three major projects, which has helped to overcome constraints and led to a successful strategy for open education. TVTC has worked in cooperation with the Ministry of Labour and a number of strategic partner companies including local telecommunication companies, international IT companies and open learning provider companies, to develop these three projects (**SDGs 4 and 17**).

*DSA Platform* is a software package that changes the idea of the web by facilitating webpage design without any need for a server or domain, and helps teachers to maintain contact with their students, bosses with their employees and parents with their children (**SDG 8**).

<sup>78</sup> Project nominated for a WSIS Project Prize 2015

<sup>79</sup> Project nominated for a WSIS Project Prize 2015

<sup>80</sup> Project nominated for a WSIS Project Prize 2015

<sup>81</sup> Project nominated for a WSIS Project Prize 2015





Arabic, is a platform that acts as a “blackboard” accessible to students (Malafee, which means “my file” in Arabic, is a platform that acts as a “blackboard” accessible to students (**SDG 4**). It contains various sections that allow the user to access their schedules, examinations, notifications, learning material and knowledge databases. Through the interactive knowledge database, students have access to the ministry’s e-library that contains over 10 000 resources including re-usable library sources. Students can also access their subject-specific syllabus among more than 250 syllabuses.<sup>83</sup> Three projects from the **United Arab Emirates** help to achieve **SDG 4**, on access to quality knowledge and education for all.

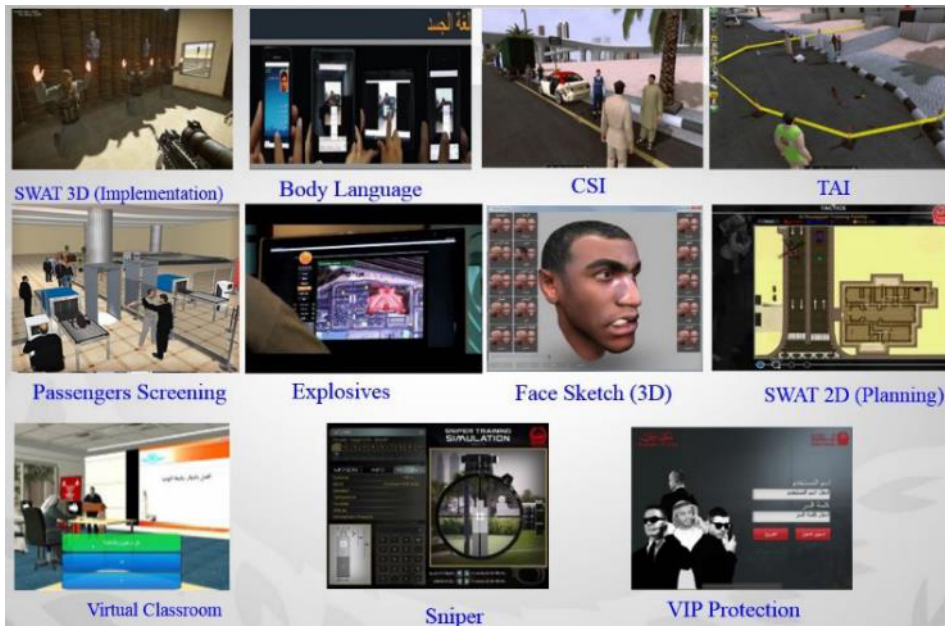
The United Arab Emirates University (UAEU) depends on ICT, as it is critical to its academic and administrative success. The UAEU has devoted a lot of energy to implementing the *Mobile Solution for Enhancing Teaching & Learning* project that allows the university community and society to stay connected to the university’s systems and services both on and off campus. It allows students, the faculty, staff and the public to stay connected with the UAEU network wherever they are and gives them easy access to UAEU resources while on the move using their tablets and smartphones, and includes real-time transactional services that support students in their academic programmes and student life.

Thus, the project accomplishes **SDGs 4** and **9** on ensuring quality education and building resilient infrastructure.



The **Dubai** police created a *Virtual Learning* project by employing cutting-edge video-game technologies to create innovative virtual incidents ranging from crime scenes to traffic accidents to hostage scenarios in an engaging way. It allows the trainee to learn by doing, and to harness his skills in a safe and practical environment. The importance of such an innovative approach was realized early on as a means to enhance and support traditional learning methods. The Dubai police researched and developed many virtual products that have been replicated in many different fields and are shaping up a technological transformation in the methods used in learning in the police domain and beyond (**SDG 4**).

<sup>83</sup> Project nominated for a WSIS Project Prize 2015



The *Future Aviators website* initiative is one of the Emiratization campaign activities targeting Emirati students and their parents on one hand and the education system (teachers, principals and education councillors) on the other. It is being implemented in order to raise awareness about the aviation sector and the career opportunities available to Emiratis (SDG 4). This sector is considered to be relatively unknown to a lot of people, not only in UAE but in the entire world. As a result, there are few people working in the aviation sector.

