

WSIS Stocktaking Success Stories 2016

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DRAFT

Acknowledgement

The WSIS team would like to acknowledge the tremendous contributions from governments, international organizations, private sector, civil society and other stakeholders in providing information on ongoing projects and initiatives to the WSIS Stocktaking Platform. The WSIS Success Stories 2016 Report is based on the contributions provided by 18 WSIS Prizewinners (18 success stories) together with 70 brief project descriptions from the newly introduced WSIS Prize Champions category.

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Executive Summary

Introduction

Each year, on the occasion of the WSIS Forum, 18 WSIS stakeholders are awarded **WSIS Prizes**, as a unique mark of global recognition for excellence in the implementation of WSIS outcomes. To this end, 18 projects are selected as the most successful stories worldwide, under **each category**, to serve as best-practice models to be replicated by other stakeholders interested in information and communication technologies (ICTs) for development. These projects brilliantly demonstrate how established **Sustainable Development Goals (SDGs)** can be realized in concrete actions and inspire other stakeholders all over the world to follow their success.

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. The 18 success stories together with the descriptions of the 70 champions' projects thus constitute the body of this report.

The WSIS Prizes contest serves as the platform for identifying and showcasing the success stories across the WSIS Action Lines defined in the Geneva Plan of Action and SDGs. It also provides us with models that can be replicated in the interests of empowering the community at the local level, providing everyone with an opportunity to participate in the contest and, most importantly, recognizing the efforts made by stakeholders to contribute to the development of society and their commitment to achievement of both the WSIS goals and SDGs. The WSIS Prizes contest is an integral part of the WSIS stocktaking process (www.wsis.org/stocktaking) set up in 2004 to assist WSIS implementation and follow-up. The contest was held for the first time in 2012, since when it has rapidly gained recognition and popularity within the ICT for Development (ICT4D) community.

WSIS Prizes is a unique international contest developed in response to calls from WSIS stakeholders for the creation of an effective mechanism for identifying and recognizing individuals, governments, civil society, local, regional and international agencies, research institutions and private-sector companies having achieved outstanding success in implementing development-oriented strategies that leverage the power of ICTs as an enabler of the SDGs.

The WSIS Project Prizes contest is open to all stakeholders: governments, private sector, civil society, international organizations, academic institutions and others. All stakeholders are urged to encourage their networks to join the WSIS Prizes process, including the multistakeholder consultations at the WSIS Forum, in order to ensure that all features correspond to the real needs of the WSIS implementation process beyond 2015. In the 2015 edition, more than 140 000 stakeholders joined the voting phase thanks to the many campaigns launched by project owners, thereby attracting newcomers to the WSIS process.

Building on the outcomes of the United Nations General Assembly (UNGA) Overall Review on WSIS, as well as on the 2030 Agenda for Sustainable Development, **WSIS Prizes 2016** began reflecting on the linkages between the projects and the **SDGs**. ICTs are enablers for sustainable development, and reporting on ICT success stories to best showcase the possible achievement of **SDGs**, through the implementation of projects related to the WSIS Action Lines, is the new objective of the WSIS Stocktaking process, including WSIS Prizes. We invite you learn how ICT projects submitted for WSIS Prizes 2016 are enabling the advancement of the SDGs.

The contest thus comprises 18 categories which are linked to the 11 WSIS Action Lines outlined in the Geneva Plan of Action and SDGs.

The 18 categories are as follows:

- 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

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

To conclude this brief introduction with a few figures, more than 400 ICT success stories were submitted for **WSIS Prizes 2016** by 31 January 2016 – another successful illustration of how the WSIS Prizes contest serves as unique recognition of excellence in the implementation of WSIS outcomes. 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. We at ITU are very proud of this achievement, and would like once again to highlight the importance of the multistakeholder and bottom-up approach that is the essential philosophy of the WSIS Forum.

History of the WSIS Prizes and Stocktaking process

WSIS Project Prizes provides unique worldwide recognition for excellence in the implementation of WSIS outcomes. The contest, first held in 2012, rapidly became popular with the ICT4D community and was referred to in ECOSOC resolution 2014/27, on assessment of the progress made in the implementation of and follow up to the outcomes of the World Summit on the Information Society, which “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 World Summit project prizes as an integral part of the World Summit stocktaking process, while taking note of the report on the World Summit success stories”.

In consideration of the great achievements thus far recognized in more than ten years of stocktaking (from 2004 to 2016) and five years of WSIS Project Prizes (2012 to 2016), and with the increasing involvement of the ICT community (more than 130 000 stakeholders as at May 2016), ITU remains strongly committed to promoting the WSIS process in the future, including its two tracks – Stocktaking and WSIS Project Prizes – which constitute, respectively, a major inventory of successful projects in the field of international ICTs for development, and a unique showcase of the most useful initiatives and best practices available worldwide in the sphere of ICTs for sustainable development.

In the light of the increasingly important role played by ICTs in promoting sustainable development, the 11 WSIS Action Lines are undoubtedly a significant contribution to the fulfillment of the newly-proposed SDGs currently under discussion within the United Nations.

In its pursuit of the outcomes of § 120 of the Tunis Agenda, ITU is engaged in the WSIS Stocktaking process, providing the means for sharing information related to the implementation of the WSIS outcomes. A publicly-accessible database of WSIS-related implementation activities, initiated during the Tunis phase of WSIS, has been maintained and improved.

The Stocktaking Database has become an effective tool for the exchange of information on the projects in relation to the implementation of the 11 Action Lines. By May 2008, more than 3 800 projects were registered in the database and the number of entries continues to grow. In order to expand the functionality and interactivity of this publicly-available tool, several improvements were made during 2007. The database architecture was adjusted in order to enhance the responsiveness of the search interface. The level of interactivity has been improved by allowing stakeholders to update their entries directly. Finally, all WSIS stakeholders now have the possibility of installing the stocktaking database web interface directly onto their own website.

By the end of 2009, more than 4 000 entries were registered in the database and the number of entries has continued to grow. More than a quarter of the entries have been updated on an ongoing basis. It is worth mentioning that many entries reflect more than one flagship initiative and project implemented by WSIS stakeholders. By July 2010, the number of entries in the database had grown to 4 770.

The outcomes of the WSIS Stocktaking Session held on 11 May 2010 were aimed at leveraging the efforts of countries and increasing their visibility in the WSIS implementation process through the development of analytical input within the framework of WSIS Stocktaking. To respond to these requirements, country and implementation case studies were proposed as an alternative to leverage Member States’ activities relating to the ICT framework at the national level and WSIS implementation. The case studies will be elaborated within the framework of partnerships with the WSIS stakeholders.

C1 - The role of governments and all stakeholders in the promotion of ICTs for development

WSIS Prizewinner

Project name:	Fostering integration of Argentine Academia in the activities of ITU
Organization:	ENACOM (Ente Nacional de Comunicaciones)
Country:	Argentina

Basic information

Enacom is an autonomous and decentralized agency under the scope of the Ministry of Communications of **Argentina** whose purpose is to lead the technical convergence process and create stable market conditions so as to ensure that all Argentine citizens have access to the Internet, fixed and mobile telephony, radio, television and postal services.

Enacom was created in December 2015 by Decree 267, which establishes the role of communication regulator with the aim of ensuring that all users nationwide have access to quality services.

Its main functions are to ensure:

- the implementation of a harmonized normative framework adequate for industrial development, resulting in benefits for users and consumers so that they can access a greater number and broader range of services at lower prices
- improved protection for competition against all manner of market distortions, benefiting consumers and preventing competitive distortions such as selective sanction imposition, discretionary licence-granting and any arbitrary reward/punishment mechanism or other distorted practices
- the protection of overall well-being and equal conditions in terms of the population's access to quality services, thereby helping to eradicate the digital divide
- the maintenance of fast-acting and efficient public policy to establish a rational path for the sector's development, adapting regulation to the requirements of the sector and society and collaborating in the reorganization of the communication market
- broad freedom of the press, pluralism and access to information so as to foster the development of new ICTs and move towards convergence among the different available technologies, guaranteeing safe legal conditions for the promotion of infrastructure investment
- that the proper functioning of the different players in the communication sector is maintained, adapting concentration rules on a regular basis, having regard to the impact of technologies and the appearance of new factors or situations.



Project description (description of the activity)

History

Argentina's academic history dates back to 1613 with the foundation of the country's first university, the National University of Cordoba. Its higher education institutions have since had a long and illustrious history, producing five Nobel laureates to date.

In the ITU context, academic institutions enjoyed a major boost with the approval by the Plenipotentiary Conference (Guadalajara, 2010) of Resolution 169, which provides for their participation in the work of the Union's three Sectors.

At PP-14, a proposal from the Administration, strongly supported by the Americas region, led to the adoption of a significant modification providing for the participation of academia in the three Sectors with a single monetary contribution, thereby facilitating the greater involvement of universities from developing countries in the work of the Union.

In this context, the Administration of Argentina, together with the Director of ITU's Telecommunication Development Bureau, signed a project for the "Promotion of integration of Argentine Universities in ITU activities."

The goal of this project is to build human capacity with a high level of specialization in telecommunications and ICTs. In pursuit of this goal, all national universities and other associated research institutions interested in and related to the work of ITU were invited to participate.

In line with the above, the Argentine Government contributes to the project by funding both the annual ITU membership fee and the participation of academia in the study groups, study questions and rapporteurships, according to the topics of interest or those related to their curricula.

In this way, universities have been linked with specific national and regional needs, especially those pertaining to production sectors, social organizations, local governments, small and medium producers and technology companies. At the same time, the project aims to bring universities closer to ITU while fostering greater participation by Argentina in the international arena, as well as more and better human resources specialized in telecommunications/ICTs, whose knowledge would benefit the country's development.



Examples of linkages between the WSIS Action Line and the SDGs

The Declaration of the Agenda for Sustainable Development recognizes that “the spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies; and the same happens in the case of scientific innovation in fields as diverse as medicine and energy”.

The agreed-upon goals recognize, either directly or indirectly, the key role that ICTs play:

SDG 4: Education; **SDG 5:** Gender equality; **SDG 7:** Energy; **SDG 8:** Employment and economic growth; **SDG 9:** Infrastructure, industrialization, innovation; **SDG 10:** Reduce inequality; **SDG 12:** Sustainable consumption and production patterns; **SDG16:** Peace and justice; and **SDG17:** Implementation.

There is a relationship between C1 “The role of governments and all stakeholders in the promotion of ICTs for development” and the SDGs as regards the project:

This project between the Government, academia and ITU promotes essential values for international relations in the 21st century.

Also, this initiative strengthens empowerment of the academic sector through active participation in ITU that will make for the acquisition of new experiences, thereby improving knowledge and strengthening the human capacities of professors, researchers and students in a way that will have positive benefits in the academic sector, the telecommunication/ICT sector and within society as a whole.

Lastly, this project helps to reduce developing-country participation imbalances in ITU, promote capacity building and strengthen the institutional capacity of the academic sector, while, at the governmental level, promoting cooperation and partnerships with the international community.

Highlights of the project's partnership activities

To date, the following 22 universities and institutions have been linked to the project:

- Instituto Balseiro, Bariloche (Pcia. de Río Negro)
- Instituto Nacional de Tecnología Industrial (INTI), Pcia. de Buenos Aires
- Instituto Universitario Aeronáutico, Pcia. de Córdoba
- Universidad Nacional Arturo Jauretche, Florencio Varela (Pcia. de Buenos Aires)
- Universidad Nacional de Avellaneda, Avellaneda (Pcia. de Buenos Aires)
- Universidad Nacional de Córdoba, Pcia. de Córdoba
- Universidad Nacional de La Plata, La Plata (Pcia. de Buenos Aires)
- Universidad Nacional de Luján, Luján (Pcia. de Buenos Aires)
- Universidad Nacional de Misiones, Posadas (Pcia. de Misiones)
- Universidad Nacional de Río Negro, El Bolsón (Pcia. de Río Negro)
- Universidad Nacional de Rosario, Rosario (Pcia. de Santa Fe)
- Universidad Nacional de San Luis, San Luis (Pcia. de San Luis)
- Universidad Nacional de Tucumán (Pcia. de Tucumán)
- Universidad Nacional de La Matanza (Pcia. de Buenos Aires)
- Universidad Nacional del Sur, Bahía Blanca (Pcia. de Buenos Aires)
- Universidad Tecnológica Nacional (y sus Regionales)
- Universidad de Buenos Aires (Ciudad de Buenos Aires)
- Universidad de Río Cuarto, Río Cuarto (Pcia. de Córdoba)
- Universidad del Chubut (Pcia. de Chubut)
- Universidad Nacional de Moreno (Pcia. de Buenos Aires)
- Centro de Capacitación en Alta Tecnología para Latino América y el Caribe (Ciudad Autónoma de Buenos Aires).

Researchers, teachers and students from academic institutions have thus far been participating in remote and/or face-to-face ITU meetings.

To ensure effective participation, and as part of the project, talks were held to raise awareness among the academic institutions concerning ITU.

Similarly, as part of the preparations for the 2015 World Radiocommunication Conference (WRC-15), a seminar entitled "Integration of Universities in ITU / ITU-R" was held on 28 and 29 May 2015, with the esteemed presence of the Director of the Radiocommunication Bureau, Mr François Rancy.

In addition to addressing WRC-related issues with universities that are currently participating in the ITU-R study groups, the seminar also served to deepen knowledge of ITU in general among universities already involved and other guests who have shown interest in joining the project in the near future.

Challenges and future perspectives for the project

For Argentina, this project, which prioritizes the development of partnerships, is also allowing for the follow-up of more topics of interest in the three ITU Sectors, together with active participation in meetings, workshops and seminars that provides first-hand knowledge and participation in discussions

taking place at the international level, with the subsequent training of AFTIC's human resources, which we hope will be reflected in the development of the sector and of the country as a whole.

AFTIC believes in the replicability of such models. Aware as it is of the reality of other countries in Latin America and the Caribbean, Argentina wants this experience to encourage them to work together with their academic and other research institutions, involving them in the work of ITU as a way to optimize synergies and resources in pursuit of greater international presence and national development.

Moreover, **the incorporation of academia in ITU activities, coupled with the pursuit of coordinated work between all such institutions at the regional level, should result in benefits for other international organizations in the region**, such as the Interamerican Telecommunications Commission (CITEL), leading to the region's greater participation and enhanced visibility within the international arena.

Finally, the Administration of Argentina, has decided to extend the project, initially scheduled to conclude at the end of 2015, until 31 December 2016.

Views on the WSIS Stocktaking and Prizes contest

AFTIC notes with satisfaction that the consultation process as adopted was successful in terms of its transparency and for having collected all the opinions of the stakeholders, whose contributions strengthen and enhance the joint work being done under the three pillars of sustainable development (economic development, social integration and environmental protection), with particular emphasis on broadband as a key element for achieving the **17 SDGs**.

As regards the WSIS Forum Awards 2016, this is a distinction that should fill the telecommunication/ ICT sector with pride, since it reflects the commitment of all players in building an all-embracing and pluralistic information and knowledge society. Congratulations!

WSIS Prize Champions

Project name:	E-Money
Organization:	Ministry of Telecommunications and Information Society (MINTEL)
Country:	Ecuador

The Ministry of Telecommunications and Information Society (MINTEL) of **Ecuador** came up with a national strategy, *E-money*, which fosters financial inclusion by facilitating access to lower-cost financial services for citizens, thereby improving their quality of life and reducing poverty indicators. Among other benefits, it enables the government to grant nanocredits and focus subsidies. The E-money system, managed by the Banco Central del Ecuador (BCE), is a payment method that allows citizens to make secure and reliable online transactions, using cellphones, without the need for Internet access or a bank account. Under its national legislation, Ecuador must move towards the sustainable consolidation of social solidarity and a reliable economic system, while at the same time developing an efficient alternative payment system. This will help to achieve economic and social inclusion and the well-being of millions of citizens, as well as stronger public finances and a better-regulated economic system. In this context, BCE developed a new mechanism to strengthen the use of electronic and alternative payments.

The project thus relates directly to the promotion of sustained and inclusive economic growth, and achievement of full and productive employment and decent work for all, thereby reflecting **SDG 8** and its relevant targets.



Project name: Laws “On Informatization”

Organization: Mazhilis of the Parliament

Country: Kazakhstan

In **Kazakhstan**, the Mazhilis (lower house) of the Parliament adopted the *Laws on Informatization*, in the interests of ensuring the ongoing informatization of Kazakh society through the legislative implementation of an efficient system of organization. It meets contemporary international standards, such as:

- legislative recognition of a new model for the informatization of government agencies, including IT outsourcing and cloud computing;
- legislative recognition of state support for the development of informatization;
- creation of a legal framework for the e-government architecture;
- regulation of basic trends in public policy for the informatization of the State’s activities;
- regulation of measures for ensuring information security in the field of informatization.

The Laws on Informatization promote the cultivation of innovation, an inclusive society based on sustainable development and strengthening of the means for implementing an efficient system, all of which is fully in line with the corresponding goals and targets (**SDGs 10, 16 and 17**).



Project name: Mobile Payment

Organization: Tunisian Post

Country: Tunisia

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.

Project name: MOI UAE Smart Application

Organization: Ministry of Interior (MOI)

Country: United Arab Emirates

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

WSIS Prizewinner

Project name:	Data centers for government agencies
Organization:	National Information Technologies JSC
Country:	Kazakhstan

Basic information

The NITEC (National Information Technologies) Joint Stock Company, established on 3 July 2000, is a leading company in Kazakhstan's information technologies market. It is an authorized organization responsible for the creation and maintenance (exploitation) of the e-government infrastructure, as well as for organizing interaction between State information systems.

The company's main activities include: management of IT projects related to the creation and establishment of basic components of e-government and other information systems across the State and business sectors of the Republic of Kazakhstan; support and maintenance of information systems of government bodies; provision of consulting services related to IT-project lifecycles; telecommunication support.

NITEC's mission is to construct a reliable, efficient and client-oriented State administration system through the use and implementation of innovative information technologies.

NITEC has thus far initiated and successfully implemented several IT project services for public authorities, including the *e-government portal, e-licensing portal, e-learning system, "E-notary" uniform notarial information system, electronic government payment gateway, individual and legal-entity databases, real-estate register, and uniform system of e-document flow for State authorities.*

Project description (description of the activity)

"The establishment of an Internet server platform for delivering hosting services to government agencies of the Republic of Kazakhstan" is one of the key projects implemented within the framework of the State programme of accelerated and innovative industrial development.

The main objective is to create a data centre in the country's regional centres to provide the hosting and colocation services to the government agencies of the Republic of Kazakhstan for increasing the efficiency of hardware/software information system functions.

The main advantage of the technologies used in the established data centres lies in the fact that they are built on the basis of high-tech infrastructure which ensures the smooth and uninterrupted operation of data-centre hardware. The advanced data centre is a platform equipped with a climate control system, uninterrupted power supply, security and other support systems.

NITEC provides the specialized and secured (encrypted) channels, guarantees the safety and reliability of the data centre and ensures the maximum rate of data transmission.

The organization created an effective model of IT services delivery through the hosting and leasing of servers for government agencies on the basis of a single transport network, accounting for 14 per cent of data processing in Kazakhstan, with integrated security systems operating in 7/24/365 mode.

In addition, it organized the centralized monitoring and infrastructure maintenance systems for all data centres coordinated from (headquartered in) a central server centre with an automated alerting system located in Astana city.

NITEC can confidently assert that government data is stored in the safest place. The electricity supply system is built in such a way that repair and preventive maintenance operations can be performed without affecting the efficiency of the data-centre systems. In the event of a power blackout, the diesel-based generators are launched automatically, while voltage peaks are smoothed and only “pure” energy is supplied.