In **Yemen**, many surveys and research efforts focusing on the hearing and speech impaired have revealed that this sector is more capable of dealing with computers as an important part of modern life (SDGs 4 and 10). This group was therefore targeted and admitted into the Faculty of Computer Science at Sana'a University as a first step towards fully integrating them and enabling them to study other subjects in the coming years. The centre aims to implement its first project, *Adaptive curriculum for the computer department - Computer Faculty - Sana'a University*, translated into electronic sign language to serve for hearing-impaired students, in preparation for a suitable curriculum adapted to the needs and abilities of this sector as soon as possible, to enable them to pursue their university studies. With the cooperation of Sana'a University, the centre devised a specialized academic committee consisting of university teachers, assistant teachers, programmers, translators, editors, coordinators, and so on. The committee selects the subject's materials for the computer department and converts them into a written and readable electronic curriculum translated into sign language with audio and video aids so that hearing- and speech-impaired students can benefit over a period of six months.<sup>84</sup>

## E-agriculture

In **Egypt**, the Egypt Information and Communication Technology Trust Fund (ICT-TF) has launched the *Managing Agriculture Knowledge through the Localized Community Expert System*. The Egyptian agro-community knowledge portal, [www.aradina.net](http://www.aradina.net), is an online forum for sharing information and networking on agricultural production, agriculture technologies, fisheries and livestock (SDGs 4 and 8). The portal has various related articles, e-services and forums interconnecting agro-enterprises, experts, consultants and farmers. One of the biggest breakthroughs has been the establishment of a localized agro-expert system that gathers all human experiences to help solve complex agriculture

<sup>84</sup> Project nominated for a WSIS Project Prize 2015

problems. The platform has optimized resource utilization and increased agricultural productivity, thus helping to solve Egypt's food security problem.

In **Sudan**, more than 90 per cent of people in the agricultural sector, especially farmers, are digitally illiterate. The government has in the past spent large sums developing software programmes that soon collapse because of mismanagement, resistance to change and a shortage of ICT skills and trained staff. Crop prices vary widely, and most of the time farmers sell their crops at low prices for want of information, going out of business or being bankrupted as a result. There is need of collaboration between farmers, shepherds (nomads) and the Forestry Department. Gedaref Digital City Organization (GDCO) has developed a potentially sustainable *e-agriculture project* with many partners to tackle these problems<sup>85</sup>; thus contributing to **SDG 8**.

More than 90 per cent of those in **Sudan's** agricultural sector, especially farmers, are digitally illiterate. The Government has spent a lot of money in developing software, but such projects soon collapsed as a result of mismanagement, resistance to change, and lack of ICT skills and trained staff (**SDGs 8 and 17**). There is wide variation in crop prices, and most of the time farmers sell their crops at low prices owing to lack of information. There is severe conflict between farmers, shepherds (nomads) and the forest department. The *GDCO Sudan Telecentres Empowering e-Agriculture* project is a public-private partnership project for community development. It provides good opportunities to invest in telecentres for better sustainable development.<sup>86</sup>

In the **United Arab Emirates**, the Abu Dhabi Food Control Authority has implemented a project to sustain the agriculture sector in Abu Dhabi through a *smart irrigation system*. The objective was to introduce wireless soil moisture sensors in Abu Dhabi crop production after an intensive evaluation of the system in terms of its accuracy, precision and irrigation efficiency compared to traditional practices (**SDGs 2, 9, and 13**). The system showed consistent water savings, which will help to economize millions of cubic metres annually. It is therefore a good means of automatic smart irrigation scheduling, providing growers with practical solutions for profitable and sustainable agriculture. By combining sensor technology, the Internet and scientific knowledge, growers can continuously monitor and fine-tune their production process throughout the growing season.<sup>87</sup>

As part of the Abu Dhabi Food Control Authority's technology advancement initiative and automating the core business of the organization, the *Animal Identification and Registration System* was commissioned in the 2010 in the **United Arab Emirates**. The Animal Identification and Registration System is a government initiative in line with international standards and best practices intended to establish a mechanism to improve livestock planning, food safety through traceability and food security, animal disease surveillance and control; to improve animal production and the health and management of government livestock subsidy/assistance; to maintain the safety and sustainability of animal wealth; and to create an integrated database of animal numbers and species (**SDGs 2, 3, and 17**).<sup>88</sup>

## E-environment

In **Kuwait**, the Environment Public Authority has taken the initiative to establish the *Beatona.net* Kuwait Official Environmental Portal, a GIS-based web portal that aims to share authentic environmental information with the public over the Internet (**SDG 13**). *Beatona.net* ("Our environment" in Arabic) is a network that offers information about Kuwait's environment from various national, regional and international organizations on one single platform. It also allows the public to participate and interact in

<sup>85</sup> [http://sudan-e-village.org/index.php?option=com\\_content&view=article&id=397:2013-07-26-05-39-12&lang=en&Itemid=](http://sudan-e-village.org/index.php?option=com_content&view=article&id=397:2013-07-26-05-39-12&lang=en&Itemid=)

<sup>86</sup> Project nominated for a WSIS Project Prize 2015

<sup>87</sup> Project nominated for a WSIS Project Prize 2014

<sup>88</sup> Project nominated for a WSIS Project Prize 2015

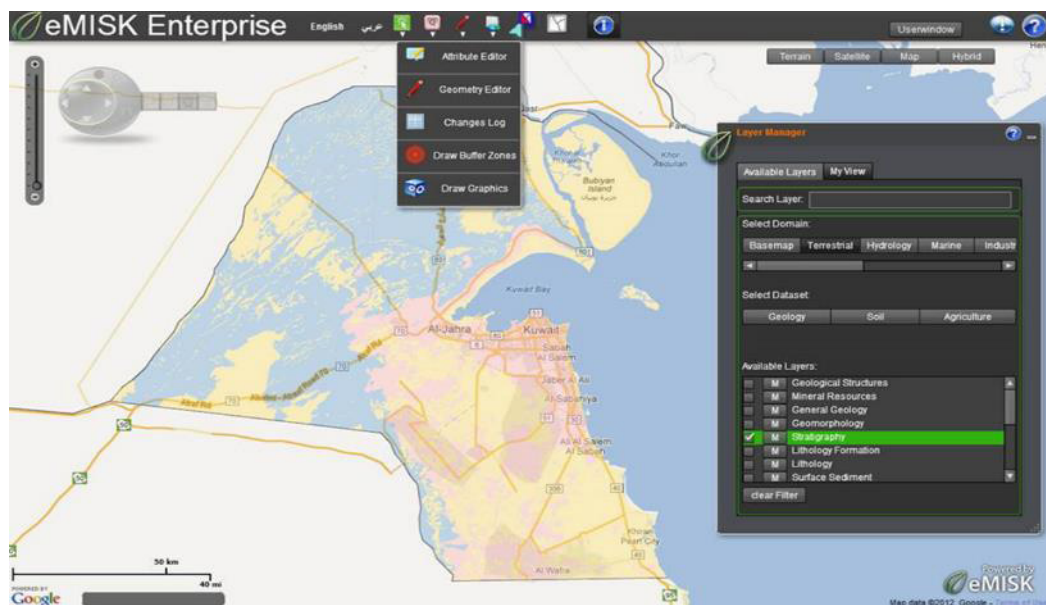
environmental preservation and protection by reporting environmental phenomena and problems. This initiative is expected to play a leading role in raising awareness of the value of the environment in Kuwait.<sup>89</sup>