Examples of linkages between the WSIS Action Line and the SDGs

The second category, C2 – INFORMATION AND COMMUNICATION INFRASTRUCTURE, states that:

“Infrastructure is central in achieving the goal of **digital inclusion**, enabling universal, sustainable, ubiquitous and **affordable access to ICTs** by all, taking into account relevant solutions already in place in developing countries and countries with economies in transition, to provide **sustainable connectivity and access to remote and marginalized areas at national and regional levels**”

NITEC’s Data centre for government agencies project meets the criteria set by this category, inasmuch as it:

1. Provides all government agencies with an opportunity to store and process information in a reliable and resilient way (in textual, graphic, digital and other formats)
2. Provides colocation services, enabling reductions to be made in current budget costs for the maintenance and development of e-government projects and for the maintenance of governmental and sectorial information systems at a fixed cost
3. Delivers its services to the 14 largest cities and urban areas throughout the State.

Furthermore, the successful establishment and operation of data centres decreases the time spent on processing and analysis of the initial information and effectively optimizes operations through the unification of technologies and technical facilities, thereby **optimizing connectivity** among major information networks (meeting the tenth point)

As regards the SDGs, the aforementioned features of data centres (in accordance with the Action Line's requirements) overlap with:

- **SDG 8**- "Promotion of sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" by striving to achieve higher levels of economic productivity through technological upgrading and innovation
- **SDG 9**- "Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation" by developing quality, reliable, sustainable and resilient IT infrastructure
- **SDG 16** – "Promotion of peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels" by contributing to the development of effective, accountable and transparent institutions at all levels through supplying reliable and resilient infrastructure for the storage, processing and analysis of information in e-government components

Highlights of the project's partnership activities

The partnership activities were for the most part carried out with the Ministry for Investments and Development.

Challenges and future perspectives for the project

In Kazakhstan, it is mistakenly believed that the services of such centres are demanded only by large companies, whereas in fact there is already a trend towards their use by public authorities, as well as by emerging companies, especially where startups with foreign investment are concerned. Only five years ago, however, the public authorities were not ready for such data-storage solutions, but NITEC has now made this a logical step in the age of high technology.

At the initial stage of data-centre creation in Kazakhstan, it was important to meet the challenge of ensuring a power supply to each of the 14 data centres from two independent substations, each with a capacity of 200 kW, by providing them with high-speed optical communication channels and centralized monitoring of all data-centre engineering systems, this being problematic owing to the size and characteristics of Kazakhstan's territory and remoteness of its cities. These problems were resolved at the data-centre design stage by increasing the power substations, while the consolidation of computing resources and data-storage resources within the data centre can reduce the overall cost of IT operation.

Views on the WSIS Stocktaking and Prizes contest

The WSIS Stocktaking and Prizes contest is one of the most significant events on which the JSC "NIT" Community focuses its attention. NITEC highly appreciates the opportunity to participate in such a large-scale event. For years, it has been regularly applying for the contest. Currently, this is the second winning project at WSIS, the first having been "E-licensing" in 2013. NITEC would also like to thank the organizers for having initiated the open consultation process, the introduction of which has had a positive impact on the contest and resulted in the establishment of the awards for the Champion runners-up.

Summing up, it is evident that the Forum facilitates the information exchange, sharing of best practices and creation of knowledge needed to actualize the SDGs. Once again, it is a great honour to contribute the JSC "NIT" Community's efforts to this common goal.

WSIS Prize Champions

Project name: Connect every 1000 inhabitants locality to optic fiber

Organization: Algérie Télécom

Country: Algeria

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.

Project name: Kuwait Information Network

Organization: Central Agency for Information Technology

Country: Kuwait

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.

Project name: Kemaman Smart Community

Organization: Malaysian Communications and Multimedia Commission

Country: Malaysia

In **Malaysia**, *Smart community* is a vital building block of a smart nation vision. As Malaysia pursues its transformation into a smart digital nation, its rural communities need to be empowered through proper exposure to knowledge and by being equipped with adequate ICT facilities. This is one of the main objectives under the Smart Digital Nation vision, which is now spearheaded by Malaysian Communications and Multimedia Malaysia (MCMC). The idea behind Smart Community is about using technology to improve the way of life. MCMC has kicked off a Smart Community initiative in

Kemaman, in the state of Terengganu, to expose the local community to technology and to ways in which it can address everyday problems and thereby improve living standards.

The Kemaman Smart Community project relates to several key SDGs, such as promotion of inclusive and sustainable economic growth, employment and decent work for all, reduction of inequality within and among countries and ensuring sustainable consumption and production patterns (**SDGs 8, 10** and **12**).



Project name: UAE National Validation Gateway

Organization: Emirates Identity Authority (EIDA)

Country: United Arab Emirates

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.

C3 - Access to knowledge and information

WSIS Prizewinner

Project name:	Connected Homes
Organization:	Presidential Social Council
Country:	Costa Rica

Basic information

The Presidential Social Council articulates all public policy from the Government of the Republic of **Costa Rica** regarding the reduction of inequality and poverty, particularly extreme poverty.

The Council was created on 20 August 2014. It is coordinated by the Second Vice President of the Republic, Mrs Ana Helena Chacon Echeverría, supported by a group of Ministers and heads of State institutions.

The Presidential Social Council's functions are:

- To monitor and ensure effective implementation of the National Development Plan
- To develop, approve and coordinate policies, programmes and strategic projects involving the sectors represented within the Presidential Council
- To develop a methodology and a monitoring and evaluation system for projects and programmes involving the sectors represented within the Presidential Council
- To acknowledge the quarterly evaluations regarding implementation of the plans, programmes and projects of the different sectors represented within the Presidential Council.

Project description (description of the activity)

"Connected homes" is one of the programmes from Costa Rica's 2015-2021 National Telecommunications Development Plan. It is part of the range of institutional services to be covered by the "Bridge to development" national strategy.

"Connected homes" aims to enable households in a vulnerable situation to have an Internet connectivity service within the home and a connectivity device (laptop) at a lower price than commercial rates for a period of three years.



The financial resources for this project come from the National Telecommunications Fund (also known as Universal Service Fund). The goal is to reach more than 140 000 households countrywide, especially in those districts that have been identified as a priority under the “Bridge to development” national strategy, led by the Second Vice-President.

To access these benefits, the head of household must:

1. Go to a telecommunication operator store of their choice, which should be duly authorized to participate in this programme
2. Check the fees that the household must pay for 36 months in order to participate in the programme
3. Sign a contract with the operator in which the payment rates and the obligations in regard to safety and equipment use are established.

The requirements that must be met by the household are:

1. Not to have Internet service in their house
2. To have a household income ranging between income deciles I and V (poverty and extreme poverty), as defined by the National Institute of Statistics and Censuses.
3. To have a family member that is a female micro-entrepreneur, a female head of household, a student not older than 25 years of age, an elderly person, a person with a disability or an indigenous person.



Meeting with parents and students

Examples of linkages between the WSIS Action Line and the SDGs

This programme is defined as a social and economic initiative to achieve the national political priorities. In line with the United Nations SDGs, by increasing the accessibility of information technologies for vulnerable segments of the population we can achieve the following objectives:

1. **SDG 1:** No Poverty: This programme focuses on low-income families by providing a tool to increase their income and employability.
2. **SDG 2:** Good Health and Well-Being: The development of new e-government health applications will provide people with greater access to information and on-request health services, ensuring healthy lives and promoting well-being for everyone, irrespective of age
3. **SDG 4:** Quality Education: By accessing international websites as well as local educational applications, students and families can access more and better educational services. Info-literacy is also included. In this way, education is more inclusive and equitable and provides lifelong learning opportunities for all.
4. **SDG 5:** Gender Equality: In families, especially single-mother families, women and girls will have the access they need to achieve gender equality, empowerment and self-development.
5. **SDG 8:** Decent Work and Economic Growth: The digital economy is one of the main engines of development. Innovation can be pursued and new businesses created using information technologies. With the resulting inclusive and sustainable economic growth, full and productive employment and decent work for all can be achieved.
6. **SDG 9:** Industry, Innovation and Infrastructure: The higher demand for broadband will foster the building of a bigger and more resilient telecommunication infrastructure, in an open and competitive market.

7. **SDG 10:** Reduced Inequalities: Access to information technology for vulnerable groups dramatically reduces inequality within the country, almost instantaneously enabling access to more information and to better products and services at very low cost.
8. **SDG 11:** Sustainable Cities and Communities: Internet access is one the most important basic services necessary within a household to make cities and human settlements inclusive, safe, resilient and sustainable.
9. **SDG 12:** Responsible Consumption and Production: E-commerce generates an entirely new market that is much bigger, dynamic, competitive and less expensive. This creates benefits mainly for small and medium-sized businesses and consumers, generating economic growth.
10. **SDG 13:** Climate Action: Through teleworking via the Internet, people will spend less time using transportation, thereby reducing their carbon footprint.
11. **SDG 16:** Peace, Justice and Strong Institutions: Through greater access, people will have more information at their disposal to investigate and assess different organizations, making for a more transparent society. This will also promote peaceful and inclusive societies.
12. **SDG 17:** Partnerships for the Goals: Enabling low-income population segments to access the Internet will expand globalization and generate new partnerships for sustainable development, as demonstrated by this PPP.

Highlights of the project’s partnership activities

“Connected Homes” is part of the National Telecommunications Development Plan, the “Bridge to Development” Strategy, and the Costa Rican “crdigit@l” Strategy headed by the Presidential Social Council. The programme is financed through FONATEL (USF). Several telecommunication companies receive the corresponding subsidy and sell the bundles to the beneficiaries. The information technology industry provides computers to the telecommunication companies.

This programme is thus a great public-private partnership (PPP), in which the Government provides the subsidy, defines the policy and identifies the families, and the private sector implements the programme. Other institutions support the initiative, promoting it, providing content, software licences and e-government applications, and training people in digital literacy.

It is a programme whereby each stakeholder provides its best competencies to achieve the goals.

The “Connected Homes” programme is also aligned with and supports other programmes, creating synergy and engaging in mutual collaboration with them. The main ones are:

Institution	Programme / public policy	Description
Vice-Ministry of Telecommunications; Ministry of Science, Technology and Telecommunications	2015-2021 National Telecommunications Development Plan of Costa Rica	Planning and general orientation tool for the telecommunication sector whereby the goals, objectives and priorities of the sector are defined.
IMAS (Joint Institute for Social Aid); MEP (Ministry of Public Education)	Avancemos (Let’s Advance)	Promotes retention and reintegration into the formal educational system of adolescents and young people from families who are struggling to keep their children in the education system for economic reasons.

Institution	Programme / public policy	Description
Office of the Second Vice-President	“Bridge to Development” National Strategy	Assistance for families in extreme poverty, ensuring their welfare and a genuine possibility of access to social protection; a second stage will involve capacity enhancement and then linkage with employment and production.

Challenges and future perspectives for the project

One of the biggest challenges is to achieve the necessary public-private coordination in order to meet the proposed target of covering 140 000 families in poverty and extreme poverty, and for their heads of household to set aside a portion of their income to subscribe to an Internet service with a connectivity device bundle. This requires informing the population about the great opportunities that are generated by having access to digital technologies. Principio del formulario

Along the same lines, the next challenge is to achieve inter-agency coordination in the interests of generating digital content focusing on the development of skills and of productive capacities.

Views on the WSIS Stocktaking and Prizes contest

From the perspective of public policy, the WSIS Stocktaking process is a very important input for decision-making. The database enables familiarization with high-impact projects being developed in all the regions of the world and the rapid identification of websites on which further details of each project may be found. This feature is crucial for the definition of public policy since it makes for easier and more rapid consultation of up-to-date benchmarks relating to recent experiences that could be adapted to the reality of other locations.

The WSIS Prizes recognize the hard work being done by governments, international organizations, the business sector, civil society and other entities, whose efforts enable stakeholders to work towards SDG achievement through ICTs. They are an incentive for everyone to continue making their contribution in the search for a more inclusive information society.

WSIS Prize Champions

Project name:	Mobile ICT Centers (Télécentres de Proximité Mobile)
Organization:	Ministère de la Formation et de l’Enseignement Professionnels
Country:	Algeria

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.

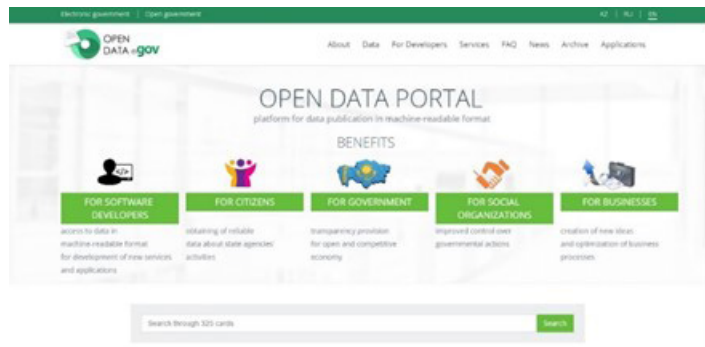


Project name: Open data

Organization: National Information Technologies JSC

Country: Kazakhstan

Development of transparent and accountable government is one of the five key priorities of a number of institutional reforms announced by the Head of State of **Kazakhstan**. Government agency “openness” was defined by the President of the Republic of Kazakhstan in the “100 Specific Steps” national plan. Kazakhstan is embracing the concept of transparency by implementing the *Open Data project*, launched in 2013 with the objective of implementing transparency and accessibility principles and permitting the repeated usage of data generated by government and quasi-governmental organizations. This project enables citizens to be aware of key and socially-important areas of the government’s activities, this being in line with **several SDGs** in terms ensuring well-being for all and providing access to information throughout the country.



Project name: Create information and training resource center for people with disabilities
Organization: Institute of Electronics and Telecommunications
Country: Kyrgyzstan

The Institute of Electronics and Telecommunications of **Kyrgyzstan** launched the *Create information and training resource centre* project, designed for people with disabilities. The centre, which is equipped with standard and supporting ICT tools adapted to the needs of different categories of user, assists in the development of information and educational materials and the training of teachers to provide people with disabilities with the skills they need to use ICT tools. As it looks towards international implementation (Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan), the initiative relates to several SDGs in view of its focus on the provision of quality education and reduction of inequality, as well as the promotion of economic growth and peaceful and inclusive societies (**SDGs 4, 8, 10 and 16**).

Project name: TRA-ITU ICT Discovery Museum
Organization: Telecommunications Regulatory Authority
Country: United Arab Emirates

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.



C4 - Capacity building

WSIS Prizewinner

Project name: Smart Online SMEs (S.O.S.) by Thaitrade.com
Organization: Department of International Trade Promotion (DITP)
Country: Thailand

Basic information

In **Thailand**, the Department of International Trade Promotion (DITP) is a Trade Promotion Organization (TPO) operated under the Ministry of Commerce of the Royal Thai Government. The DITP is committed to providing service excellence to Thai entrepreneurs, irrespective of their size (small, medium or large), in international business to promote Thailand as a major gateway to Asia.



Project description (description of activity)

Operated by Thaitrade.com under the DITP, the “Smart Online SMEs” (S.O.S.) programme was established to reduce the gap between Thailand’s rich and poor. After it was found that the provision of an e-marketplace, Thaitrade.com, was not fully addressing the problem owing to a lack of understanding of the importance of online trading and to inadequate familiarity with the use of online tools, a series of knowledge-sharing sessions and inspiration-building campaigns were conducted in

five provinces. In the period 2010-2015, the programme catered for over 4 000 people, some 2 700 of them from rural areas.



Examples of linkages between the WSIS Action Line and the SDGs

One of main means to enable local communities in both central and regional areas to be fully aware of and understand non-traditional services, and to utilize them in order to generate income, is “knowledge-sharing sessions”. The knowledge-sharing sessions run by S.O.S. are implemented to ensure that those in rural and underserved areas understand ICT capabilities in the interests of generating income for their communities. Moreover, the sessions promote the production of useful and socially meaningful content. Such knowledge provision is aimed at ending poverty in all its forms (**SDG 1**), building resilient infrastructure, promoting sustainable industrialization and fostering innovation (**SDG 9**) and reducing inequality within the country, irrespective of geographical location (**SDG 10**).

As part of the knowledge-sharing sessions, the education and training programmes involve a range of techniques to ensure that opportunities to participate in the information society can be accessed. The techniques, including one-on-one clinics, hands-on workshops and group discussions, are designed to cover inclusive and equitable quality education and promote lifelong learning opportunities for all (**SDG 4**). What is more, the techniques are tailored to fit the types of participant in order to achieve sustainable economic growth and employment for all (**SDG 8**).

S.O.S. utilizes the DITP’s partners to enable various cooperation activities in order to enhance the capacity of Thai SMEs. With consistent cooperation with partners being pursued not only domestically but also globally, the DITP is constantly fostering further partnerships, both with other government bodies and with private organizations around the world, thereby enabling the sustainable development of cooperation (**SDG 17**).

Highlights of the project's partnership activities

The S.O.S. programme has been hosting and co-hosting activities nationwide with its partners, not only domestically but also internationally. The highlights are:

- Global partners: seminars and clinics hosted around the country with Google Inc. in March and November 2015.
- Domestic partners: knowledge-management sessions with regional branches of the DITP in Thailand.



Challenges and future perspectives for the project

- Lack of funds to physically embrace the importance of the online trading platforms
- Lack of responsiveness to buyers' inquiries
- Lack of a proactive approach to the consistent marketing of products and services
- Availability of a stable, high-speed Internet connection
- Fraud protection.

Views on the WSIS Stocktaking and Prizes contest

The DITP truly appreciates ITU for organizing the WSIS Stocktaking and Prizes contest, which serves to highlight the true potential of the developing and less-developed countries with respect to the application of ICT to help foster the development of the information society. When stakeholders see countless success stories involving the implementation of ICT-related projects worldwide, they are for the most part happy to share their own stories. Moreover, the DITP is confident that many organizations around the world are also inspired to apply ICT to their operations, enabling communities to benefit from the age of the information society.

WSIS Prize Champions

Project name:	IT Education
Organization:	Educational Center of High Technology Park
Country:	Belarus

In **Belarus**, the Educational Centre of High Technologies Park (EC HTP) provides training to junior-level IT specialists under its *IT Education* initiative. During the period January-November 2015, thanks to their training at EC HTP, some 200 graduates, many of whom had no previous IT background or experience before receiving training at the centre, secured employment with IT companies in Belarus. In the five years that have passed since EC HTP released its first graduates (five from the Java Developer programme and seven from the Software Testing Engineer programme), the centre has experienced considerable progress in the areas of training and development, and is currently providing training to over 200 students on 20 different programmes. The total number of EC HTP graduates having obtained employment is in excess of one thousand.

The initiative's goals relate to **SDGs 4** and **8**, having to do with equitable quality education and the promotion of sustainable economic growth and lifelong learning opportunities.

Project name:	Financial literacy for children- accessible and funny
Organization:	Lyuben Karavelov Regional library
Country:	Bulgaria

In **Bulgaria**, the *Financial literacy for children - accessible and funny* project is aimed at transforming a public library into a modern, accessible and innovative environment in which children and young people can acquire basic financial literacy and receive training to become conscious future users by means of ICT, in an environment in which they learn how to use their mobile devices for spending, saving, investing or donating. An interactive auditorium has been equipped and trainers have been trained in the provision of early financial literacy for children and young people. The training programmes impart knowledge of basic financial terms and services in an enjoyable manner, using mobile devices and applications.

This is in line with the provision of quality education and ensuring sustainable consumption and production patterns (**SDGs 4** and **12**).