The Environment Public Authority of **Kuwait** has taken the initiative of establishing the *beatona.net Official Environmental Portal*, a GIS-based web portal that aims to share authentic environmental information with the public over the Internet. *beatona.net* (“our environment” in Arabic) is a network that offers information about Kuwait’s environment from various national, regional and international organizations on a single platform. It also allows the public to participate and interact in the preservation and protection of the environment by reporting environmental phenomena and problems (**SDGs 9, 11, 13, 14, and 15**). This is expected to play a leading role in raising awareness of the value of the environment in Kuwait.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2015

The *Environmental Monitoring Information System of Kuwait (eMISK)* is an ambitious system initiated by the Environment Public Authority (EPA) of Kuwait. It aims to establish, build and maintain a comprehensive geo-environmental database for Kuwait along with an enterprise-level geographic information system (GIS) for accessing, updating and analysing the environmental data. This geo-environmental database is made available through eMISK to decisions makers and stakeholders, outside agencies and the public at large.

The main goals of eMISK include raising awareness at all levels of Kuwaiti society in regard to the values of the environment, and placing authoritative scientific information at the centre of decision-making (**SDGs 11, 13, 14 and 15**).



The main objective of the *Disaster emergency system based on a new decision network approach* from **Morocco** is the implementation of a new, efficient system that serves to help citizens threatened

<sup>89</sup> Project nominated for a WSIS Project Prize 2014

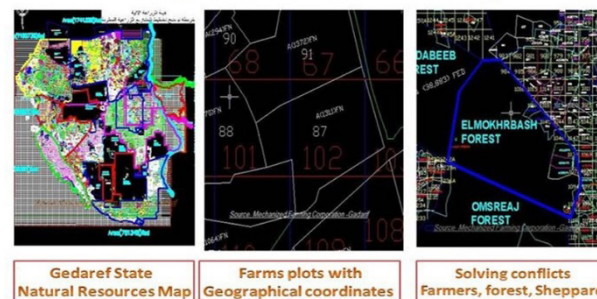
by flooding to suffer less damage and to guide their choices according to their profiles, employing a solution based on environmental data and real network simulation methods using multi-agent systems and constraint programming (**SDG 11**). As an innovative solution, the system detects erroneous or redundant data by a classification method with the aim of ensuring that only reliable and adequate data are stored in the database and processed in the decision support system for real-time flood forecasting.<sup>90</sup>

The *Indoor Air Quality* project by Majmaah University in **Saudi Arabia** aims to identify the type of air inside a building that will promote the comfort and health of its occupants. Gases, microbial contaminants and particles affect air quality and can cause bad health conditions (**SDG 3 and 11**). The project has just been launched and will run for ten years until 2015. The key factors affecting indoor air quality may be divided into material, chemical and biological factors. Material factors include temperature, humidity, dust, air movement, lights and noise. Chemical factors include contaminants produced by paints, carpets, new furniture, environmental tobacco smoke, curtains, cosmetics, etc. Biological factors include fungus, bacteria and viruses transmitted or resulting from the same location.<sup>91</sup>

In **Sudan**, the Gedaref Digital City Organization (GDCO, a civil society NGO) and its partners have developed an *e-agriculture project*. Owing to significant variations in crop prices and lack of information, farmers sell their crops at low prices. Moreover, there is severe conflict between farmers, shepherds (nomads) and the forestry department. The e-agriculture project is a public-private partnership (PPP) for community development. It provides good opportunities to invest in telecentres for better sustainable development. The project's objectives are as follows:

- Development of agriculture through ICT
- Development of national and global online crop marketing, including for illiterate farmers or those with poor computer skills, to help them sell their products (SDGs 1-5)
- Exchange of knowledge and best practices between farmers to establish strong partnerships in the interests of improving agricultural practices so as to increase crop yields and reduce the cost of crop production (SDG 17)
- Enhance capacity building and improve the quality of training in the agricultural sector, thereby promoting the country's economic growth (SDG 8)
- Develop the e-map of the Gedaref State's natural resources to help farmers monitor their farms from any location via satellite (GPS), thereby reducing inequalities between them (SDG 10)
- Disaster control and conflict resolution between farmers, shepherds and the forestry department (SDG 15)
- Achieve the eight Millennium Development Goals (MDGs) and pursue the SDGs.

**Gedaref State National Resources e-Map**



In the **United Arab Emirates**, the Abu Dhabi Environment Agency established the *EnviroPortal*. The project involves the development of a geoportal that manages and accesses metadata, and

<sup>90</sup> Project nominated for a WSIS Project Prize 2015

<sup>91</sup> Project nominated for a WSIS Project Prize 2015



a mapviewer that supports the display and querying of geospatial data (**SDGs 13 and 15**). The EnviroPortal provides a means of raising public awareness of environment-related issues by displaying the locations of environmentally sensitive elements such as habitats of fauna and flora, protected areas, etc. It helps developers or project proponents to gauge in advance the potential impact of their projects. The EnviroPortal also allows certain data elements to be downloaded. Mapviewer users can benefit from various functions available on the portal, such as adding online services, redlining, measuring and spatial searching, in order to further explore any environmental component in detail, and share their results with their network.