Project name: Free Basic Digital Literacy Training

Organization: Malvar Community eCenter

Country: Philippines

In the **Philippines**, *Free Basic Digital Literacy Training (FBDLT)* is a training activity conducted free of charge by the Malvar Community eCenter (CeC). Four stationary CeCs and one mobile CeC contain 39 desktop and 13 laptop computers. With the goal of making a difference in the lives of constituents, free training is provided in word processing, spreadsheets, multimedia, Internet browsing, use of social media and e-mail. The clients of *FBDLT* are housewives, retirees, senior citizens, young people not attending school, children with special needs, volunteers, municipal and barangay officials and employees, tricycle drivers, elementary and secondary school pupils and students.

The initiative fulfils such SDGs as fighting against poverty, achievement of gender equality and promotion of sustainable economic growth of the country (**SDGs 1, 5 and 8**).

Project name: Dubai Smart Training Initiative

Organization: The Executive Council- Government of Dubai

Country: United Arab Emirates

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.



C5 - Building confidence and security in the use of ICTs

WSIS Prizewinner

Project name:	Certification Programme for better ICT services
Organization:	Office of Electronic Communications
Country:	Poland

Basic information

The President of the Office of Electronic Communications (UKE) is the national regulatory authority for the telecommunication and postal services market in **Poland**. The President of the UKE is also the specialized authority in the area of equipment conformity assessment, including telecommunication terminal equipment and radio equipment.

Project description (description of activity)

The President of UKE grants one-year certificates to telecommunication undertakings in five categories: Safe Internet, Senior, Junior, Offer Comparison Website and Handicapped-friendly. Each of the three categories has its own goals:

1. The Safe Internet category is designed to:
 - encourage the activities of telecommunication undertakings intended to ensure the safety of network users, including above all children and young people, and their protection against cybercrime;
 - improve the quality of services provided.
2. The purpose of the Senior category is to:
 - encourage the elderly to improve their skills in the use of new technologies and cheaper forms of communication.
3. The Junior category focuses on:
 - child protection against harmful content that could be encountered via premium-rate services or the Internet;
 - improving the protective shield against the harmful influence of inappropriate content on children.
4. The Offer Comparison Website category aims to:
 - increase the availability of information on offer to consumers to enable them to make the best choice from among the available services;
 - encourage operators to formulate thoroughly transparent offers and to support equal and effective competition in the telecommunication market.
5. The Handicapped-friendly category aims to:
 - support equal and effective competition in the provision of telecommunication services and ensure that end users, including users with disabilities, benefit from optimum protection in the telecommunication sphere;

- ensure equal opportunities for people with disabilities in terms of access to telecommunication services;
- create, for people with disabilities, special (optional) facilities to improve their ability to function in the telecommunication market, thanks to expanded access to new technologies and new, cheaper forms of communication (according to the type and degree of disability).



Examples of linkages between the WSIS Action Line and the SDGs

The “Certification programme for better ICT services” project links to **Goal 12**: Ensure sustainable consumption and production patterns through improvement of quality of services provided by telecommunication operators as well as promotion of good practices and good behaviour patterns. This project has made a considerable contribution to safe Internet usage, to supporting and improving the digital literacy of people aged over 50, as well as to increased access to transparent information about available offers. The Certification Programme aims to promote equal and effective competition in the provision of telecommunication services, and to ensure the widest possible consumer protection.

This programme will be continued over the coming years, constituting a “quality stamp” that is important for both subscribers and telecommunication undertakings.

Challenges and future perspectives for the project

The possibility of expanding this initiative by adding new categories and thereby attracting new partners for and participants in the President of UKE’s Certification Programme.

Views on the WSIS Stocktaking and Prizes contest

ICTs empower billions of individuals around the world with wide-ranging applications cutting across sectoral boundaries in agricultural productivity, population, health and education, transportation, industry, trade and finance, climate change and protection of the environment, as well as in the prevention and management of disasters, among many other spheres. The WSIS Stocktaking and

WSIS Prizes provide an opportunity to discuss new initiatives in those areas for strengthening international efforts in the transfer of know-how in the implementation of the WSIS Action Lines and for identification of best practices in the ICT ecosystem in a multistakeholder format.

WSIS Prize Champions

Project name: First Moroccan Electronic Certification Service Authority and Provider

Organization: The Moroccan Post

Country: Morocco

In 2011 the postal entity of **Morocco**, Poste Maroc, aware that digital services cannot be developed without the requisite technological, operational and legal measures, launched *Barid eSign* in order to satisfy the need for a certification platform to ensure the safety, integrity and probative value of all electronic exchanges. Through the development of Barid eSign, Poste Maroc is positioning itself as the first Moroccan electronic certification service authority and provider for dematerialized transactions. Through Barid eSign, Poste Maroc has reached the first milestone in its development strategy for digital postal services and positioned itself as a leader in the secured electronic correspondence/exchange market.

The project's goals align with **SDGs 4, 9 and 17** by focusing on lifelong learning opportunities for all, sustainable industrialization and revitalization of the global partnership for sustainable development.



Prestataire de service de certification électronique

Project name: Oman Public Key Infrastructure

Organization: Information Technology Authority

Country: Oman

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**).

Project name: Multimedia distance-learning course on the safe use of Internet resources
Organization: A.S. Popov Odessa National Academy of Telecommunications
Country: Ukraine

In **Ukraine**, the A.S. Popov Odessa National Academy of Telecommunications developed the *Multimedia distance-learning course on the safe use of Internet resources* project, which represents a part of the CIS (Commonwealth of Independent States) regional initiative on “Creating a child online protection centre for the CIS region”, adopted at WTDC-14 (Dubai, UAE), with the support of the A.S. Popov National Academy. The course is divided into three parts: basic (for pre-school and junior schoolchildren); intermediate (for children in classes 5 to 9); and advanced (for senior pupils, students, parents and teachers). Each course is based on thematic modules with tests after each module.

The project aims to ensure quality education and promote learning opportunities for the CIS region (**SDG 4**).



Project name: DEWA Smart Power Plant System
Organization: Dubai Electricity and Water Authority (DEWA)
Country: United Arab Emirates

In the **United Arab Emirates**, the Dubai Electricity and Water Authority (DEWA) began implementing the *GD Smart Power Plant (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**).

C6 - Enabling environment

WSIS Prizewinner

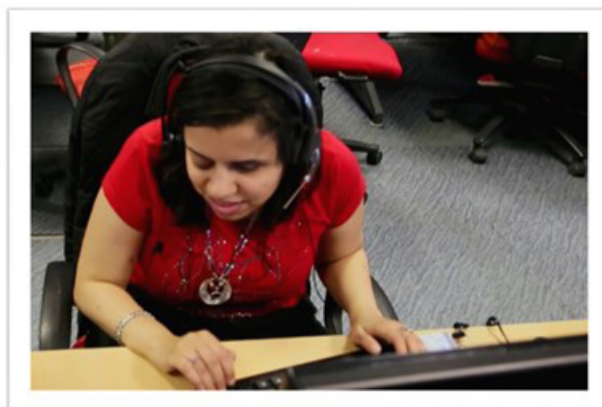
Project name:	Life Long Learning and Employment for People with Disabilities
Organization:	Ministry of Communications and Information Technology
Country:	Egypt

Basic information

The Ministry of Communications and Information Technology (MCIT) was established in 1999 to develop the national ICT sector in **Egypt**. MCIT's vision consists in "Achieving the digital economy through ICT to provide prosperity, freedom and social equity for all.

Project description (description of activity)

Persons with Disabilities (PwDs) are not offered the appropriate training programmes that would help them meet job market requirements, and are consequently experiencing a high level of unemployment. In full cooperation with the PwD community and with a number of prominent NGOs and the Communications and Information Technology Chamber of Commerce, MCIT launched a Life Long Learning (LLL) programme to help PwDs find job opportunities. The training programmes on offer range from basic IT and soft skills to specific technical skills stipulated by those IT companies that are interested in hiring PwDs.



Examples of linkages between the WSIS Action Line and the SDGs

PwDs need intensive capacity-building in order to be able to utilize ICTs as a tool for communication and knowledge acquisition and to gain the qualifications needed for the jobs on offer in the ICT private sector. In addition, they need skills enhancement to ensure their integration in the work environment. This is the first Egyptian specialized programme to target the capacity-building and employment of PwDs using ICTs. The programme offers two grants: “The International Computer Driving Licence for PwDs” (ICDL) grant, and the “PWD training for better employment” grant. It has thus far benefited 1073 persons with different disabilities and has resulted in employment for 83 per cent of the graduates of the “PWD training for better employment” grant. The programme provides PwDs with an enabling work environment in which appropriate ICT assistive technologies are in place, and where PwDs are equipped with the technical and personal skills required for the job and for integration in the workplace. The programme thus contributes to several **SDGs**, tackling such problematic issues as poverty, quality education, employment of specific people, etc. (**SDGs 1, 4, 8 and 16**).



Highlights of the project's partnership activities

The importance of this public-private partnership (PPP) project stems from its ability to mobilize the community to work together to support the capacity-building and employment of PwDs.

Creation of an innovative cooperation model between the private sector and NGOs, where one NGO partially supports the salaries of the employed PwDs on a descending basis, as follows: 100 per cent of the salaries over the first six months; 50 per cent by the NGO and 50 per cent by the hiring company over the next three months; and 25 per cent by the NGO and 75 per cent by the hiring company over the last three months of the first year. This model has been very effective in encouraging companies to ascertain PwDs' abilities and qualifications on a practical basis, at a reasonable cost (given the economic situation after the revolution), before committing to hiring them. All employees who were hired during the first year of the programme are still working on full pay with their respective companies.

Successful partnering with 16 ICT companies, highlighting the possibility of employing a large number of PwDs in prestigious companies.

Challenges and future perspectives for the project

The programme has faced a number of challenges, but the responsible team has succeeded in taking appropriate mitigation measures:

1. **At the strategic level:** Owing to the prevailing negative mindset about PwDs and their abilities, skills and level of productivity, it was difficult to find and align with partners and to convince the private sector to employ PwDs. This has been mitigated through continuous discussion and by presenting best practices in other counties to potential partners.
2. **At the economic level:** Owing to the recent changes in the political situation in Egypt and to the attendant economic challenges, companies were minimizing their spending by, among other things, laying off employees. This made employing PwDs at ICT companies an extremely difficult process, in particular at the beginning of the programme. This was overcome by the creative cooperation model established with NGOs, which partially supported the salaries of PwDs over the first year of employment. In addition, MCIT provided the companies with the requisite specialized accessibility software.

3. **At the operational level:** Since this is the first intensive programme for the utilization of ICT in the employment and capacity-building of PwDs, there were many operational challenges. For example:
- Only a handful of centres were equipped to train PwDs. This was mitigated by helping other centres to have the requisite accessible IT infrastructure and software.
 - The fact that PwDs required courage to enroll in the programme, following the exclusion they had previously experienced, resulting in low numbers of applicants during the first year of the programme. This was mitigated through partnering with more NGOs to disseminate information on the programme, and by conducting more than 25 awareness-raising sessions (separate sessions and at relevant conferences and events), where success stories were related in order to boost PWD confidence. Another mitigation measure involved communicating the programme to all governors, ministers and university presidents.

Views on the WSIS Stocktaking and Prizes contest

The WSIS Stocktaking Prize Contest is an effective mechanism not only for recognizing best practices but also for showcasing, sharing and exchanging experiences among winners on projects that can make a difference. Since projects are selected according to the number of votes they get from their communities, the projects selected are sure to be those making the highest impact. It is also an indirect way to raise awareness at the local community level on successful projects, their values and their impact.

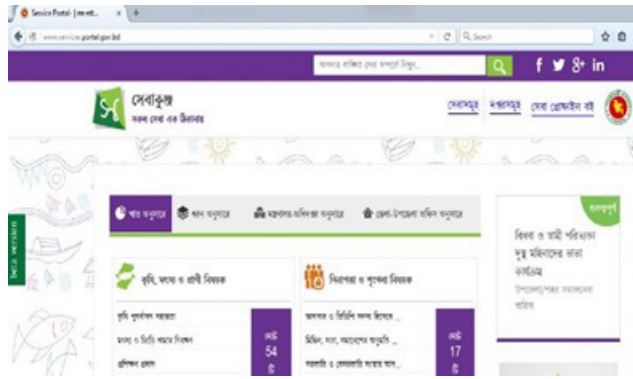
WSIS Prize Champions

Project name:	SPS for Increased Transparency, Efficiency and Responsiveness
Organization:	a2i, Prime Minister's Office
Country:	Bangladesh

Digital **Bangladesh** is a long-term vision of human development through leveraging the flexibility and ubiquity of ICTs. With a whole-of-government approach, a2i (Access to Information) – the facilitator of this innovative agenda from the Prime Minister’s Office – has mobilized the entire government machinery through:

- service process simplification (SPS) and the Services Portal – tool
- a systematic capacity development approach – capacity
- annual performance agreements (APAs) – policy support.

This combination has created an enabling environment to empower civil servants at all tiers of government to improve the quality of services by reducing service delivery inefficiencies. The project also aims to increase transparency, efficiency and responsiveness, while addressing the empowerment of women, inequality and global partnership (**SDGs 1, 5, 10, 16 and 17**).



Project name: Law on Access on Information

Organization: Mazhilis of the Parliament

Country: Kazakhstan

The objective of the *Law on access to information* in **Kazakhstan** is to ensure the legal conditions whereby individuals and legal entities can have access to the information held by government agencies and other information holders with respect to:

- the use of funds assigned from the government budget
- legal market entities occupying a dominant or monopolistic position
- prices for goods/works/services manufactured/sold by such entities.

The project also seeks to involve citizens in government-agency decision making at all levels, especially local, through the open-government mechanism. Thus, fostering secure access to ICTs, the project is related to **SDGs 8, 10, 11** and **16**.



Project name: Mobile Telephony Plans Comparator

Organization: Instituto Federal de Telecomunicaciones

Country: Mexico

In Mexico, the *Mobile Telephony Plans Comparator* is an online tool that makes it easy for users to compare the current mobile phone service packages on offer and find out specific contractual details regarding such things as monthly subscription charges, voice minutes, text messages, megabytes, characteristics, tariffs and options. It also offers valuable statistical and user habit information derived from its quality surveys. On the basis of user acceptance and participation, the Plans Comparator is constantly being updated with new data to facilitate decision-making, thereby positioning itself as the only tool of its kind in Mexico backed by a government institution.

Thus it aims at promoting peaceful societies, sustainable industrialization and secure access to information (**SDGs 9** and **16**).



Project name: ICT Policy for the Federal Public Administration

Organization: The Presidency of Mexico

Country: Mexico

Endorsed by the Mexican Presidency, the *ICT Policy for the Federal Public Administration* programme enables alignment of the ICT federal budget in order to guarantee fulfilment of the objectives of the National Digital Strategy. Furthermore, it promotes equality among government agencies of the Federal Public Administration by democratizing access to cutting-edge technology. Agencies that are less developed in terms of ICT have the opportunity to make a technological leap, irrespective of their size, number of staff or general budget, resulting in the equitable acquisition of technology. This is the first time the Federal Government has digitized the ICT procurement processes, creating efficiencies in more than 12 per cent of the ICT budget.



C7- e-Government

WSIS Prizewinner

Project name:	e-National Judicial System
Organization:	Ministry of Justice
Country:	Turkey

Basic information

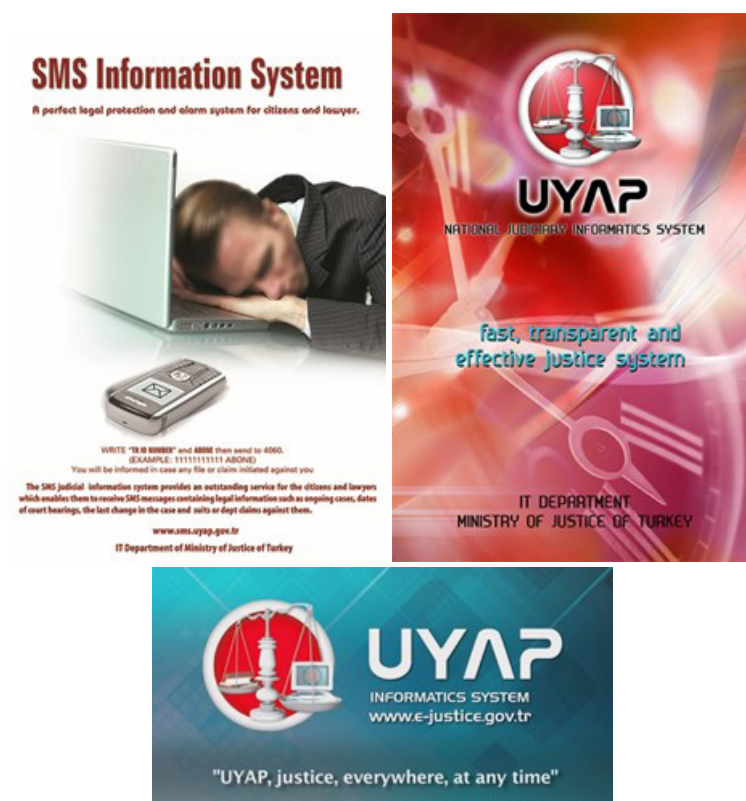
The Constitution of **Turkey** sets out in Article No. 2 that the Republic of Turkey is a democratic, secular and social state governed by the rule of law; and, under Article No. 36, that everyone has the right to a legal remedy either as plaintiff or defendant and the right to a fair trial before the courts. In 1998, the IT Department of the Ministry of Justice of Turkey (MoJ) was established with the duties and responsibilities to establish, operate and maintain the informatics system in cooperation with the judicial units.

Project description (description of activity)

UYAP, as an outstanding and comprehensive e-justice system, was developed to address the chronic problems of the Turkish judiciary. The problems faced by the Turkish judiciary were complex, including enormous workloads, insufficient numbers of staff, missing or chaotic files, delayed cases, inadequate training, outdated equipment, inability to keep up with technological change and lack of effective administrative support. The effects of this inefficient judiciary were detrimental to public confidence in the judiciary, preventing access to justice. ICT support was urgently required in order to transform an old-fashioned, outdated, poorly working judicial system into a modern, effectively-functioning organization which has earned the confidence of society. UYAP is a complex and integrated system which consists of the following sub-modules:

- **Citizen Portal:** The Citizen Portal offers citizens electronic access to execution offices, and all judicial and administrative courts. Citizens can connect to the portal via the Internet using their e-government password, e-signature or mobile signature, open online cases and online enforcement proceedings (e-tracking), and follow the main phases (cause of case, value of the claim, parties, phase of case, hearing dates, supreme court phases, etc.) relating to their own cases that are currently pending.
- **Lawyer Portal:** Lawyers can open online cases and online enforcement proceedings (e-tracking) via UYAP by connecting using their e-signature, mobile signature or e-government password and have online connection during office hours. Lawyers can view their open and closed cases with procuration *intra vires*. Lawyers can also view other cases without procuration by getting approval from the authorized judge.
- **Institution Portal:** The UYAP Institution Portal Information System is a service offered by the Ministry of Justice for both public and private institutions. Via the Institution Portal, institutions can follow online their case files that are closed or pending in judicial and administrative courts and execution offices.
- **Expert Portal:** The Expert Portal is a service provided by the Ministry of Justice for experts working on judicial case files. With this service, experts can follow their files electronically without going to the courts.

- **SMS Information System:** The Ministry of Justice has signed a cooperation protocol with GSM operators whereby court decisions and other judicial proceedings information are sent via SMS to the mobile phones of the relevant people. As a mobile complement of UYAP, the SMS Information System is for both lawyers and citizens. Up to now 1 346 762 subscribers to the SMS system and parties have been informed via the system.
- **SEGBIS (Audio and Video Information System):** SEGBIS provides for listening to people who are outside the judicial locality or not attending a trial, recording their interventions via videoconference.
- **E-Sales Portal:** The e-Sales Portal is a service allowing the enforcement and bankruptcy offices to publish bids and offer by collateral to the bid by electronic deposit.
- **Electronic Ads (E-Ads):** E-Ads is an e-government application for publishing information and documents of judicial units as required by legislation over the Internet.
- **E-Justice Portal:** Users can access directly the UYAP applications, Distance Learning, Help Desk, Data Bank, E-Mail and Op-ed Page, E-Signature and Information Security website via the e-Justice Portal as the main and single means of entry to the UYAP system.



Examples of linkages between the WSIS Action Line and the SDGs

UYAP aims to ensure that all persons have access to high quality legal services to protect their rights and benefit from equal opportunities to access judicial services (**SDG 16, target 16.3**). Seventy-eight million citizens and 40 000 lawyers in Turkey follow their proceedings online without going to the courts, using authenticated e-ID. UYAP ensures that the design of its interfaces does not make it difficult for a physically handicapped or visually impaired person. UYAP provides transparency and fairness to the judiciary thanks to electronic and instant access to the files and work of the courts as one of the most important measures to be taken. The use of objective criteria for the assignment of files, determined in an electronic environment, also prevents corruption and promotes trust. The smarter and intelligent central e-justice knowledge management system has improved the functioning of the entire judiciary through the use of ICT. All judicial units have been fully equipped with the

necessary ICT tools and document and case management systems, interconnected to each other by a secure network with access to the UYAP central database which contains all relevant information needed in the judicial proceedings. UYAP has thus transformed an old-fashioned, paper-based judiciary into a smoothly functioning organization assessed as the biggest revolution in the Turkish judiciary, thereby contributing to the sustainable industrialization of the country (SDG 9). UYAP employs modern software such as case management systems, electronic diaries and listing systems to allow judges to do their main job more quickly and effectively, preventing delays and inefficiencies.

Highlights of the project's partnership activities

UYAP integrates judicial units not only with each other, but also with other governmental and private institutions. This allows electronic access to every kind of data needed during both civil and criminal proceedings. Databases of government departments have been integrated with UYAP so as to enable rapid online information sharing among concerned authorities. The UYAP system has subsystems comprising public prosecutors, courts, forensic medicine, prisons, the Constitutional Court, Supreme Court and Council of State. UYAP is also integrated with approximately 50 external systems such as the Record of Convictions and Statistics, Population and Citizenship Unit, other ministries, police departments, Land Registry, Postal Service, Social Security Institution, Information and Communication Technologies Authority and banks. During trials, judges can access criminal records and birth certificates online, in line with their authority. For example, land, address and driver registrations can be retrieved instantly at the beginning of trials.

Challenges and future perspectives for the project

Information and communication technologies play a major role in the development and improvement of the judicial process. They help deal with the growing complexities of litigation and make hearings faster and more efficient. The creation and maintenance of an effective, modern and capable judiciary is one of the main challenges of this project. The challenges emerging in the development of technological solutions in the UYAP system come in the form of problems related to the infrastructure of the appropriate technology. The integration of existing databases as well as searching within the entire judicial sector is another challenge for UYAP. This requires the development of systems that not only run based on a single organization, but also link different prosecutors' offices, courts and lawyers. Resistance to the use of technology in judicial activities is also a major challenge. In UYAP, all documents have to be sent within an electronic environment, and the legal status of the e-signature is another challenge. To meet this challenge, Turkey's MoJ was regulated under a legal framework with the passing of the Law on Electronic Signature, No. 5070, dated 15.01.2004. With this regulation, electronic signature has the same power of proof as hand signature.

Many countries are striving to implement national solutions in regard to e-transformation in the same manner as Turkey. It is considered that sharing the experiences gained in implementing the major, complex UYAP project would be interesting and beneficial to many countries of the world.

Views on the WSIS Stocktaking and Prizes contest

WSIS Stocktaking is a significant platform that showcases best projects and national initiatives in the field of telecommunication and information technology. The community significantly contributes to enhancing competitiveness and quality standards, as each participating country endeavours to highlight the progress and development attained in this area. Being responsible for developing and extending the e-national judicial system in Turkey, the MoJ's main objective is to achieve an honourable representation and positive image that reinforces the leading profile of Turkey in global events and forums and to ensure that the best and highest number of awards are won.

The quality and nature of the projects submitted for this year's contest highlight the enormous, successive and rapid developments taking place in many countries' government entities and

institutions, reflecting comprehensive vision and well-defined future plans and action strategies all aimed at further improving and developing this sector.

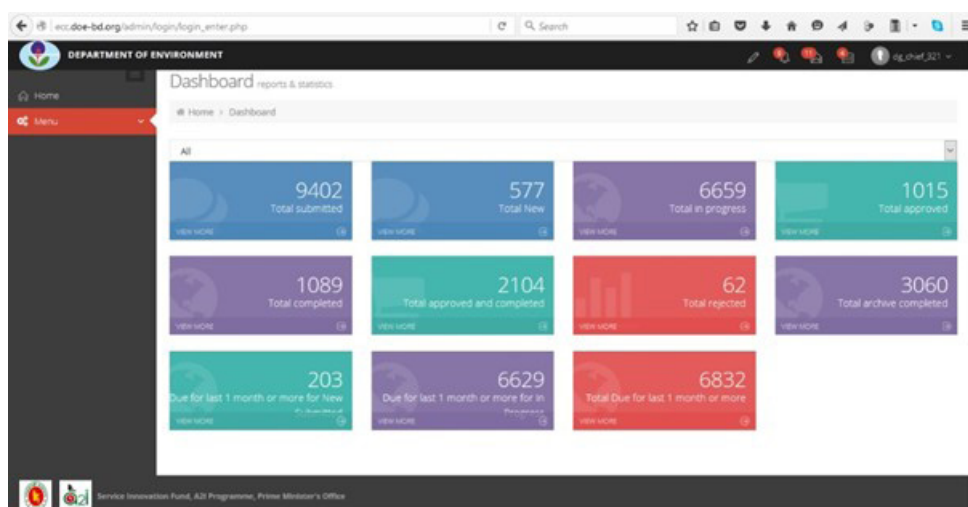
WSIS Prize Champions

Project name: Development of the web-based Environmental Clearance Certificate (ECC) Application System of the Department of Environment

Organization: Access to Information (a2i) Programme, Prime Minister's Office

Country: Bangladesh

In **Bangladesh**, the Department of Environment (DoE) developed the *Web-based Environmental Clearance Certificate (ECC) Application System* project. As the single most important agency mandated to preserve and protect the environment, DoE had to handle the reluctance of businesses to apply for the ECC on account of the cumbersome and time-consuming application process. By developing an innovation supported by the Service Innovation Fund (SIF), it has re-engineered this project, making it more transparent, accessible, accountable and user-friendly, resulting in a 200 per cent jump in applications and a 20/57/33 per cent decrease in time/cost/visits, respectively, within seven months of its launch, doubling the corresponding revenue and demonstrating visible progress on **SDGs 9** and **13** – building of resilient infrastructure, promotion of sustainable industrialization and combating climate change and its impacts.



Project name: Kanyashree Online 3.0

Organization: Department of Women Development and Social Welfare, Government of West Bengal

Country: India

In **India**, *Kanyashree Online 3.0* is a multi-user government to citizen (G2C) application that provides comprehensive e-governance of *Kanyashree Prakalpa*, a conditional cash transfer (CCT) scheme implemented by the government of West Bengal. *Kanyashree Prakalpa* aims to reduce child marriage and increase the educational status of adolescent girls, thus promoting healthy lives, equitable,

quality education, gender equality as well as peaceful and inclusive societies (**SDGs 3, 4, 5, 10** and **16**). Kanyashree Online provides end-to-end ICT-enablement to the scheme, serves as a real-time monitoring mechanism for the scheme's MIS, and promotes the scheme's accountability, transparency and efficiency.



Project name: Integrated Call Center

Organization: National infocommunication holding "Zerde"

Country: Kazakhstan

Initiated by the national infocommunication holding "Zerde", the *Integrated Call Center for public services (ICC)* project is an information and referral service that provides 24x7 consultation assistance on public services to citizens. ICC's main objectives are:

- To provide a single access point for citizens to obtain information on public services
- To improve the level of public awareness about government agencies' activities and the procedure for public services delivery
- To improve the accessibility of information on public services and the forms of delivery thereof to citizens
- To interact with government agencies on issues relating to the provision of information on public services.



Project name: Emirates Vehicle Gate

Organization: Ministry of Interior (Mol)

Country: United Arab Emirates

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**).



C7 e-Business

WSIS Prizewinner

Project name:	ATTA'A System
Organization:	Atta'a for helping charity organizations
Country:	Saudi Arabia

Basic information

Project name: Atta'a System.

Basic information concerning your entity: Dr Abdulsalam Alsulaiman (personal)

Project description (description of activity)

The Kingdom of **Saudi Arabia** (KSA) has numerous charity organizations involved in supporting families in need by providing cash, food and donations in kind. Such associations are responsible for receiving the enrolment applications from the families in need; they study the extent of their needs, and log the qualifying families in the system. The association then starts to provide its services to such families on the basis of available resources and different types of donations collected.

In the past, each association used to manage and direct such operations individually, using different types of conventional and advanced technologies, which resulted in numerous administrative problems and led to more difficulties for the families in need.

The importance of technology in business management in general is very important and well known. It is particularly important in a charity association's business operations too: the rapid advances in information and telecommunication technologies strengthen the various technological opportunities they offer for use by charity associations.

As a result, the need for the *Atta'a* project emerged, involving the automation of KSA charity associations' different functions and the linking of all such associations within one system- "*Atta'a*". This system can easily handle the associations' information systems, unify their common functions in one template and provide them with the government e-services.

Atta'a is responsible for automating the functions of all charity organizations in KSA, converting them to electronic means of transaction and linking them to one core system by designing and providing all the operational functionalities required to cater for the very different types and structures of organizations. In addition, it is capable of organizing an association's transactions, especially in regard to the collection of money and payment to the desired families, ensuring compliance with the principles of equity, integrity, abstinence, transparency and accountability, privacy and information security, and awarding the associations that use the system and follow its measures a ranking to reflect quality. Such ranking can be promoted in such a way as to strengthen the trust placed in those awarded it, particularly the donors.

Work on this system started in 2012, with a dedicated working team on charities and technologies. Pilot testing of the system was effected by a branch of the AlBir Association in Riyadh. During the test period, the observations of users and similar domain experts were logged, the system was further developed and numerous observations were conducted. Following the development of the system,

it was introduced to all AlBir association branches in Riyadh and connected to Riyadh's General Secretariat office, as well as to various other associations within Riyadh. The system was then applied in many other charity organizations across the Kingdom.

There are about 650 charity associations in the Kingdom, of which about 485 belong to AlBir⁽¹⁾. According to the latest information, the system is applied in all AlBir associations in the Kingdom, catering for all their different types and services in a flexible manner that accommodates the functions and information of all the associations. It is worth noting that development is still ongoing with a view to adding more features to the Atta'a system to meet all the needs of such associations based on study and analysis of their requirements.



Figure 1 – Prior to Atta'a, underprivileged people used to frequently visit the charities' premises to submit their needs.



Figure 2 – Nowadays they can apply through the system and receive their supplies through affiliated hypermarkets and their money via their bank accounts. This eliminates all embarrassment.

The project aims to ensure compliance with the basic principles required in the charity process in the Kingdom, among which:

- **Integrity:** This can be achieved by controlling the flow of charity funds to such associations as well as the expenditure of these funds, and by monitoring the relationships between the beneficiaries and charity associations' personnel.
- **Equity:** The Atta'a system can guarantee the delivery of charity to the right beneficiaries and prevent any charity from going to the wrong people as a result of bad management or the exploitation of weak people in the association itself.

¹ KSA Charity associations guide issued by the Ministry of Social Affairs in Ramadan 1435 AH.

- **Abstinence:** The Atta'a system is well suited to helping the beneficiaries in their frequent follow-ups with the associations by providing all required services, such as enrolment, inquiries and the receipt of dues, without the need to physically visit the association's premises. It can also contribute to maintaining the beneficiaries in a situation of abstinence, which can help in preparing them to transform easily from a state of need to greater self-sufficiency.
- **Transparency:** The Atta'a system can fulfill all transparency principles at different levels; donors can identify the end beneficiaries of their charity; and beneficiaries can identify the shares they are entitled to from the charity. Monitoring bodies can also ensure the functionalities of the ALBir charity associations.
- **Accountability:** The Atta'a system can contribute considerably to increasing society's trust in ALBir association operations.

It may be noted that delivery of the above objectives is ensured within an information security framework guaranteeing the protection of privacy. This includes the system's structure and the ALBir associations' transactions and procedures within the system.

Examples of linkages between the WSIS Action Line and the SDGs

By converting traditional charities to e-business, the Atta'a system achieves the objectives of WSIS Action Line C7 (e-business) to a considerable degree. The Atta'a system employs technology to provide information and e-transactions for those involved in the charity process.

Associations implementing the Atta'a system observed an increase in their levels of quality and performance, achieved by utilizing the Atta'a system's various features and reflected in relation to the association's management and at beneficiary and donor level. For example:

- Noticeable increase in performance of ALBir associations.
- Upgrading of the provision of services to beneficiaries.
- E-communications among different associations.
- Availability of a wide range of reports and statistics that can help in drawing up strategies.
- Establishment of enrolments in ALBir charity associations.
- Provision of information to the beneficiaries via the government e-systems and services.
- Rapid and efficient communications with beneficiaries.
- Processing of the beneficiaries' entitlements using ALBaraka accounts or through their bank accounts automatically.
- Distribution of charity to the entitled families with equity, per order and according to their needs.
- Ability to add an association's various projects utilizing the additional service feature in the system.

With these extraordinary results, the Atta'a project aims to continue seeking to automate all other ALBir associations in the Kingdom, have them transformed to e-service and link them in one core system. 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.



Highlights of the project's partnership activities

- 700 unemployed young people from various charity organizations across the Kingdom were given the opportunity to attend vocational training sessions and workshops aimed at assisting them in job seeking.
- Training sessions were organized to promote and facilitate the involvement of youth in different types of voluntary charity work.

Challenges and future perspectives for the project

The preparedness of associations to apply the Atta'a system varies. Associations were therefore classified in different categories reflecting their preparedness and ability to apply the system, among which:

- An available physical location for the association.
- Ensured availability of infrastructure required for the application (e.g. PCs and suitable Internet services).
- Existence of an actual and real organization structure.
- Sufficient qualified personnel able to interact with the system.
- Existence of an actual PC application that is current and in use in the association.
- Sufficient details of families benefiting from the service.
- Variety in the services provided to the families in need.

Based on the aforementioned information, charity associations can be categorized according to three main patterns, as follows:

First category:

- Existence of an actual physical location for the association.
- Availability of sufficient system infrastructure to ensure the system's application (PCs with good capacity and Internet services).
- Availability of an applied organization structure with a clear authority and responsibilities grid.
- Availability of qualified personnel capable of interacting with the system (10 or more).

- Presence of an actual PC application already in use in the association.
- Availability of electronic records for the families in need.
- Quality and variety in the services provided to the families in need.

Second category:

- Availability of actual premises for the association.
- Availability of sufficient system infrastructure to ensure the system's application (PCs with good capacity and Internet services).
- Clear personnel authority and responsibilities grid.
- Availability of qualified personnel capable of interacting with the system (10 or fewer).
- Availability of sufficient electronic means used in the association's operations.
- Details of the families in need (electronic or conventional).
- Families provided with limited services.

Third category:

- Availability of association's managers responsible for its activities.
- Lack of infrastructure to ensure the system's application or part thereof.
- Lack of personnel authority and responsibilities grid.
- Lack of qualified personnel capable of interacting with the system.
- Details of families in need available by conventional means only or details lacking.
- Poor service provision to the families in need.

Views on the WSIS Stocktaking and Prizes contest

The Atta'a system is a national project for managing and linking the information of all charity organizations in Saudi Arabia. It aims to provide equity, integrity, transparency, credibility, and avoid the humiliation of underprivileged people. The Atta'a team hopes that the system will achieve automation of the operations of charity organizations as well as the objectives for which the project was established. Listing the Atta'a system in the WSIS Stocktaking or, even better, winning the prize contest could give Atta'a a huge boost towards its application to each and every charity in Saudi Arabia.

WSIS Prize Champions

Project name:	Apps.co
Organization:	Ministry of Technology, Information and Communication
Country:	Colombia

Apps.co is the digital entrepreneurship initiative of the Ministry of Information and Communication Technologies of **Colombia**. It is framed as part of the "Vive Digital" plan which is aimed at generating economic and social advancement with ICT. Apps.co promotes the creation of ICT businesses, focusing on mobile/web applications and digital content. The objective is to transform entrepreneurs and ideas into sustainable and profitable businesses. The entrepreneurship community counts over 107,000 members.

More than 50,000 people have accessed online training programmes, and mentoring programmes have contributed to the creation and consolidation of more than 1,000 start-ups across the country.

The programme deals with such problematic issues as poverty, quality education and gender equality (SDGs 1, 4, 5). It also contributes to economic growth and fosters innovation (SDGs 8 and 9).



Project name: Financial reports depository

Organization: Ministry of Finance

Country: Kazakhstan

Launched by the Ministry of Finance in **Kazakhstan**, the “Financial reports depository” information system provides access to an electronic database where users can find information about the financial and economic activities and corporate events of public interest entities, thus fulfilling certain SDGs in regard to providing equal information access and promoting industrialization in the country (SDG 16). The entities include: financial institutions (except for legal entities engaged in foreign currency exchange operations), joint stock companies (excluding non-profit organizations), mining companies (excluding companies that produce commonly occurring minerals) and organizations with a state share in the statutory capital as well as state-owned enterprises based on business law.



Project name: Invest Easy

Organization: Ministry of Commerce and Industry

Country: Oman

The *Invest Easy* project 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.

Project name: Smart Navigation System

Organization: Smart Navigation Systems

Country: United Arab Emirates

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**).



C7 - E-learning

WSIS Prizewinner

Project name:	MexicoX-Platform of Massive Open Online Courses (MOOCS)
Organization:	National Digital Strategy
Country:	Mexico

Basic information

The National Digital Strategy (EDN, according to its initials in Spanish) is the action plan that the Government of **Mexico** is implementing to encourage the adoption and development of ICTs and integrate Mexico in the information and knowledge society.

Project description (description of activity)

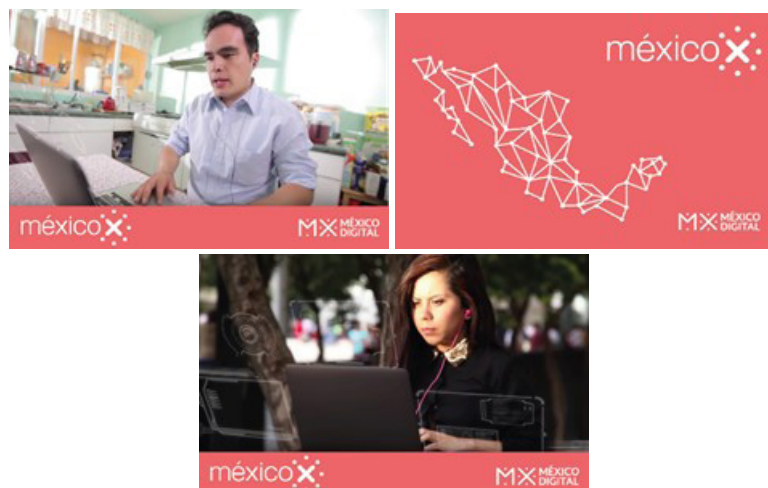
MexicoX is an online platform led by the Ministry of Education and the National Digital Strategy. The main objective of this project is to offer free Massive Open Online Courses, known as MOOCs, and to spread access to education to the entire Mexican population.