In the **United Arab Emirates**, Dubai Civil Defence (DCD) introduced the *smart system* (Smart Buildings), which ensures that buildings and residences are kept safe, using a smart comprehensive infrastructure (**SDG 11**). In October 2009, the smart system linked over 8 000 buildings to a control room for emergencies and other urgent needs. Buildings were categorized into five types, according to risks, and DCD has also surveyed a total of 23 549 buildings for installation purposes. Priority in installing the smart system was accorded to the most hazardous facilities such as factories and high-rise buildings. The smart system monitors firefighting and alarm systems in buildings and keeps the control room informed of the status of water sprinklers, firefighting pumps and faults in lifts, among other things.

In the **United Arab Emirates**, the *My Garden* smartphone app can be used by participants in the widely popular annual “My Garden, My City” competition, which aims to increase green spaces in suburban areas across Al Ain, Abu Dhabi and the Western Region while spreading awareness in the community about the importance of sustainability in daily life (**SDGs 11, 13, and 15**). The application allows users to track the number of plants, their growth and other factors in their own gardens. It also provides environmental benefit information on their accomplishments and shows other users’ progress, while including a platform that allows users to share snapshots of their gardens, share ideas and realize the environmental benefit.<sup>92</sup>

Also in **United Arab Emirates**, the Abu Dhabi Water and Electricity Authority’s *Water Network Management System* is another remarkable project conceived in the United Arab Emirates. The first initiative of its kind in the UAE and the broader Gulf region to tackle the issue of water management through active leak detection techniques, the system covers the design, supply and installation of instrumentation, communication, IT infrastructure, hardware and software in order to collect network parameters (**SDGs 13 and 14**).<sup>93</sup>

The *E-license program* is a smart solution that automates the process of obtaining the core business services of the Federal Authority for Nuclear Regulation (FANR) in the **United Arab Emirates**. It enables organizations to register, apply and check the status of their applications for services online. It also enables FANR to receive, track, control, create and maintain, inspect and take decisions regarding these applications. The E-license program aims to improve the services provided, improve sustainability, protect the environment, create and maintain the database and spatial data, minimize the risk, maximize emergency preparedness and optimize response, provide better control and ensure the instantaneous updating of precise records, and share such records with relevant national and international organizations as deemed necessary (**SDGs 9, 11, 13 and 17**).

<sup>92</sup> Project nominated for a WSIS Project Prize 2015

<sup>93</sup> Project nominated for a WSIS Project Prize 2015



The **United Arab Emirates** adopted the concepts of "e-government" and "smart government" as part of the UAE vision of 2021. In this context, the Ministry of Environment and Water (MoEW) has developed *M-Environment*, a smart reporting application developed as the ideal analytical tool, which helps decision-makers to analyse and monitor work progress, e/m-applications and the extent to which the service level agreement is dynamically applied on the country map along with a detailed screen with the associated statistics. M-Environment aims to:

- Encourage and increase agricultural areas in the country
- Facilitate the procedures of the services and re-engineer them
- Provide the latest technologies such as online payment and multiple channels for service
- Enrich the animal wealth
- Encourage and preserve the wealth of fisheries

The M-Environment application is an innovative tool to help sustainability and reduce the time, effort and resources needed to complete requests by enabling the M-Environment application on different platforms and channels.

It contributes to building resilient infrastructure, safety in cities, combating climate change and desertification, and conserving oceans, seas, etc. (**SDGs 9, 11, 13, 14 and 15**).

## E-science

In **Kuwait**, Kuwait University launched the *Remotely Operable Scanning Electron Microscope* (ROSEM). This project permits full remote control of a scanning electron microscope through the Internet, so that students and researchers can operate it online and obtain live high-magnification images of specimens (**SDGs 4 and 8**). It has been found to be very useful in fostering enthusiasm for science among students and enabling researchers to use otherwise unaffordable technology.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2014

The *HistoNano Website* in **Kuwait** is a prime initiative aimed at creating an interrelated multidisciplinary web portal encompassing a wide range of subjects within a single framework. The histology disciplinary streams primarily concern histopathology, cell biology, nanoscopy and nanotechnology. The website's mission is to enable scientists, researchers and educators to access high-quality images and texts on histology, histopathology, cell biology and nanoscopy, in order to meet diverse teaching and research requirements (**SDGs 4, 6, 7, and 17**). In addition, links are also provided to related websites concerning these fields, as a crucial service helping visitors, web users and a wider readership interested in the broad field of histology to access vital information for their diverse needs. The website is exclusive and personal, developed and founded by its owner, Professor Abdel-Majeed Safer, who also heads the Nanoscopy Science Centre of Kuwait University's Faculty of Science. To keep the site widely representative and user friendly, visitors' and readers' views and suggestions are welcomed.<sup>94</sup>

<sup>94</sup> Project nominated for a WSIS Project Prize 2015

**Saudi Arabia** has introduced the *Research Project Management System*. Scientific research plays a key role in the achievement of sustainable development, and carrying out scientific and applied research is also considered to be one of the most significant activities widely used in determining to what extent educational institutions can play their pioneering role in various fields of knowledge. It thus becomes necessary to consolidate the process of scientific research by facilitating communications between those in charge of scientific research and the researchers interested in this field. Majmaah University, represented by the Deanship of Scientific Research, has developed a system for research project management (**SDGs 4 and 17**). This system would create a business environment characterized by flexibility and ease of information and data sharing between all parties participating in research financed under the Deanship of Scientific Research, by facilitating electronic submission of scientific research proposals, which will then be evaluated and archived for publication.<sup>95</sup>