The platform uses the Open EdX Code developed by Harvard University and the Massachusetts Institute of Technology (MIT). We defined six major strategic lines covering the content of the courses:

1. Fundamental academic skills
2. Specialized skills
3. Teacher training skills
4. National challenges
5. Global challenges
6. Promotion of art, culture, history, science and enjoyment of knowledge

At present, we are in the pilot stage; however, there are more than 600 000 users enrolled, from Mexico and other countries, in 58 online courses from more than 23 institutions. More users are expected to enrol in the platform, since the government has signed some important agreements that ensure not only more content, but also greater promotion of the courses.

Link: <http://mx.televisioneducativa.gob.mx/>



Examples of linkages between the WSIS Action Line and the SDGs

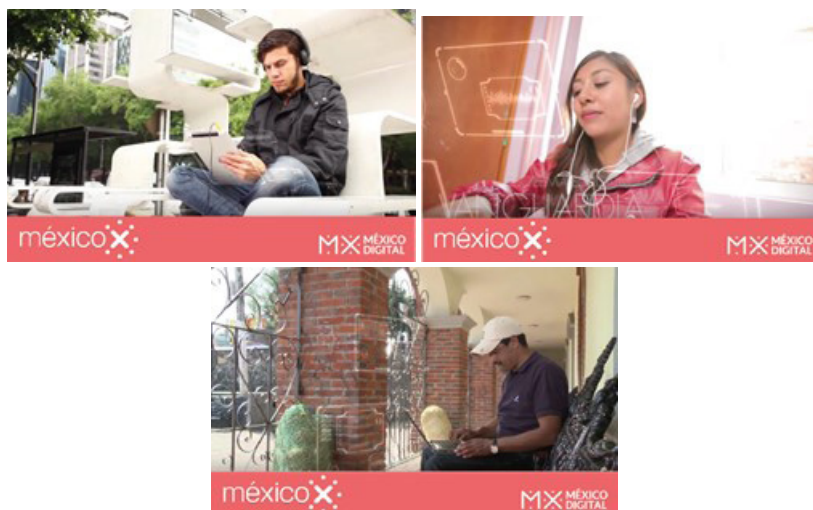
Mexico has made a bold decision: to build a complete ecosystem to foster development and achieve growth through structural reforms and policies.

Over the past years, deep, transformative reforms were promoted in Mexico. Two of them, crucial to this theme, are: the Mexican Education Reform and the Reform in Telecommunications. Regarding policies, the fundamental public policy document that traces the country's goals is the National Development Plan. Within this plan, the National Digital Strategy is established. Fully in line with the objectives of WSIS, it defines how to achieve universal access, digital inclusion and massive use of ICTs to impact education, healthcare, economy, security and deep government transformation in a framework of data protection, information security, citizen participation, freedom of speech, collaboration and accessibility.

One of the five objectives of the National Digital Strategy is "Transformation of Education", which integrates ICTs into the educational process. A strategy of this objective is to "Expand the range of educational services through digital means". Under this strategy, the MexicoX- Platform of Massive Open Online Courses (MOOCs) is developed. In addition, MexicoX is related to **SDG 4**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, as the main objective of this project is to offer free MOOCs and spread access to education to the entire Mexican population.

Highlights of the project's partnership activities

The National Digital Strategy and the Ministry of Education have had a great impact on the incorporation of ICT education in Mexico. MexicoX will make available a single window that consolidates valuable content for Mexicans, provide new instruments to measure the impact of MOOCs and increase collaboration between private/public partnership, academia, civil society and government.



Challenges and future perspectives for the project

Working collaboratively presents a significant challenge given the universities' differing approaches, topics and understanding of what constitutes a MOOC. The success of the pilot depended on aligning the views of those involved in it, without losing the creativity and insights of each. Alignment of the objectives is important in order to improve the quality of the supply, but it was relevant for the pilot to observe different courses in order to understand the needs of the users.

So far, all the courses have been donated, so to be able to scale the programme and make it sustainable is a challenge. To design and create a MOOC can be very expensive, and EDN needs to make sure that the programme is stable enough to last in the coming years.

EDN needs to keep providing education to new generations, since this type of platform demands digital literacy and self-regulation on the part of the users.

In countries like Mexico, it is important to be aligned with other programmes that provide connected spaces and/or Internet coverage, since this is fundamental to use of the Platform.

Views on the WSIS Stocktaking and Prizes contest

The Government of Mexico is delighted to have the opportunity to share Mexico's digital progress and experiences throughout the WSIS contest. EDN believes this is a great platform for countries and all other organizations to know, interact with and share lessons learned and success stories that can be replicated accordingly in other countries.

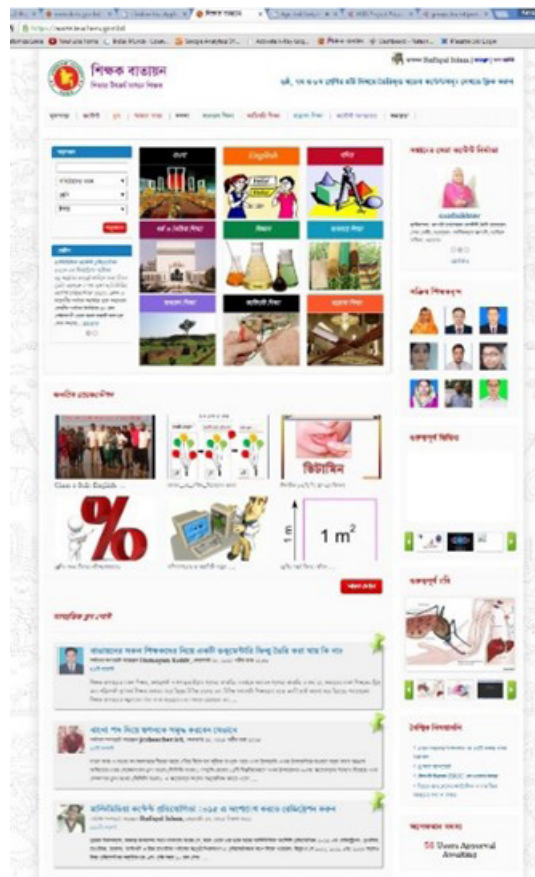
The WSIS Stocktaking will allow countries to know what all stakeholders, including civil society, academia, the private sector, governments, organizations, etc., are doing to empower their communities. Considering all WSIS winner projects are stories that have successfully delivered extended benefits to all involved, countries can feel confident in applying similar but adapted measures to address challenges in an innovative way.

WSIS Prize Champions

Project name: Teachers’ Portal for Empowerment
Organization: Access to Information (a2i) Programme, Prime Minister's Office
Country: Bangladesh

In **Bangladesh**, the Prime Minister's Office created the *Teachers’ Portal for Empowerment* that represents a smart supplement to Bangladesh’s ailing teachers’ training system that fails to serve 900 000 teachers with classroom facilities limited to 1 500 seats. The costly face-to-face training is often prohibitively expensive for the teaching administration and teachers. The Teachers’ Portal, a collaborative, co-creative and problem-solving continuing professional development (CPD) platform, has fast become popular among teachers for creating/sharing digital content on all subjects. As membership exceeds 100 000 and growing, the portal is already the largest local repository of educational content. An offline annual conference started recently has also sown the seed for a vibrant community of learners.

The portal thus provides equitable quality education, reducing inequality and revitalizing the global partnership for sustainable development (**SDGs 4, 5, 10, 12, 16 and 17**).



Project name: E-Learning

Organization: Wockhardt Foundation

Country: India

In **India**, the *E-Learning Programme* of the Wockhardt Foundation aims at ensuring academic excellence through quality and innovative teaching methods. The e-learning programme is intended to make learning a fun-filled and interactive experience. It is developed by quality e-learning experts and qualified instructional designers. The programme is designed for children from standard 1 to 10 for all subjects. The curriculum is as prescribed and followed by the Maharashtra State board. The complete syllabus is provided in an audiovisual format in the Marathi, Hindi and English languages. The audiovisual format comprises an interactive question bank and is designed with a child-friendly interface.

Hence, the programme ensures equitable quality education and gender equality and promotes lifelong learning opportunities for Indian citizens (**SDGs 4** and **5**).

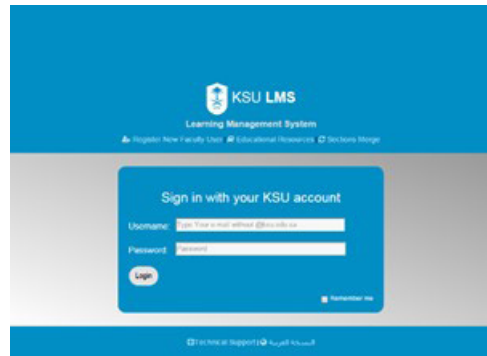


Project name: Digital Courses Development Initiative

Organization: King Saud University

Country: Saudi Arabia

In **Saudi Arabia**, the King Saud University (KSU) endeavours to spread e-learning in order to provide a distinguished education. Thus, the *Digital Courses Development Initiative* conforms to international standards and meets the local educational needs. This initiative aims at providing appropriate tools for developing the faculty members' digital content (**SDG 4**). Its purpose is to develop their courses and train them in terms of updated methods and international specifications for developing their courses and managing them within the framework of the principles of instructional design and quality requirements.

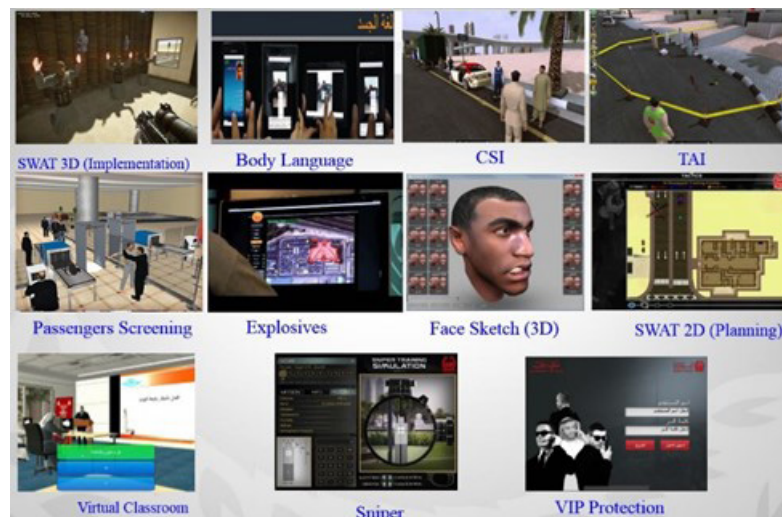


Project name: Virtual Learning

Organization: Dubai Police

Country: United Arab Emirates

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**).



C7 - E-health

WSIS Prize Winner

Project name: Informatization of the Public Health System

Organization: SOFTEL

Country: Cuba

Basic information

SOFTEL was founded in **Cuba** on 6 March 1986 as the Software Development Enterprise. The company is established in the Cuban market and leads in the development of software and delivery of computer services in such sectors as tourism, health and business management.

Since 1998, *SOFTEL* has developed advanced software solutions as its main product, specializing in the area of health systems, with professionals experienced in the design, implementation and management of these solutions.

It combines experience in the development and integration of solutions with the application of modern technologies. Our mission: to meet the expectations of the health system, providing tools to increase the quality of services in institutions.

SOFTEL is celebrating 30 years as leader in the IT sector in Cuba and is proud of its high professional level.



Project's description (activity's description)

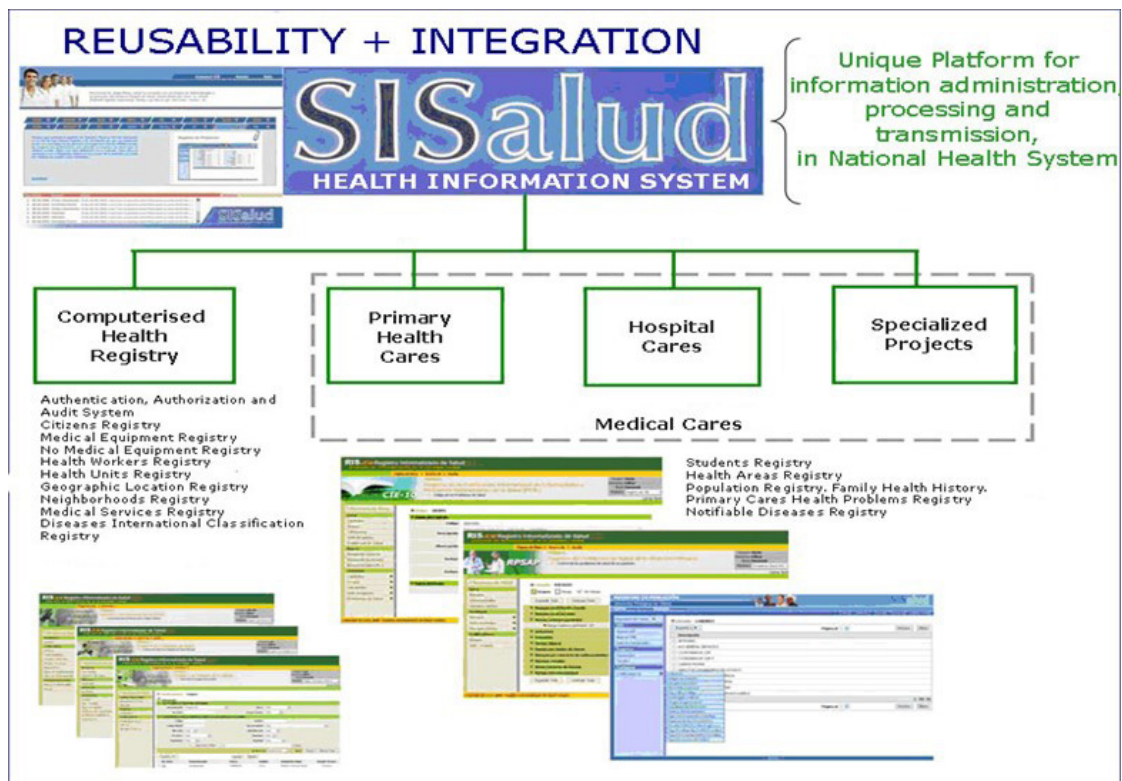
The Government and the Ministry of Public Health of Cuba have developed a strategy and a policy to implement a general programme of informatization of the National Health System (NHS) with

the goal of providing services to citizens supported by an efficient and high-quality information and communications infrastructure.

Since 1998, they have been developing programmes that meet this objective and achieve integration of the processes of informatization of society (government information systems, citizen records systems, digital signature). The proposal for a comprehensive solution for informatization of the health system comprises interrelated software solutions that allow the creation of a timely and high-quality health information system that is both affordable and reliable. It also promotes ongoing medical training, education and research through the use of ICTs, while respecting and protecting the right of citizens to privacy.

Lines of work are focused on the development of integrated IT solutions for the NHS, with accompanying solutions for sustainability and maintenance of each project and the development of human resources in IT as required for the operation of these systems.

The following principal lines of work, among others, constitute the project: Hospital Informatization, Blood Bank Network Informatization, Centralized Donors Registry and Primary Health Care. They are integrated within the Health Information System (SISalud) and are defined as an integral solution in which a new paradigm in the provision of health services and the development of applications and components with a high level of interoperability will generate timely, consistent and reliable information for management in health processes and decision-making at the various levels of management and care.



Examples of linkages between the WSIS Action Line and the Sustainable Development Goals

Informatization of the Public Health System in Cuba proposes a new paradigm in the provision of health services and the development of applications with a high level of interoperability that will generate timely, consistent and reliable information for management in health processes and decision-making at the various levels of management and care.

Patient management is the basic element of control to improve healthcare, optimize the use of staff, improve the quality of hospital services and reduce their costs. It provides the information required for management activities at all levels and the development of statistical reports, which makes it possible to alert, monitor and control the spread of communicable diseases through the improvement of common information systems.

It also strengthens public health research programmes, prevention, and the promotion of women's and men's health, with investigation into sexual and reproductive health and sexually transmitted infections and diseases of global concern like HIV/AIDS and tuberculosis.

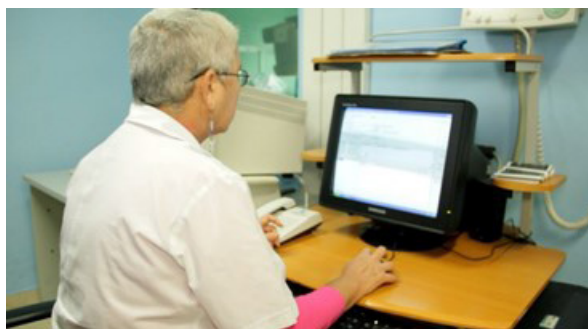
The project allows the development of indicators and statistical information necessary to evaluate the results in terms of health and support for health surveillance carried out at the different levels of the health system, through the early detection and notification of transmissible diseases and diseases declared by the Pan American Health Organization (PAHO) as notifiable.

As part of the project, the Blood Bank Network Computer Solution contributes to improving the quality and quantity of blood and blood components used for patients in hospitals across the country, as well as to ensuring greater satisfaction and security for donors attending blood banks and collection centres.

The Primary Health Care solution achieves, in a planned and organized way, an integral solution for healthcare at the primary levels. It ensures the management of health services provided to the population and the collection of information for SISalud registries at the community level, and improves the quality of community services through the programme's implantation in institutions with minimal resources. It also makes it possible to attend to patients with the family and community approach through Family Health Records, and promotes activities for disease prevention and more effective control through the Notifiable Disease Record.

Service quality and professionalism has a direct impact on bringing positive services, greater satisfaction and enhanced quality of life to the population, thanks to excellence in the services provided (**SDG 3**).

To sum up, informatization of the public health system promotes medical training, education and research through the use of ICTs, the development of human capacities, and protection of citizens' privacy (**SDGs 5, 6 and 10**). The project allows management of the health system at all levels, focusing on the early detection of disease, promoting transparency in public administrations and strengthening relations with citizens (**SDGs 11, 16 and 17**).



Highlights of the project's partnership activities

This project has been implemented for over 15 years now, in line with a comprehensive government policy for the informatization of Cuban society, thanks to the interest and commitment shown in the use of ICT in healthcare processes.

The different phases of the project have been planned, organized and implemented from a common strategy between SOFTEL and the Informatics Management of the Ministry of Public Health (MINSAP).

The results of implementation of the project have been certified by the National Statistical Management of MINSAP and have benefited from the participation and validation of prestigious experts from health institutions within the country.

Other partners have also contributed significantly to the success of the project: Copextel SA, as provider of hardware technology; Infomed, as health network of Cuba; CEDISAP, as the computer company of MINSAP; and collaborative R&D projects with universities, including the University of Havana and the University of Informatic Sciences.

Challenges and project's future perspectives

The principal challenges for the project are:

- To contribute, through the use of ICTs, to better healthcare for all people, promoting more just and inclusive societies.
- To extend the implementation of solutions to a total of 152 hospitals within the country and at all levels of healthcare as far as financial resources allow.
- The ongoing technological updating of solutions, ensuring security, sustainability and technological sovereignty.
- To contribute, through the use of ICTs in health, to consolidating the high prestige that the Cuban health system enjoys in the world today.
- Replicating the experience of Cuba, as a developing country, in other countries with limited resources but with interest and government commitment.



Views on WSIS Stocktaking and Prizes contest

This forum makes it possible to share up-to-date information on the status of ICT in the world, to report the experience of a developing country with a view to replicating innovative projects, and to promote collaboration between countries and institutions.

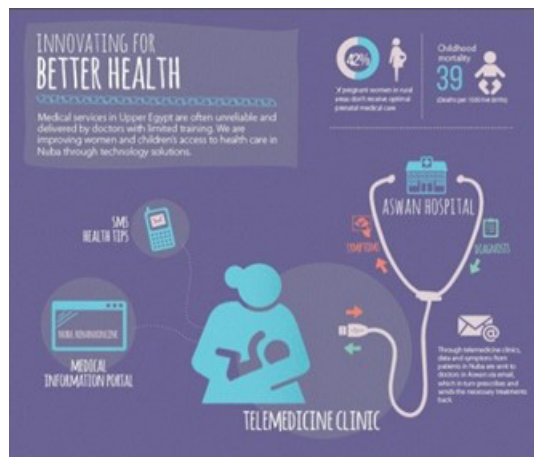
The process whereby projects are submitted for awards allows the participating entities to acquire experience in the presentation of innovative projects integrated with the **SDGs**.

The awards for projects represent a challenge and a commitment to continuous improvement, and at the same time the prestige associated with the awards extends possibilities regarding the dissemination of results and makes it possible to define new, higher goals and establish greater collaboration with other entities.

WSIS Prize Champions

Project name: Telemedicine Solutions Program
Organization: Egypt ICT Trust Fund
Country: Egypt

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**).



Project name: Open Hospital

Organization: Open Hospital

Country: Italy

Open Hospital, Italy, is an open source, free software by NGO Informatici Senza Frontiere (ISF) for the daily management of hospitals in developing countries. It is currently installed and used in several hospitals in Africa and the Middle East. Some ISF members are working constantly to add features to make it more useful. A collaboration agreement between ISF and certain large NGOs will promote dissemination of the software in many other African hospitals. In Italy, it is used, for example, for the management of a particular current phenomenon, in the form of the health centre for immigrants in Verona, which provides medical services for immigrants with no residence permit or health card.

The project directly contributes to accomplishment of **SDGs 3, 6, 10** and **16** relating to healthy lives, access to water, equal conditions among countries, and the building of inclusive societies.



Project name: Treatment Abroad System

Organization: Ministry of Health (MoH)

Country: Saudi Arabia

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**).



Project name: Pharmaceutical Track&Trace System

Organization: Tiga Information Technologies

Country: Turkey

The *Turkish Pharmaceutical Track&Trace System* is the infrastructure designed to track and trace all drug units in **Turkey**. It tracks and checks all steps of the supply chain, from production/import to consumption. This system makes it possible to identify the locations of the products in the supply and distribution chain and provides the health authorities with end-to-end visibility over the supply chain. The benefits of this system consist in:

- Preventing counterfeit drugs
- Avoiding illegal parallel trade of drugs
- Preventing reimbursement fraud and balancing costs
- Effective recall management
- Expiry date control, better inventory and waste management
- Providing statistics to develop policies on rational drug use

The system thus contributes to protection of the health system, achieving **SDG 3.8**.



C7 - E-employment

WSIS Prizewinner

Project name: Technology for Education, Employment, Entrepreneurs and Economic Development Project

Organization: Information and Communications Technology Office

Country: Philippines

Basic information

The Information and Communications Technology Office (ICTO) is an agency attached to the Department of Science and Technology (DOST) of the Republic of the **Philippines**. It is the lead implementing agency of the government in all ICT-related efforts with special focus on areas of industry development, policy, infrastructure development, research and development, capacity building in the public sector, and administration of the e-Government Fund.

ICTO aims to provide leadership, direction and coordination in the development, implementation and use of ICT for socio-economic development. It envisions a globally competitive knowledge-based economy, enabled by open and innovative ICT-enabled governance, providing world-class responsive services to empower citizens and communities for a progressive, equitable and sustainable society.

Project description (description of activity)

The *Technology for Education, Employment, Entrepreneurs and Economic Development (Tech4ED) Project* is a national digital inclusion initiative of ICTO. It aims to establish Tech4ED Centers that provide critical ICT, e-government and social services in rural municipalities with minimal or no access to information and government services. The presence of such Centers is intended to achieve deeper rural penetration to create more self-reliant communities empowered by access to ICT-driven services.



This initiative fundamentally provides local content relevant to user needs, building up specific skills and competencies to harmonize all sectors under the initiative. The main thrust of Tech4ED is to "enable, empower and transform society to create an inclusive, integrated, and equitable Countryside," it shall not stop at setting up the centre but shall be complemented with the provision of a learning management system (LMS) containing relevant local content for its target beneficiaries- the out-of-school youth, women, farmers, entrepreneurs, persons with disabilities, overseas Filipinos, indigenous people, senior citizens, students and educators. The content includes digital learning materials for an English language learning application for Pinoys, skills training including vocational courses, financial literacy, values and character formation. Through the LMS portal users can gain and develop skills which give them the edge for employment or to start their own business. Having gained skills in digital literacy, users can also opt to engage in online jobs.

The Tech4ED Project was a response to the widening gap between urban cities and underserved rural communities in terms of access to ICT goods, vital government services, information, knowledge and opportunities for national participation and development. Its existence emanates from national policies which recognize the need to promote development and enhance the productivity of communities through ICT-enabled services and facilities such as the Tech4ED Center. These include the Medium Term Philippine Development Plan 2004-2010, the Philippine Strategic Roadmap for ICT Sector 2006-2010 and, most recently, the Philippine Development Plan 2011-2016 and the Philippine Digital Strategy.



Examples of linkages between the WSIS Action Line and the SDGs

The Tech4ED Project gives access to a learning management system that contains non-formal educational and vocational content that helps users gain and develop skills for employment, thereby empowering and transforming society and creating an inclusive, integrated and equitable countryside, relating to poverty, education and equality issues (**SDGs 1, 4, 5 and 8**).

Highlights of the project's partnership activities

The national government provides the Tech4ED Platform containing aggregated content for learning. The content is gathered from government agencies and private institutions and can be accessed only through established Tech4ED Centers in the Philippines. The Centers are usually hosted and equipped by local government units and civic organizations which then provide for the space, facilities and personnel operations of the Tech4ED Center.

Challenges and future perspectives for the project

The biggest challenge in implementing the project is in getting people to grasp the value and urgency of operating the Tech4ED Center. Community leaders prioritize investing in infra projects or subsistence subsidy funding for people, as some still do not understand the value of a knowledge-based society.

The Tech4ED Project sets its sights on preparing a franchise model where interested institutions other than the local government can adopt and replicate implementation of the project. The portal will further be enhanced to provide more data for monitoring and evaluation. More partnerships are planned and new content is constantly added.

Views on the WSIS Stocktaking and Prizes contest

The ICT Office appreciates the WSIS contest initiative where country-level programmes and projects on ICT for development are given the opportunity to be in the limelight. This encourages the prime movers of ICT to take efforts to the next level in the knowledge that the global community puts high emphasis on the power of ICT for transformation and progress.

WSIS Prize Champions

Project name:	MiPyme Vive Digital
Organization:	Ministry of Information and Communications Technologies
Country:	Colombia

MiPyme Vive Digital is an ICT development project launched by the Ministry of Information and Communication Technologies of **Colombia** aimed at expanding the use of ICT in Colombian micro, small and medium-sized enterprises (MSMEs) in order to make them more competitive and profitable. The initiative consists of two main strategic axes:

- The first axis- Digital Entrepreneur- consists in raising awareness and technological adoption within MSMEs so as to demonstrate the positive impact of ICT on their businesses.
- The second axis- Public Call for MSMEs Value Chain- is a strategy that promotes the implementation of Internet solutions for MSMEs that are part of the supply or demand chain of a large private company (anchor company). This strategy has a direct positive impact on productivity and efficiency in the MSMEs benefiting from it.

The programme thus promotes sustainable economic growth, industrialization and employment and fosters innovation (**SDGs 8.3** and **9**).



Project name:	MGRP Website
Organization:	Manpower and Government Restructuring Program (MGRP)
Country:	Kuwait

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.



Project name: Wadhefatek wa Be'athatek #YourJob_and_YourScholarship Program
Organization: Ministry of Education
Country: Saudi Arabia

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
 للابتعاث الخارجي
 المرحلة الثالثة ١٤٣٦ - ١٤٤٠هـ
#وظيفتك_وبعثتك

Project name: Smart Recruitment

Organization: Dubai Police

Country: United Arab Emirates

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.

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



C7 - E-environment

WSIS Prizewinner

Project name: Asia Pacific Green Data Center Farm

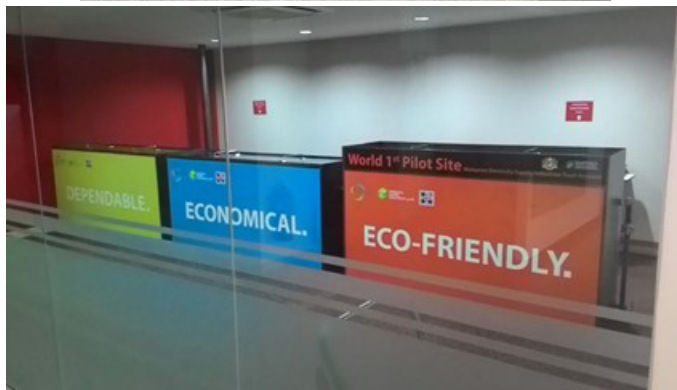
Organization: Green Data Center LLP

Country: Malaysia

Basic information

Green Data Center LLP is a green technology company based in **Malaysia** that manufactures and distributes a range of innovative green data centre products and offers a range of green data centre services to customers through its network of global distributors and partners. Green Data Center LLP consists of environmental stewards representing the ICT industry with the mission of helping preserve Earth for our future generations because children are at the highest risk during climate change. Representatives help customers to achieve the Triple Bottom Line of the Planet, People and Profit.

For customers planning to build a **new data centre**, our multiple-award winning Eco² data centre cooling technology will reduce build costs by 70 per cent whilst reducing operating costs by 50 per cent. Maintenance costs are 76 per cent lower. Payback on investment is typically from 18 to 24 months depending on deployed capacity. On the other hand, for customers with **existing data centres** looking to reduce operating expenditure dramatically and making sustainability a primary factor, our PROfluidFLO™ retrofitting kit based on the acclaimed Eco² technology is the answer. A no-fuss, uncomplicated and safe way of converting a data centre to a lean green machine without any major modifications at a low cost. For customers who do not want to invest in owning a data centre, Green Data Center LLP offers a bespoke green cloud computing platform or green managed hosting platform for **outsourcing their data centre** needs. All the savings that are derived from having green DNA are passed on directly to customers resulting in economical monthly fees.



Project description (description of activity)

The *Asia Pacific Green Data Center Farm* is a next-generation green data centre utilizing super energy efficient cooling equipment and ICT equipment located in the city of Petaling Jaya, Malaysia. The facility features the innovative Eco² fluid submersion technology by Green Data Center LLP. Eco² (shorthand for economical and eco-friendly) is a modular end-to-end fluid submersion data centre cooling solution. The cutting edge Eco² coolant allows any OEM server, switch, firewall or router to be submersed in the coolant. Air is a poor heat conductor. The coolant is 1 350 times more efficient than air producing a PUE of 1.046. Cooling energy is cut by 90 per cent because it takes a lot less energy to keep the coolant cool. Another 15 per cent of energy is saved by removing fans on the servers. Fans are not needed in a fluid submersed environment. Eco² supports rack densities of up to 118 KW with high flash and fire points of > 220°C. It is absolutely safe for humans whilst being renewable, sustainable and bio-degradable. Only basic flooring and standard fire protection is required and it works indoors or outdoors.

Compared with the incumbent data centre cooling technology which is conventional air cooling, the technology deployed at the Asia Pacific Green Data Center Farm is clearly a game changer which is already disrupting the way data centres are being designed and deployed. The capital expenditure to build the facility was 70 per cent lower than for conventional data centres owing to the elimination of computer room air conditioning, chiller towers, large backup generators and raised flooring. The ongoing operating expenditure is 50 per cent lower owing to a drastically reduced cooling energy footprint. The carbon footprint of the facility is also 50 per cent lower compared to conventional facilities of the same capacity.

Apart from the cost effectiveness of the technology, there are other benefits observed at the facility. The systems were deployed 80 per cent faster than normal, allowing the facility to be in production mode very quickly. In the event of a cooling system failure, there is an eight-hour buffer before ICT systems experience overheating failure. Compared to the 8-10 minutes response time needed in an

air-cooled facility, Eco² allows for far longer response times. Other advantages noted at the facility included a dust-free environment due to the absence of air and a noise-free environment due to the removal of fans in servers and air-conditioning blowers.



The tables below highlight the differences in energy efficiency and energy operating expenditure between the facility's and traditional air-cooled data centres.

Table 1: Comparing Eco² Energy Efficiency with Traditional Air Cooling

	Eco ² Facility	Air Cooling Equivalent	Difference
ICT Equipment (kWh)	37,064	40,992	10.6%
Cooling Equipment (kWh)	1726	40,992	2275%
Total Facility (kWh)	38,790	81,984	111%
PUE Calculation	1.046	2.0	91.2%

Table 2: Assessment of Operating Expenditure on Annual Energy

	Eco ² Facility	Air Cooling Equivalent	Difference
ICT Equipment (USD)	4,276	4,729	10.6%
Cooling Equipment (USD)	198	4,729	2275%
Total Facility	4,474	9,458	111%

Examples of linkages between the WSIS Action Line and the SDGs

This project fits into the e-Environment WSIS Action Line and aligns with a number of related SDGs, namely:

- **Goal 7:** Ensure access to affordable, reliable, sustainable and modern energy for all

- **Goal 9:** Build resilient infrastructure, promote sustainable industrialization and foster innovation
- **Goal 11:** Make cities 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 17:** Revitalize the global partnership for sustainable development

Data centres globally pose a major environmental threat. The 8 million private, commercial and government data centres constitute 1.6 billion square feet of usable space with an annual carbon footprint of 1.2 billion metric tonnes of CO₂. Data centres contributed 3.3 per cent of the world's carbon emissions in 2014.

Urban areas in Malaysia and globally are fast becoming smart cities and adopting the Internet of Things, which demands high levels of digital connectivity and the handling of large volumes of digital data. To meet this demand, data centres are key and need to be deployed within urban environments to ensure fast response times through reduced latency. The challenge is that data centres are in the top ten of unsustainable industries globally, owing to their consumption of large amounts of electricity which is typically generated by the use of fossil fuels that i) result in the emission of greenhouse gases and other pollutants that degrade urban air quality and ii) create potential issues of energy insecurity in both an urban and national context. Over half of the electricity consumed in a data centre is for cooling, the balance being for server operation and ancillaries. This project delivers a 50 per cent reduction in the total energy footprint of data centre computing and thereby leads to an improvement in environmental resilience and energy security while in parallel supporting urban green growth; it will alleviate the strenuous space requirements of data centre sites; it will have significant societal impact by enabling sustainable connectivity and creating economic growth as well as job opportunities.

The project realistically addresses the data centre challenge effectively and efficiently in a solution-orientated manner through the rational use of energy for cooling. Through the creation of a sustainable and systemic public-private relationship in an industrially driven consortium made up of Malaysia's government agencies and green data centre-focused partners, a mutual exchange of knowledge will create a next generation green data centre computing model that will address a critical socio-economic urban development challenge for countries.

With the resulting model that can be commercially deployed anywhere in the world, the consortia will help address the grand challenge of climate change and urbanization, but also open up new sustainable market opportunities in the various countries and beyond through the innovative translation of existing, excellent research into highly relevant commercial products and services with high societal impact.

Highlights of the project's partnership activities

The success of this project was the result of a cohesive and effective public-private partnership consisting of Green Data Center LLP, CRF Computer Recovery Facility Sdn Bhd, the Ministry of Energy, Green Technology and Water, the Ministry of Communications and Multimedia, the Malaysian Green Technology Corporation and the Malaysian Communications and Multimedia Commission.

Green Data Center LLP took on the role as technology provider and systems integrator. CRF Computer Recovery Facility Sdn Bhd is a commercial data centre operator which hosted the facility with the provision of bandwidth and power. The Ministry of Energy, Green Technology and Water funded the facility's deployment through a grant from the Malaysian Electricity Supply Industries Trust Account. The Malaysian Green Technology Corporation acted as the project manager ensuring that the objectives and timelines were met. The Ministry of Communications and Multimedia and the Malaysian Communications and Multimedia Commission played a pioneer role by supporting the prior development of the proof of concept with funds from the Green ICT Industry Promotion Development

managed by the Malaysian Technical Standards Forum Berhad. The Green ICT Working Group also played a pivotal role in the facilitation of the technology.

Challenges and future perspectives for the project

The project faced some of the challenges that typically came with high technology innovation and hence managing innovation risks became a standard operating procedure. Some of the risks that were managed included commercial risk and feasibility, commercialization strategy, technical risk and feasibility, intellectual property protection and investment management.

Moving forward, during the planned second phase of the project, kooKUBES, a derivative product of Eco² will be added. koolKUBES is a novel extension of the Eco² capability to outdoors by placing reservoirs of ICT equipment into 20-foot ISO shipping containers that can be stacked up to save on premium indoor data centre space. The configuration will be further strengthened with the addition of a novel clean and green cryogenic backup power generation system from the United Kingdom.

Views on the WSIS Stocktaking and Prizes contest

The WSIS Stocktaking and Prizes contest is an efficient and effective platform for winners and champions to gain important recognition and validation that they are working in the right direction. On a broader scale, the contest serves to effectively evaluate the progress made towards the SDGs at an international level.

WSIS Prize Champions

Project name:	E-Basura/E-Waste: ecological approach to the digital age
Organization:	Facultad de Informatica de la Universidad Nacional de La Plata
Country:	Argentina

Argentina advanced the *E-Basura/E-Waste: ecological approach to the digital age* project, which is a university extension project that transforms the problem of e-waste into a tool to serve the community, demonstrating the benefits that can be achieved educationally, socially, environmentally and economically. Refurbishing obsolete computer equipment and subsequently donating it to social institutions helps to reduce the digital divide, benefiting the environment by extending the lifecycle of electronic equipment. The project disseminates initiatives in the community that promote and encourage the development of green-ICT capabilities among university students and society in general, creating environmental awareness. It also contributes to reducing the social gap through its School of Crafts in Repairing PCs aimed at underprivileged citizens.

Thus, the project integrates research, teaching and university extension relating to **such SDGs as 4, 8, 10, and 13.**



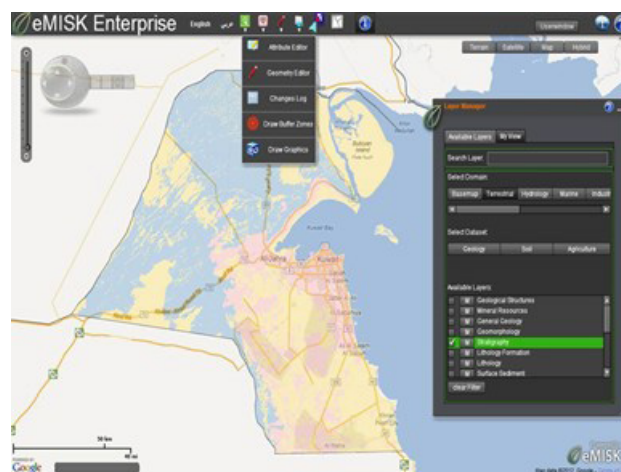
Project name: Environmental Monitoring Information System of Kuwait (eMISK)

Organization: Environmental Monitoring Information System of Kuwait (eMISK)

Country: Kuwait

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**).



Project name: Open Data Climate Change Tool

Organization: National Digital Strategy

Country: Mexico

The Government of **Mexico** developed an *Open Data Climate Change Tool*, fed by 50 priority datasets, in order to illustrate and put into context climate change, its consequences, and actions that can be taken by citizens and the government to reduce emissions (**SDG 13**). The tool will be complemented by a public challenge open to innovators and SMEs in Mexico, for the development of an application for the general public to count and reduce their emissions by promoting behavioural changes in their daily lives.



Project name: M-Environment

Organization: Ministry of Environment and Water (MOEW)

Country: United Arab Emirates

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**).