In the **United Arab Emirates**, the Emirates Foundation for Youth Development implemented the *Think Science* programme. The aim of this initiative is to inspire, encourage and empower UAE youth between the ages of 15 and 24 to embrace careers in science and technology (**SDGs 4 and 8**). It was established in response to the nation's demand for scientific talent, and in order to support the creation of a national "critical mass" of citizens capable of participating in science-based policy-making and of using science and technology to promote general prosperity. The programme, which was launched in 2008, comprises three core elements: the national *Think Science Competition*, *Think Science Ambassadors* which empowers youth, and the *Think Science Connect* platform.<sup>96</sup>

---

<sup>95</sup> Project nominated for a WSIS Project Prize 2015

<sup>96</sup> Project nominated for a WSIS Project Prize 2014

## C8. Cultural diversity and identity

In **Algeria**, the Ministry of Religious Affairs and Endowments has initiated the development of online services (*e-Zakat, e-Fatwa, e-Mawakit, e-Library*) on the website of the administrations under its supervision (**SDG 4**). This project was implemented through the development of the website which provides online services, interactive forms, text documents, presentations and so forth for 48 directorates of religious affairs and endowments, Islamic cultural centres and training institutes for executives of religion.

In **Kuwait**, the *Al-Babtain Library* website primarily serves Arabic readers and those interested in Arabic language, poetry, literature and culture, offering its visitors a collection of electronic services, including (**SDGs 4, 8, 11, and 12**):

- library information, services, sections, news, photos and FAQ;
- electronic index for searching library collections;
- cultural services and Library Cultural Forum;
- social networking services through which miscellaneous cultural information is published;
- e-registration for training courses;
- audio and electronic publications section;
- assistance services such as WhatsApp, mailing list, Library Mobile, YouTube channel and RSS and smartphone applications (IOS and Android) and the Babtain Cultural E-Magazine.<sup>97</sup>

Internet multilingualism is a major initiative to ensure cultural diversity and involvement for all global linguistic groups. **Saudi Arabia** has realized the significance of linguistic diversity and recognized the importance of supporting the *Arabic language in domain names* and the vast impact this can have in empowering local Arabic users (**SDG 8**). In 2001, SaudiNIC (CITC) initiated a national programme to support the use of Arabic in Internet domain names. It was aimed at achieving standard and internationally acceptable solutions that also properly address the real needs of Arabic users. The programme followed an open and broad participation methodology that ensured engagement with all stakeholders locally and regionally. The work went through many phases, beginning with identification of linguistic issues. It included publishing scientific papers and technical reports and expanding R&D beyond the Arabic language to include issues for the whole Arabic script. Prototypes were implemented and several technical tests performed, and a registry-level solution that supports the registration of Arabic domain names was also developed to resolve the issue of character variants.<sup>98</sup>

In the **United Arab Emirates**, the General Authority of Islamic Affairs and Endowments (Awqaf) has established *E-Fatwa*, a web-based interface accessible via Awqaf's website: [www.awqaf.gov.ae](http://www.awqaf.gov.ae), where users can send their religious queries related to Islamic culture, the jurisprudence of worship and transactions (**SDGs 4 and 11**). The online interactive service has a global scope. It receives religious queries from all around the world, which are responded to in line with the working procedures adopted by the E-Fatwa centre.

In the **United Arab Emirates**, Sultan Bin Zayed's Culture and Media Centre (CMC) continues to work on the national initiative *Khalifa in World Language*. Launched in December 2012, it is the world's largest heritage gateway, carrying the name of President Khalifa in 200 languages, and a website that includes a biography of HH Shiekh Khalifa in various languages as well as a history of UAE (**SDGs 4 and 10**). The initiative translates the people's deep love and loyalty for the UAE leader. The project aims to highlight UAE's culture and national identity and show appreciation to other world cultures.

<sup>97</sup> Project nominated for a WSIS Project Prize 2014

<sup>98</sup> Project nominated for a WSIS Project Prize 2015

Also in the **United Arab Emirates**, *Emiratweet* is the first Emirati online social community (virtual majlis) for the Emirati by the Emirati. This social media platform serves as a means of maintaining and preserving national identity by providing information, facts and news about Emirati individuals and society (**SDGs 4 and 8**). Emiratweet aims to bridge the existing gap, sustain the Emirati presence through social media, support Emiratis, and increase awareness about UAE through teaching, support, learning, sharing and organizing events.

In the **United Arab Emirates**, *UAEpedia* is a centralized online information resource about UAE. The website follows an open-source model, allowing the public to contribute and modify content. Currently in its first phase, UAEpedia is available only in Arabic. Other languages will be added at a later stage. At present, UAEpedia contains more than 1 000 articles distributed over 18 main topics such as geography, history, economy, language and literature, and hundreds of sub-topics related to UAE.<sup>99</sup>

In the **United Arab Emirates**, *Bel Arabi* was launched by the Higher Colleges of Technology with the support of His Excellency Jamal bin Huwairib, Managing Director of the Mohammed bin Rashid Al Maktoum Foundation. The Bel Arabi initiative is based on ideas generated and shared by the young Arab community in institutions of higher learning. The initiative involves maintaining the Arabic language through the media. Conversations with this generation have led to the creation of an initiative that empowers Arab youth to contribute to the establishment of a knowledge-based economy (**SDGs 4 and 8**). At a time when the Arab world is looking to emerge as a global powerhouse, the use of the Arabic language will serve as a cohesive force in projecting a strong regional voice. Among half a billion people who speak Arabic as a native language, only 140 million people use the Internet. During the launch, the entire population base has expressed its love for the mother language. This has added up to an incredible number of almost 1 400 000 tweets within 24 hours of the launch, or about 16 tweets per second.<sup>100</sup>

*Kalima* is a non-profit initiative dedicated to funding the translation and publication of high-quality works of classic and contemporary writing from other languages into Arabic, in addition to organizing events and activities related to translation (**SDGs 4, 8, and 12**). In essence, Kalima's mission is to revive translation in the Arab world by increasing the number and choice of books available to the world's 350 million Arabic readers. Kalima's mission reflects the fact that Arabic is a beautiful, expressive language, which should be celebrated and enriched by giving readers access to more high-quality translated titles.