C7 - E-agriculture

WSIS Prizewinner

Project name: Harmonized Information of Agriculture, Revenue and Irrigation for a Transformation Agenda – Precision Technology for Agriculture

Organization: Centre for Development of Advanced Computing

Country: India

Basic information

HARITA-PRIYA, **India:** *Harmonized Information of Agriculture, Revenue and Irrigation for a Transformation Agenda – Precision Technology for Agriculture.*



Agriculture Department officials' interaction with farmers at P. Kothapeta, Gooty



Training for Agriculture Department officials

Project description (description of activity)

ICT components adopted for this project:

The following ICT components were integrated to develop this model.

Wireless Sensor Networks (WSNs), an emerging area of research that facilitates the integration of sensing systems with state-of-the-art electronic processing and wireless communication technologies. A WSN consists of spatially distributed autonomous sensor nodes that cooperatively network among themselves and monitor environmental conditions.



Figure 1 – Harita-Priya – Collage: Open field deployable WSN node, communication unit and sensor unit

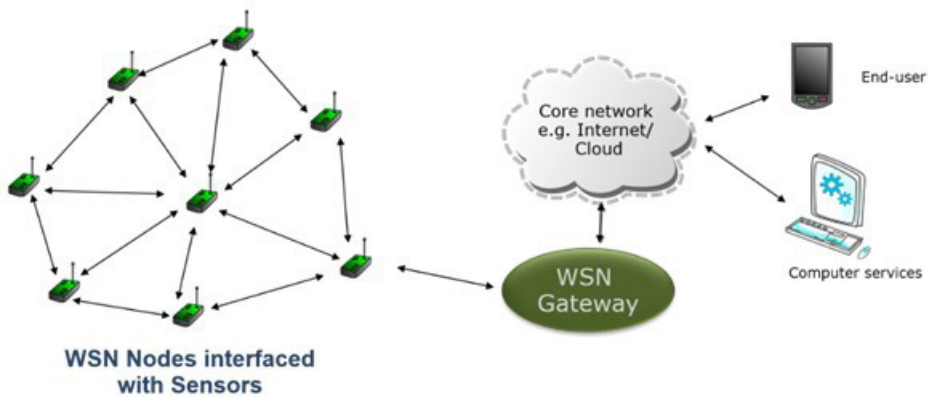


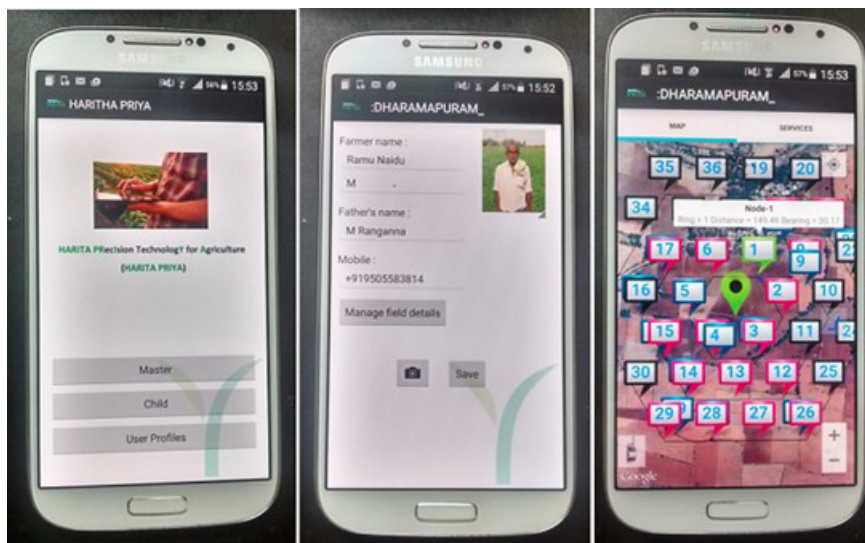
Figure 2 – System Architecture

A typical WSN architecture consists of 3 fundamental components

1. A group of sensing devices popularly known as **nodes** or **WSN nodes**
2. An on-field aggregating station called **gateway**
3. A data storage and analysis server called **remote administration server**

Mobile communication

1. Uploading the weather data from field to HARITA-PRIYA server
2. Disseminating SMS advisories to famers in local language, Telugu



Mobile App for farmer registration and geolocating WSN units

Web technologies

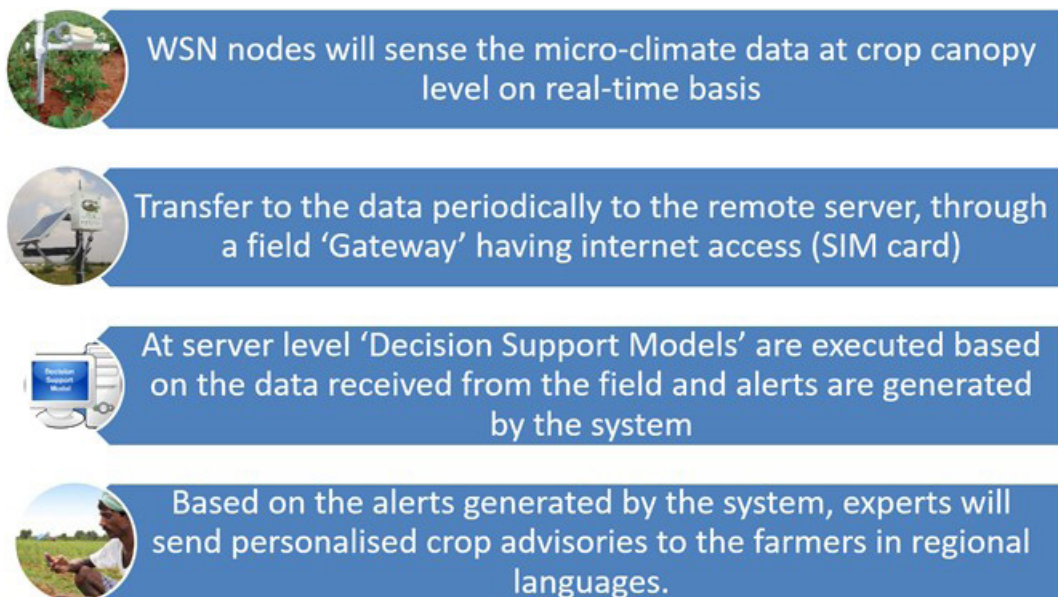
1. Decision support models for forewarning leaf spot disease in groundnut crop and irrigation scheduling
2. Module for the agriculture officers to send advisories to farmers, in Telugu
3. User-friendly web interface for various stakeholders for viewing the data and generating reports

Process of implementation

For this pilot project, five representative villages in the Anantapur District, Andhra Pradesh State, India, were selected in consultation with the Department of Agriculture. A total of 74 WSN nodes are installed in five villages, covering approximately 80 acres in each village. Each WSN node comprises the following components.

1. Sensing module deployed at canopy level, comprising five sensors (temperature, relative humidity, leaf wetness, soil moisture and soil temperature)
2. Processing and communication module (mote)
3. Solar-based power module

These nodes, developed indigenously at C-DAC, sense the microclimate at crop canopy-level in real time and transfer the data periodically to a remote server, through a field 'gateway' having Internet access. At the server, 'decision support models' are executed based on the data received from the field and alerts are generated for pest forewarning or irrigation scheduling. Based on the alerts generated by the system, experts send personalized crop advisories to the farmers in Telugu.



Examples of linkages between the WSIS Action Line and the SDGs

Action line: ICT Applications: e-Agriculture

This project is in line with **SDG 2**, i.e., to end hunger, achieve food security and improve nutrition and promote sustainable agriculture. This is being achieved through the following:

1. Reaching unreached farmers with timely, personalized and localized agro advisories leading to optimal crop management practices resulting in increased yield and income.
2. This model leads to input cost reductions for the farmers and optimal use of water and pesticides leading to conservation of natural resources and reduced health hazards in the environment.

Pre-deployment vs. post-deployment

S No	Area of impact	Pre-deployment	Post-deployment
1	Advisory to farmers	Farmers used to get only generic advisories from the Agriculture Department for that particular season at mandal level; around 2 to 3 advisories per crop season	An individual farmer received personalized advisories specific to crop conditions. An average of 14 scheduled advisories, 2-3 WSN-based disease alerts and a few general advisories during the crop season.

S No	Area of impact	Pre-deployment	Post-deployment
2	Acquisition of weather data	Weather data are available only at district level, acquired through automatic weather station	Microclimate data are available at village level (10-15 sample points in a village), acquired through WSNs. This data benefited the Agriculture Department and scientists in the design of village-specific crop management practices and sending of personalized advisories to farmers.
3	Income to farmers	Usually a groundnut farmer will take up 6-8 fungicide or pesticide sprays in a season.	WSN alert-based advisories resulted in reducing the indiscriminate use of fungicides or pesticides, thereby helping farmers to reduce input costs.
4	User acceptance	The Agriculture Department used traditional ways of sending advisories, in newspapers and by radio.	Sending personalized advisories to individual farmers via SMS in regional language (Telugu) resulted in better reachability, acceptance and adoption.

Highlights of the project's partnership activities

Partnership in R&D: Bridging the domain expertise gap in the electronics and IT research organization (Centre for Development of Advanced Computing) and agricultural research organization (Central Research Institute for Dryland Agriculture, State Agricultural University), leading to the development of a cost-effective, field-deployable system.

Partnership for field implementation: A developed model/system was deployed in a farmer's field with the support of the Department of Agriculture, Andhra Pradesh state government.

Challenges and future perspectives for the project

Challenges before implementation:

1. Lack of technology for real-time acquisition of microclimate data at canopy level from multiple locations of agricultural fields
2. Lack of pest/disease forewarning models based on microclimate data
3. Provision of location-specific and personalized agro-advisory to farmers, in local languages based on his/her crop health conditions

Challenges faced during implementation and how they were overcome:

1. Deploying 74 sensor units (WSN nodes) in the middle of the farmers' fields in five villages. Mandal agriculture officers helped in organizing awareness meetings with farmers to explain the purpose of the deployment and ensured they take ownership of the instruments deployed in their fields.
2. Developing the open field-deployable, long-lasting, low power-consuming WSN node. Developed solar-powered plug & play sensor interface module packaged in IP67 enclosures to withstand adverse weather conditions
3. Non-availability of pest/disease forewarning models for different crops. Scientists from ICAR-CRIDA and ICRISAT provided the scientifically proven prediction models for leaf spot disease and leaf miner in groundnut.
4. Providing the disease/pest forewarning alerts on time to farmers. Developed a user-friendly interface for the Agriculture Department to send alert-based advisories to farmers by SMS.
5. Scientific validation of the disease/pest alert. Agricultural scientists at ARS, Anantapur and Krishi Vignan Kendra, Kalyandurg, helped in validating the disease and pest incidence.

Future perspectives:

1. Upscaling of the technology to other districts of the state for multiple crops
2. Production of indigenous, low-cost stand-alone WSN unit leading to productization and TOT
3. Integration of voice calls for advisory dissemination
4. Development of forewarning models for potential crops

Views on the WSIS Stocktaking and Prizes contest

- WSIS is an excellent platform for global knowledge sharing and learning
- Success stories from the identified projects will definitely enable various nations to adopt ICT-based activities for societal development
- The Prizes contest is a real testbed for the organizations to showcase their technical skills, acceptance and replicability
- Boosts the morale of participating organizations and encourages the team to do better work, in the true spirit of competition

WSIS Prize Champions

Project name:	Somalia Water and Land Information Management Project
Organization:	Food and Agriculture Organization of the United Nations (FAO)
Country:	International

The **Food and Agriculture Organization of the United Nations (FAO)** initiated the *Somalia Water and Land Information Management (SWALIM)* programme that serves Somali government institutions, non-governmental organizations (NGOs), development agencies and UN bodies engaged in assisting Somali communities whose lives and livelihoods depend directly on water and land resources. The programme aims to provide high-quality water and land information, crucial to relief, rehabilitation

and development initiatives in **Somalia**. The use of ICTs to accelerate, improve and multiply the effects of this work has been a hallmark of the programme since the beginning and remains a key component.

The project is linked with a considerable number of SDGs, fighting against poverty and hunger, ensuring healthy lives and access to water, promoting economic growth and sustainable industrialization, etc. (**SDGs 1, 2, 3, 5, 6, 8, 9, 13 and 15**).



Project name: Krishoker Janala (Farmer's Window)
Organization: a2i, Prime Minister's Office
Country: Bangladesh

The Prime Minister's Office of **Bangladesh** launched the *Krishoker Janala (Farmer's Window)* project, an inexpensive-to-build and inexpensive-to-operate, user-centric, indigenous innovation, in order to combat certain challenges in the agricultural domain. The main problems of this sector are:

- Unequal knowledge about the problems any farmer might face during the various stages of pre-production, production and post-production
- Lack of confidence when suggesting solutions to the affected farming communities
- Absence of up-to-date and timely information on ways to identify and treat plant diseases
- Lack of formal education
- Use of crude and inaccurate terms to identify plant diseases.

The Krishoker Janala project aims to combat all these challenges.



Project name: City-to-Farm Agriculture Assisting

Organization: Advanced Info Services (AIS)

Country: Thailand

Launched by Advanced Info Services (AIS) of **Thailand**, the *City-to-Farm Agriculture Assisting (CFAA)* project is a service designed to create a sustainable agriculture economy through collaboration between agriculturists, consumers and governments using appropriate technologies. CFAA implements a win-win solution that allows consumers to invest capital in selected agriculturists so that the latter plant the products and deliver them to the consumers in return. This solution eradicates problems on both sides. The agriculturists are not forced to sell their products at low prices, but earn directly from consumers who are willing to pay for healthy products.

The project thus contributes to **SDGs 2, 3** and **12**, on the promotion of sustainable agriculture, well-being for all, and sustainable consumption and production patterns.



Project name: Increasing Food Production through ICT Research and Development

Organization: The University of the West Indies

Country: Trinidad and Tobago

The University of the West Indies in **Trinidad and Tobago** developed the *Increasing Food Production through ICT Research and Development (AgriNeTT)* project, focused on the agricultural sector and addressing two major problems:

- Lack of data at the farm and national levels
- Lack of ICT tools for farmers and policy-makers.

Thus, the project aims to develop a tool-box of applications (mobile and desktop) for use by farmers and policy-makers. Four mobile applications have already been developed. In order to resolve the first problem, the project provides a solution that centres on two open data platforms. This distributed approach provides great flexibility in the publication and curation of data.

Hence, the project contributes to achievement of **SDG 2** by ensuring sustainable food production systems.



C7 - E-science

WSIS Prizewinner

Project name: R-package to compute confidence intervals for heritability, reliability, and heterogeneity

Organization: Ilia Vekua Institute of Applied Mathematics (VIAM) of Ivane Javakhishvili Tbilisi State University (TSU)

Country: Georgia

Basic information

In **Georgia**, the Ilia Vekua Institute of Applied Mathematics (VIAM) of Ivane Javakhishvili Tbilisi State University (TSU) belongs to the academic sector.

<http://www.viam.science.tsu.ge/eng>



Project description (description of activity)

Intraclass correlation coefficients (ICCs) are used to quantify different features, like heritability, reliability, and heterogeneity. They are widely used in biomedical and engineering fields. For good statistical inference, it is essential to construct confidence intervals on ICCs. This project is motivated by the recently introduced beta-approach² that has worked successfully for many variance component models, but it has not been implemented in any software package. VIAM aims to study the more

²Demetrashvili N., Van den Heuvel E.R. (2015). Confidence intervals for intraclass correlation coefficients in a nonlinear dose-response meta-analysis. *Biometrics*, 71 548-555. doi: 10.1111/biom.12275

Demetrashvili N., Wit E.C., van den Heuvel E.R. (2014). Confidence intervals for intraclass correlation coefficients in variance components models. *Stat Methods Med Res*, doi: 10.1177/0962280214522787

theoretical aspects of the approach to understand its possible limitations (if any) and build an R-package that can be used in combination with any variance component model.

Beta-approach: rationale

$$\widehat{ICC} \sim \text{Beta}(a, b), \text{ where } \Theta = \{(a, b) > 0\}$$

Approximate limits for 100%(1 - α) CI:

$$\begin{aligned} \widehat{LCL}_B &= B_{a,b}^{-1}(\alpha/2) \\ \widehat{UCL}_B &= B_{a,b}^{-1}(1 - \alpha/2) \end{aligned} \quad (15)$$

Beta-approach: rationale

- Support of ICC $\in [0, 1]$
Support of Beta $\in [0, 1]$ (Johnson et al., 1995)
- Beta has different shapes: it can be highly skewed, both to the right and left, likewise ICC

- Knight (2000): if $X_1 \sim \text{Gamma}(a, c)$, $X_2 \sim \text{Gamma}(b, c)$ are independent, then $Y = \frac{X_1}{X_1 + X_2} \sim \text{Beta}(a, b)$

Examples of linkages between the WSIS Action Line and the SDGs

This project covers the WSIS Action Line on “ICT applications: e-science“, and will benefit both academia and industry. It might be most valuable for biopharmaceutical and engineering companies. This project fits into the following actions of C7: E-science.

SDGs:

- 1) promote electronic publishing and open access initiatives to make scientific information affordable and accessible in all countries on equitable basis (**SDG 10**);
- 2) promote the use of peer-to-peer technology to share scientific knowledge and pre-prints and re-prints written by scientific authors who have waived their right to payment (**SDG 16**);
- 3) promote principles and metadata standards to facilitate cooperation and effective use of collected scientific information and data as appropriate to conduct scientific research (**SDG 17**).

By providing a freely accessible R-package and respective tutorial, we will make scientific information affordable and accessible globally. **By publishing two scientific articles (one on theoretical statistics and one on statistical package), VIAM will indeed promote** peer-to-peer technology. By including case-studies in the R-tutorial, the Institute will promote the effective use of collected scientific information.

Highlights of the project’s partnership activities

This project is planned in collaboration with the **Eindhoven University of Technology**.

Challenges and future perspectives for the project

To provide a solid mathematical foundation to our hypothesis about beta distribution, challenges may arise with asymptotics, such as in which direction is the indefinite growth of the sample size in variance component models. This topic is not frequently addressed in the literature.

Another challenge might be related to the quality of the implemented algorithm in R, namely computational speed and accuracy. Computation of the confidence intervals will require estimates of the variance components, their standard errors and covariances. Thus, the speed of our algorithm will depend on the efficiency of the estimation method of the variance components. The accuracy of our algorithm will depend on the properties of the estimators, such as bias and variance. Therefore, the estimation method of the variance components should be selected carefully.

Views on the WSIS Stocktaking and Prizes contest

Any contest empowers participants, and makes thoughts and visions clearer. Acknowledgment and recognition usually please people, since they show the usefulness of the work carried out.

WSIS Prize Champions

Project name: Citation Organization Software Pajoohyar

Organization: Pajoohyar

Country: Iran (Islamic Republic of)

Pajoohyar is the first citation organization software in the **Islamic Republic of Iran**. This software assists researchers in research and documentation. Pajoohyar is a research tool that helps users in gathering, organizing and analysing scientific sources. It also documents the results of the research according to citation styles in the form of a book, a thesis or an article. This software has many facilities, including saving and classifying data, noting, using different labels, searching in saved data and so forth. In addition, Pajoohyar is connected to online sources in such a way that the user can automatically save the sources in the software and then cite them using different citation methods. It was designed by the Islamic Computer Research Center (Noor) and works with three different languages – Persian, English and Arabic – according to the user's requirements.

The project fully contributes to **SDG 4**, providing quality education and promoting lifelong learning opportunities for the country.