*UAEpedia* ([uaepedia.ae](http://uaepedia.ae)) is the online encyclopedia of the **United Arab Emirates** (UAE) created by the Telecommunications Regulatory Authority (TRA). UAEpedia documents the rich culture, history and heritage of the Emirates along with the selfless leaders whose vision shaped the country. It aims to be the only authentic knowledge repository about the UAE providing information in Arabic – the native language of the land. UAEpedia is the first collaborative effort for preserving, enriching and spreading awareness about the cultural diversity and identity of the UAE. It is being developed in collaboration with 15 federal government entities. Each entity has assigned one or more “knowledge ambassadors” to contribute to UAEpedia by adding new articles and enriching existing ones.

The encyclopedia thus ensures inclusive and equitable education, contributes to the safety and inclusivity of cities and promotes peaceful societies (**SDGs 4, 11 and 16**).

<sup>99</sup> Project nominated for a WSIS Project Prize 2014

<sup>100</sup> Project nominated for a WSIS Project Prize 2015

## C9. Media

The project *MENOS* by Regional Radio of Mila is also from **Algeria**. This is mainly a networking concept used to exchange multimedia content over satellite and is intended primarily for professional broadcasters, allowing them to share video and audio material among several sites scattered across a large geographical area (**SDG 8**).

In **Jordan**, Community Media Network implemented *support and advocacy for community voices in the Arab region (Aswatona – Arabic for “Our Voices”)*. This project, which builds on the creation of *ammannet.net*, the Arab world's first Internet radio station, aims to utilize new technology to set up online radio stations, train the stations' journalists and turn the stations into FM broadcasters (**SDGs 9, 12, and 16**). Seven stations began initially in **Libya, Tunisia, Egypt, Yemen, Jordan, the Syrian Arab Republic and Palestine**. A parallel advocacy project includes legal studies for community radio, and actions to create an enabling environment for community radio. Two regional conferences (in **Tunisia** and **Egypt**) brought together over 100 radio enthusiasts to share experiences and skills. Out of the seven online stations, five are now also already on FM and many others are learning from them and following in their footsteps.<sup>101</sup>

The *Nabd - Personalized Arabic Newsreader* project, from the Central Agency for Information Technology in **Kuwait**, is a personalized Arabic newsreader application used by over four million users globally. Nabd keeps Arabic-speaking people across the globe up to date with local and international news. The application has become a critical need for many people, as it is their main means of keeping up with local and international news and events, as well as developments in specialist areas such as technology and health (**SDGs 12 and 16**). Instead of browsing many websites or using many applications, Nabd aggregates important news from the user's preferred sources in a beautifully designed and easy to use application, saving significant time and effort.<sup>102</sup>

In the **United Arab Emirates**, the Dubai Press Club put in place the *Digital Initiative Agenda* which hosts a series of virtual seminars, meetings, workshops and talk shows using the latest digital social networking applications; thereby contributing to **SDGs 5 and 16**. The Agenda forms part of Dubai Financial Centre's efforts to establish a presence and interact with stakeholders across various parts of the Arab region and the world through social networking. Furthermore, the Agenda will serve as a foundation towards establishing a more targeted and comprehensive digital initiative that will benefit Arab media professionals and students. The project will offer training and specialized media education, besides providing information and services.

In the **United Arab Emirates**, the *M-Government TV Program* was created by the Prime Minister's Office committee as part of the m-Government Initiative of May 2013, launched by H. H. Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. It is a weekly TV programme dedicated to the m-Government Initiative. As such, it highlights the progress of the initiative in terms of m-transformation and provides information about the new ways of accessing government services while stressing the ease and convenience of the innovative technology.

Being accessible to a large public, the programme contributes to the reduction of inequality in the country and promotes a peaceful and inclusive society, giving everyone equal access to information (**SDGs 10 and 16**).

<sup>101</sup> Project nominated for a WSIS Project Prize 2014

<sup>102</sup> Project nominated for a WSIS Project Prize 2015

## C10. Ethics

In **Kuwait**, the *Kuwait Red Crescent Society Website* (KRCS) project was initiated primarily in order to make the KRCS mission more accessible to donors and people seeking assistance in disaster-affected places (**SDGs 1, 10, 11, and 17**). The project has enabled KRCS to accept online donations. The main objective of the project is to provide clear and easily accessible information on KRCS services and their institutional aspects for donors, volunteers and people seeking relief. To achieve all the intended goals, KRCS and its project partners had to adhere to a demanding schedule, and the entire project was initiated and completed in less than ten months. During the early phase of developing the project execution plan, the entire project was divided up into smaller and more manageable goals. This approach enabled the team to implement the project in a very short time.<sup>103</sup>



The awareness training initiative by the Khalifa Empowerment Program for Students in the **United Arab Emirates** is designed to create a programme at the national level that provides awareness in the fields of Internet ethics, Internet safety, cybercrime and best practices in the use of social media. The *360 Degrees of Student Awareness* programme synergizes the efforts of over 50 governmental organizations in the interests of creating a developed and ethical generation of UAE citizens.

The project contributes to several SDGs by ensuring equitable quality education, resilient infrastructure, the provision of lifelong learning opportunities for UAE citizens and revitalization of the global partnership for sustainable development (**SDGs 4, 9, 16 and 17**).

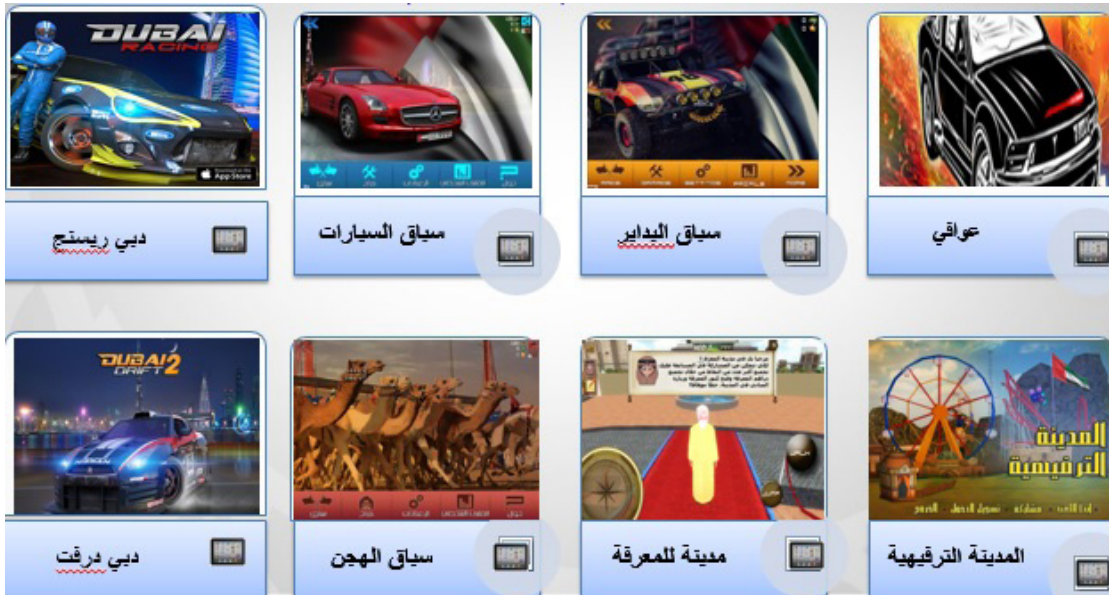
<sup>103</sup> Project nominated for a WSIS Project Prize 2015





Dubai Police has employed cutting-edge video-game technologies to develop *Electronic Awareness Games* for communicating awareness messages and strengthening the national identity and sense of belonging in the **United Arab Emirates**. The project uses innovative and engaging methods for delivering notions of awareness to the community in the form of games which serve to communicate messages, concepts and lessons in awareness and to strengthen national identity among different sectors of the community, especially students, through video games running on smart devices. The games contain awareness and learning messages in an interesting, enjoyable and fun form for both children and adults.

The project is fully in line with **SDG 16** on ensuring quality educational content for everyone and the promotion of a peaceful and inclusive society.



In order to strengthen the State's endeavours to serve as a model and an example in the provision of care and attention to children in the areas of education, health, culture and security, and to encourage institutional creativity and innovative ideas, the Ministry of the Interior of the **United Arab Emirates** launched the smart wearable technology service known as the *Hemayati Child Protection* project. It is a creatively and innovatively styled smart band that enhances smart security concepts for the protection and care of children.

The project ties in with several SDGs on healthy lives, quality equitable education, peaceful societies, building resilient infrastructure and safe and sustainable cities (**SDGs 3, 4, 9, 11 and 16**).



## C11. International and regional cooperation

In **Algeria**, the objective of the *fourth International Symposium ISKO-Maghreb 2014 on “Concepts and Tools for Knowledge Management”* was to contribute to the understanding of the factors crucial to organizing knowledge and the phenomena that affect the information society (**SDG 17**). Actions to be taken by ISKO should take account of socio-cultural, cognitive and economic aspects in the strategic management of knowledge.

In **Jordan**, the Middle East and North Africa (MENA) region *FTTH Council* is a non-profit organization which continues to fulfil its mission to accelerate the deployment of ultrafast broadband in the MENA region through information, education and promotion in order to enhance quality of life, contribute to a better environment and increase competitiveness (**SDGs 10 and 17**). Its members are vendors, national and private networks, governments, service operators and utilities, who are all committed to ensuring a sustainable future for the region. In order to facilitate broadband deployment at national and regional level, the council is engaged with its committee’s activities. The countries concerned are: **Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Syrian Arab Republic, Tunisia, Turkey, United Arab Emirates, Yemen**. The ongoing project runs from 2011 to 2034.<sup>104</sup>

In **Tunisia**, within the framework of follow-up of the WSIS outcomes and the Tunis Agenda recommendations, the government has established, since 2006, a follow-up mechanism devoted to supporting international efforts to increase cooperation in an inclusive approach to reduce the digital divide, by hosting the annual international event *ICT4ALL* (**SDG 17**). This event aims to contribute to implementation of the commitments in the Tunis Agenda adopted at WSIS-05 in coordination with all stakeholders (governments, public and private sectors, international organizations, civil society). *ICT4ALL* targets African and Arab countries, and presents a platform to address fundamental issues, in the context of the achievement of the MDGs and WSIS action lines.<sup>1</sup>

<sup>1</sup> Project nominated for a WSIS Project Prize 2014

After being a member of the focus group in the Regional Arab ICT for Persons with Disabilities, the Association of Digital Development of **Tunisia** created the *Zero Group Accessibility for Access to Information and Knowledge* project, which works to encourage regional, national and international cooperation among various stakeholders and provide them with specific actions aimed at improving the status of persons with disabilities in the context of ICTs for increasing access to education, knowledge and information, e-learning, access to public information, social services and, ultimately, job opportunities. The Zero group’s objective is to highlight and reduce digital ignorance among all persons, with or without disabilities, by providing learning platforms, mobile learning and Cloud computing, as well as training for IT professionals such as educational programmers, software and content developers and web designers.

The project thus relates to a considerable number of SDGs, touching upon such issues as poverty, education, gender equality, access to modern energy, safety of cities, promotion of peaceful societies and revitalization of the global partnership (**SDGs 1, 4, 5, 7, 11, 16 and 17**).

<sup>104</sup> Project nominated for a WSIS Project Prize 2014



The Minister of Economics of the **United Arab Emirates** aims to make the country into an internationally competitive and diversified economy under the leadership of effective efficient and knowledgeable UAE nationals. The ministry's mandate is to develop the national economy and create a pro-business environment that contributes to the country's balanced and sustainable development, by enacting and modernizing economic legislation, adopting appropriate foreign trade policies, developing national industries and exports, promoting investment, regulating competition and the small and medium-sized enterprise sector, protecting consumer and intellectual property rights, and diversifying economic activities, all under the leadership of effective nationals, in line with international standards of creativity, excellence and the knowledge economy. **(SDGs 8 and 17)** The *Patent Protection Initiative* is just one of many projects designed and developed by UAE in accordance with those aims.<sup>105</sup>

During the past decade and since the establishment of the Telecommunications Regulatory Authority (TRA), which is the Administration of the **United Arab Emirates** at ITU, the country has been at the forefront of regional and international cooperation, contributing to *ICT Development in the Arab Region*. Whether in terms of assistance in the implementation of specific regional and international ICT4D projects, the chairing of regional groups in the preparatory processes for major ITU conferences, the hosting of all major ITU events over the past five years or support for the implementation mechanism of the WSIS outcomes (i.e. the annual WSIS Forum including the WSIS+10 High Level-Event), the UAE's TRA has been at the forefront, having thus earned its reputation as a key facilitator and credible partner among the ITU Member States. In the interests of further enhancing its role, TRA looks forward to taking this international cooperation to higher levels in the future **(SDG 17)**.

As the **United Arab Emirates** moves towards its aim of being an information economy, and towards the Ministry of Interior's vision of smart government, the importance of cybersecurity awareness cannot be underestimated. Over the past decade, the *Biennial International Cyber Crimes Conference (IC3)* has been the premier cybersecurity conference in the Gulf region, attracting an audience of leaders, decision-makers and professionals in the field of cybercrime and information security. Past conferences have seen high-calibre speakers who have delved into, analysed and elucidated issues relating to information security and cybercrime at the operational, tactical and strategic levels. The topics covered have included online financial crime and money laundering, cyberfraud, compliance, privacy and identity management.

The conference relates to the global partnership and collaboration in order to combat cybercrime **(SDG 17)**.

<sup>105</sup> Project nominated for a WSIS Project Prize 2015

## Conclusion

The International Telecommunication Union (ITU) remains committed to the World Summit on the Information Society (WSIS) process, and to implementation of the WSIS goals beyond 2016. ITU recognizes and highly appreciates the extremely valuable contributions made by stakeholders to enable the continuation of WSIS monitoring and reporting. There can be no doubt whatsoever that, in today's fast-moving world, innovation and efficiency are vital to success. Accordingly, the WSIS Stocktaking Report in the Arab Region 2014-2016 shares with you the most recent updates and success stories in the WSIS stocktaking process of this region.

The Web 2.0 WSIS Stocktaking Platform continues to foster implementation of the WSIS outcomes and to facilitate exchange of information among 200.000 members representing governments, the private sector, international organizations, civil society and other stakeholders. As the Web 2.0 platform continues to flourish, so does the promotion of social development and economic growth through ICTs. We continue to maintain and improve the WSIS Stocktaking Database, which contains around 8 000 entries this year. This encouraging outcome reinforces stakeholders' belief in and commitment to the WSIS Stocktaking process and their desire to share best practices.

In addition, the WSIS Overall Review called for close alignment between the WSIS process and the 2030 Agenda for Sustainable Development, highlighting the crosscutting contribution of ICTs to the SDGs. In this context too, WSIS Stocktaking is evolving to become the unique global process for the collection of information on actions carried out within the framework of WSIS, while underlining their contribution to implementation of the 2030 Agenda for Sustainable Development.

We are also pleased to announce the recent launch of a new and innovative interface, which will make it easier to search all WSIS-related activities. All stakeholders benefit from the sharing of interesting case studies, as this undoubtedly facilitates the transfer of knowledge, experiences and models for project implementation. The WSIS platform helps to create partnerships, provide greater visibility and add value to ICT projects all around the world. The many and varied stakeholders who have implemented innovative projects and contributed to the success of the WSIS Stocktaking process deserve our sincere gratitude.

ITU announces an official call for updates and new entries and urges these stakeholders, along with all Member States, international organizations, the private sector and civil society, to continue submitting such contributions in the future as WSIS pursues the ongoing stocktaking process. We trust that readers will find this report insightful, and sincerely hope that it will inspire them to participate in the construction of a broader and more inclusive information society for all.

International  
Telecommunication  
Union  
Place des Nations  
CH-1211 Geneva 20  
Switzerland

ISBN 978-92-61-21671-9



9 789261 216719

Printed in Switzerland  
Geneva, 2016

Photo credits: Shutterstock