Project name: Kowsar-Net: Scientific Intelligent network for Women

Organization: Information Technology Management Center of Women's Seminaries

Country: Iran (Islamic Republic of)

The Information Technology Management Center of Women's Seminaries of the **Islamic Republic of Iran** boosted the *Kowsar-Net: Scientific Intelligent Network for Women* project that started in 2014 with the purpose of establishing safe and pure scientific and social relationships among women, especially women scholars, graduates and professors. This project prepares a new, safe social network experience and has changed the negative views of women regarding the negative impact of social networks.

It aims to increase the empowerment of women by increasing women's IT involvement, thus promoting gender equality, equal public access to information and a peaceful and inclusive society for sustainable development (SDGs 5 and 16).

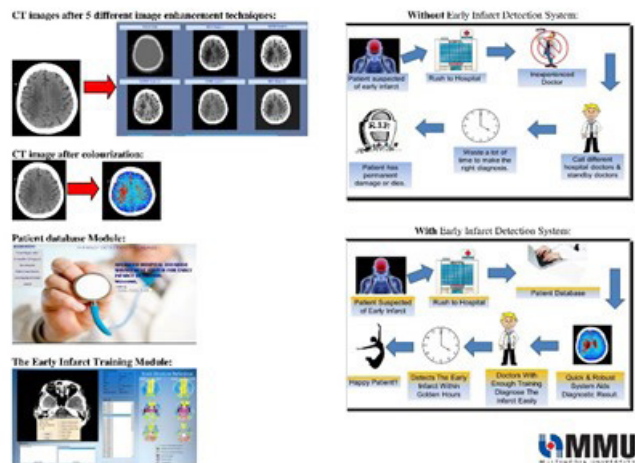


Project name: Early Infarct Detection for Brain Images

Organization: Multimedia University

Country: Malaysia

The Early Infarct Detection for Brain Images project represents a computer-aided diagnosis system designed to assist doctors and radiologists in early ischemic stroke detection. The system consists of three modules. The intelligent early infarct detection for brain images module improves the diagnosis time and also the accuracy of the infarct detection process, while the patient database module consists of the details on patient registration, patient diagnosis, and also a statistical analysis tool on the brain infarct patient. Finally, the early infarct training module is a platform for training junior doctors or any doctors lacking experience in early infarct detection. It aims to meet several SDGs by promoting healthy lives for the Malaysian population, reduction of inequalities, and so on (SDGs 3 and 10). They also promote the achievement of higher levels of economic productivity through innovation in the country (SDG 8).



Project name: Spatial Based Dynamic Contrast Enhanced Magnetic Resonance Imaging 3Dimensional (3D) Visualization

Organization: Multimedia University

Country: Malaysia

The *Spatial Based Dynamic Contrast Enhanced Magnetic Resonance Imaging 3Dimensional (3D) Visualization* project represents the last project from **Malaysia** related to the WSIS e-science action line. A computer-aided diagnosis system is designed to assist doctors and radiologists in detecting breast cancer through analysis of magnetic resonance imaging (MRI) screening. It comprises features such as an autoprobng system for lesion detection, 3D modeling of the region of interest, lesion colour classification and automated parameter computation (lesion dimensions), and deploys a three-dimensional webcam-based navigator with surface interpolation with interfacing hermite surface (SIHE) methodology. The standalone CAD-x system improves noise elimination, refines the breast region of interest (ROI) and detects the breast lesion with minimal false positive detection. The system is designed to be used in parallel with the MRI machine and not to replace it entirely. It contributes to several SDGs promoting healthy lives, reduction of inequalities (**SDGs 3** and **10**), the achievement of higher levels of economic productivity through innovation in the country (**SDG 8**).

The screenshot displays a medical software interface for breast MRI analysis. The interface is divided into several sections:

- BlackBox Connection:** Includes 'Connect' and 'Disconnect' buttons, a 'Medical Images Directory' label, and a file path: 'C:\Users\User\Documents\IAT\LAB\programs\programs\Renamed (Patient@)'. A 'Browse...' button is also present.
- Patient Profile:** Shows patient information: Patient ID: MR116705-5674, Gender: Female, Age: 41, Weight: 63 kg, Date: 03-Nov-2008, Time: 16:26:42. It includes silhouette icons and a section for 'Inter-Slices Analysis' with three small image thumbnails and a 'Correct Slice: 82' indicator.
- 3D model:** A 3D visualization of the breast with a highlighted tumor area. It includes 'Touchless Navigation' buttons for 'Start' and 'Stop'.
- Tumour Intensity Graph:** A line graph showing intensity values across slices. The y-axis ranges from 0.2 to 1.0. The graph shows a peak intensity of approximately 0.9.
- Analyze Result:** Displays analysis statistics: Total analyzed slices: 21 (slice no. 70 to 90), Cancer Area (Slice): 14.2685 cm², and Greatest Dimension: 8.35714 cm at 83.
- Biopsy Result:** Text indicating 'Right reoccural breast abscess. Multiple breast cysts bilaterally. Suggest ultrasound guided biopsy.'
- T1M1 Staging:** A table for staging: T: T3, N: N0, M: M0.
- Save Image:** Options for 'Original', '3-D', 'Coloured', and 'Graph', with an 'OK' button.
- COMPLETE:** A large pink logo at the bottom right.
- Bottom Bar:** Includes a 'Coordinate' section, 'Toggle' and 'Graph' buttons, a timer at '00:53', and a '100%' zoom level with 'Reset' and 'Execute' buttons.

C8 - Cultural diversity and identity, linguistic diversity and local content

WSIS Prizewinner

Project name: Connectivity is Productivity

Organization: Bridge Africa

Country: United States of America

Basic information

Bridge Africa is a multimedia corporation that connects Africa to the world. It empowers communities through ICT and media solutions in the global south.



Bridge Africa Trainers

Project description (description of activity)

- The goal of *Connectivity is Productivity* was to help communities in Cameroon create and access online content despite digital barriers in areas such as access to the Internet. In addition, the programme reinforces digital literacy through direct face-to-face educational training.
- The programme included three key activities that started with building the bridgeafrica.com communication platform designed for the digitally excluded. This is a three in one platform that helps people to create easy to manage websites within a few minutes. The site also connects users to a directory where they can locate all the listed websites via location and keywords (like

yellow pages). The site also has a social networking capacity whereby users can follow websites and send real-time messages. All three key features operate online and offline through text messaging, so people with and without Internet access can use Bridge Africa. The site was built within two months. A text message application demo at <https://www.youtube.com/watch?v=wTyQHMBmRes> shows how a website can be created using text.

- The following activity is also in the preparation phase in which Bridge Africa has hired and educated a team of 20 marketer/educators from Yaoundé, Cameroon, on how to train others to use the Bridge Africa platform as well as the basics of the Internet. In this same phase materials required for the programme were organized. This includes marketing materials (billboards, flyers, T-shirts, etc.), and uniforms for connectors and managers. The tablets, smart phones and Internet terminals to be used by connectors were also purchased.
- Finally, Bridge Africa has launched the community engagement phase in which it has been directly educating and training people in Yaoundé on how to use the platform and the general Internet as a tool for development. More than 5 000 actors were concerned by this four-month pilot programme. A video of the Cameroon beta programme can be seen at <https://www.youtube.com/watch?v=Hy-kDuGrdX0>.

Examples of linkages between the WSIS Action Line and the SDGs

The *Connectivity is Productivity* programme falls within the cultural diversity and identity, diversity and local content, Action Line of WSIS. It helps local communities in Cameroon to create online content and to access local content, regardless of digital barriers affecting Internet access. Cameroon has one of the lowest Internet access rates in world, resulting in a very low production of online content and restricted access to online content. Since the site is available online and offline through text messaging, Bridge Africa is helping communities to create and access local content by using tools currently available to them. Basic mobile phones (non-smart phones that do not have Internet access) have 85 per cent penetration in Cameroon and throughout most of the global south. Through its solution, Bridge Africa is helping people who could never before have imagined creating a website to do just that. They also give them access to a directory that is both online and offline. Through this programme, Bridge Africa is diversifying online content so as to include communities which were once unable to create or access online content owing to their lack of Internet access. The organization also targets the informal sector, in which women comprise a large majority, to help people get better connected. In addition they have engaged thousands of actors in Cameroon through their technology education, whereby Bridge Africa trains people in using the platform and obtaining the benefits of the Internet.

The Connectivity is Productivity project fully meets **SDG1** as it ensures that all men and women in Africa, in particular the poor and vulnerable, have equal rights to ICTs and economic resources, access to basic services, and so on. The project makes a significant contribution to ending poverty in all its forms in Africa.



Poster Campaign

Highlights of the project's partnership activities

In *Cameroon Bridge*, Africa has partnered with local telecommunication companies such as MTN and Orange Cameroon, as well as with the Ministry of Small and Medium Enterprises in Cameroon.

Challenges and future perspectives for the project

Having the idea and starting the company in 2012 was only the beginning. It took until 2015, and more than three versions of the platform, for Bridge Africa to find what they believe is the perfect solution that is scalable and sustainable so as to help communities create and locate content in emerging markets. The biggest hurdle was developing the text messaging application that could help connect those without Internet access in 2015. Recreating the platform three times required much dedication, since every time we recreated the website, we had to start over to look for funding, build the application, apply it to the local community and make observations. We now have more than 5 000 people on our platform as well as an original concept that is ready to scale. Bridge Africa has also created a marketing curriculum that has an educational base for educating local communities on how to use the platform as well as other Internet tools to increase their productivity.

Following this, Bridge Africa looks to expand throughout Africa, where there is a dynamic content divide. It seeks to further establish the paradigm for improving digital inclusion for the 4.2 billion people who are not connected to the Internet with all its benefits. According to USAID's Christopher Burns, "We believe that together we can create a content ecosystem that dramatically expands the value proposition of digital technology for the next two billion people who will come online. And only then will we realize the full potential of the digital economy to create a more inclusive world." This is why Bridge Africa seeks to start campaign#1billionwebsites to connect 1 billion people to online content in the next 10 years.

Views on the WSIS Stocktaking and Prizes contest

The WSIS Stocktaking and Prizes contest is innovative and grants private and public entities of all sizes an opportunity to highlight their activities.

WSIS Prize Champions

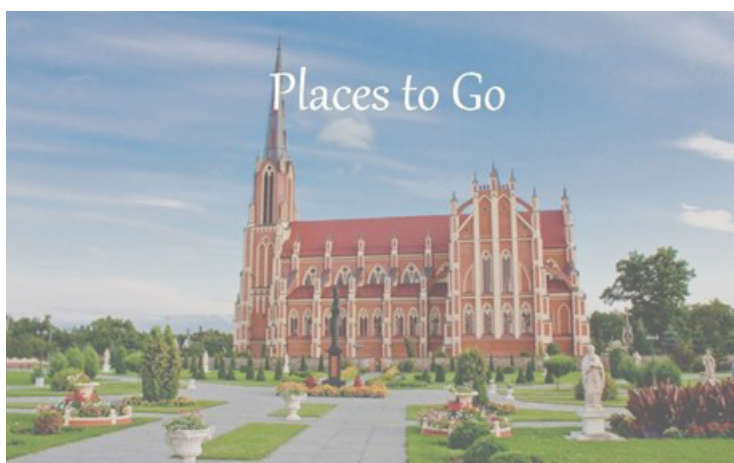
Project name: Places to go

Organization: The Academy of Public Administration under the Aegis of the President of the Republic of Belarus

Country: Belarus

The Academy of Public Administration, under the aegis of the President of the Republic of **Belarus**, initiated the *Places to Go* project for students, which is designed to attract tourists to unusual and peaceful places in Belarus. The project is a web product created in the form of a blog for its universality and ease of access. It is dedicated to various kinds of tourism in the Republic of Belarus. The blog articles are written in English and Russian by various authors using different formats and styles. All the materials used in the blog are unique, just like the site itself, which has been created using the latest technology and trends.

By creating a positive image of the country, the website promotes economic growth and political recognition with a view to global popularization of the country (**SDG 8**).



Project name: Centro De Relevo

Organization: Ministry of Information and Communication Technologies and Federación Nacional de Sordos de Colombia – FENASCOL

Country: Colombia

In **Colombia**, the Ministry of Information and Communication Technologies, together with the National Federation of Deaf People of Colombia (FENASCOL), created the *Relay Centre (Centro de Relevo)*, an initiative designed to include deaf people in society by enabling them to communicate and exchange information with hearing people easily and independently on an everyday basis. The Centre is based on

an interactive online platform that works as a bridge to enable deaf citizens to contact hearing people or institutions. Deaf citizens access the platform via the Internet from computers or smartphones, and communicate with sign language interpreters who take the message in sign language and transform it into a spoken message for the hearing person on the telephone, then sign back to the deaf user to complete the loop. This service is free for users and operates from 6 am to 10 pm every day.

This solution enables deaf people not only to communicate with friends and relatives but also to have access to government services, book medical appointments, change flight bookings, coordinate meetings and have access to information. It thus enables them to participate in building a sustainable society, promoting the economic development of the country and enhancing capacities for participatory and sustainable urbanization (**SDGs 11 and 16**).



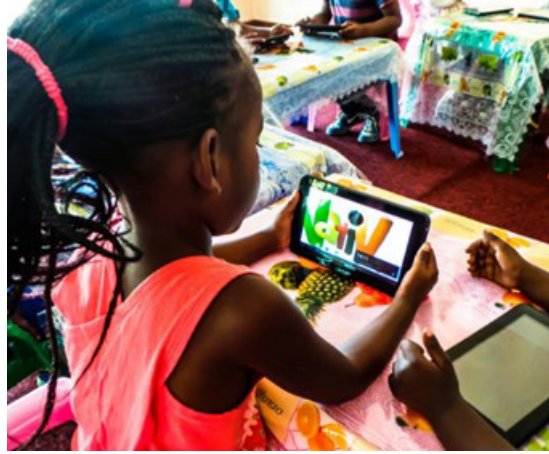
Project name: The NatiV Project

Organization: Ian N Mutamiri

Country: Zimbabwe

The *NatiV* project is an e-learning application for a low-cost Android tablet to enable children in rural **Zimbabwe** to learn to read using their own languages (including Shona), and to engage children with learning disabilities. NatiV is an Android application under development for e-learning infrastructure that will teach children how to read Shona (a Zimbabwean language). NatiV is designed to improve a child's syllable-to-sound (letter-to-sound) association. It implements simple, core Android2 application development concepts, with a user interface and gestures that are child-friendly and engaging. The aim of NatiV is to become an application that is used nationwide, catering for all local languages in Zimbabwe (Ndebele, Tonga, and so on) and operating via a central data centre which works to improve the learning software and offer parents data analysis and tips on how they can also help their children improve their reading. NatiV is being made with special consideration for children with reading disabilities such as dyslexia, with the aim of helping them learn to read by implementing technical solutions for special methods prescribed by professional dyslexia researchers.

The project meets several SDGs as it provides quality education, contributes to economic growth and promotes a peaceful and inclusive society and lifelong opportunities for Zimbabweans (**SDGs 4, 8 and 16**).



Project name: UAEPedia

Organization: Telecommunications Regulatory Authority (TRA)

Country: United Arab Emirates

UAEPedia (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 as well as the selfless leaders whose vision shaped the country. It aims to be the only authentic knowledge repository about the UAE providing information in the country's native language, Arabic. 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**).



C9 – Media

WSIS Prizewinner

Project name: Youth Women in Community Media and Journalism -the beginning of a new era in rural broadcasting journalism of Bangladesh

Organization: Bangladesh NGOs Network for Radio and Communication (BNNCR)

Country: Bangladesh

Basic information

*Youth Women in Community Media and Journalism - the beginning of a new era in rural broadcasting journalism of **Bangladesh***



Project description (description of activity)

In spite of the social and religious barriers, the prevailing scenario of gender disparity has been gradually changing, particularly in the media. Bangladesh NGOs Network for Radio and Communication (BNNRC) under the banner of “voices of the rural people”, has been in the forefront in terms of breaking the traditional biased focus towards urban areas. The organization since 2000 has played a leading role in bringing directing the focus of the media to rural areas. Community Radio, as the only broadcasting medium in rural Bangladesh, not only broke with tradition but also spearheaded the creation of a platform for women journalists from the grassroots to make their voices heard in the community. Because of their empowerment, most programmes of the women-friendly community

radio stations are designed for the most marginalized people of society – women. Bangladesh now has 16 community radio stations aiming to ensure empowerment and the right to information for the rural community. They broadcast a total of 125 programme hours per day to provide information, education, local entertainment and development motivation activities, and around 5.6 million people listen to the programmes. A total of 1 000 broadcasters are now working with those stations throughout the country; half of them are women.



Examples of linkages between the WSIS Action Line and the SDGs

WSIS Action Lines related to this project

C-9 – Media

Meeting several **SDGs**, the organization promotes equality among people in Bangladesh, contributes to ensuring quality education for all, and fosters economic development and an inclusive and peaceful society (**SDGs 3, 8, 10, 11** and **16**).

Highlights of the project’s partnership activities

Community media fellows reach out to remote locations to collect information on the lives of women and children and prepare their news and programmes. One woman feels comfortable talking to another woman of her neighbourhood about developments. These reports have brought many untold stories to light. They are contributing to development and change in their own community lives through their programmes and reports on early marriage, promotion of education and other important issues for mothers and children. Parents and social elites became sensitized and, in some areas served by community radio stations, they have collaborated to put an immediate stop to child marriages. The youth women fellows have earned prestige and recognition in the rural community through this programme. Some parents now show an interest in getting their daughters to engage in community media and journalism. It is encouraging that 22 fellows are continuing their service support with community radio stations. With her radio station Radio Naf, Hla Hla Yee Rakhaine is also working as district correspondent of a popular weekly newspaper. She is the only women journalist the area has ever produced. Some other fellows like Sanjita Kaochar Sopnil of Radio Bikrampur, Shahrina Jui Hlaand Hoimonti Mou of Borendro Radio, Samia Akhtar of Radio Mahananda, Humaira Parvin Hena of Radio Chilmari, and Abida Sultana of Lokobetar, all are working in their radio stations as full-time producers. Sharmin Sultana, the proud and confident voice of Radio Pollikontho broadcasting from the north-eastern district of Moulvibazaar since 2012, said: “It is an amazing feeling that I conduct

programmes, interact live with guests, and also respond to our audience requests for dialogues on health, women, human rights, social injustice, education, agriculture and many more issues. When BNNCR began they had only one programme on women's issues. Now they run five programmes a week exclusively dedicated to women."

Challenges and future perspectives for the project

While female journalists are facing numerous challenges even at national level, it was not easy for the youth women to work as journalists at grassroots level. "Youth women in community media" was itself a very new idea, so it was truly challenging to introduce it at the local and rural level. Challenges came not only from the families of the selected fellows; it was hard to convince even the community radio stations, and there were challenges at every step of implementation. A fellow journalist said: "It is a very challenging job in a rural conservative society. People in this part of the world have different views on young unmarried girls. A male-dominated society expects us to stay indoors. In spite of many social restrictions, we still stand up to work outdoors, even with men until late in the evening." By facing all those challenges, the programme is running successfully under the coordination of BNNRC. The fact is that the rural women are not at all the subjects of news but are now producing news and writing reports in the media. By creating opportunities for rural young women in the media and journalism, the fellowship programme particularly encourages equal opportunities for men and women in the media. Young female journalists are now sharing, with their male counterparts, the positions of producers, anchors, newscasters, reporters and station managers of the 16 community radio stations.

Views on WSIS Stocktaking and Prizes contest

WSIS Stocktaking and Prize will be an inspiring model to community media practitioners in different parts of the world. The winning of the prize will be inspiring to BNNCR's future broadcasters and policy-makers.

WSIS Prize Champions

Project name:	M-Government TV Program
Organization:	Telecommunications Regulatory Authority (TRA)
Country:	United Arab Emirates

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 reducing inequality in the country and promotes a peaceful and inclusive society, giving everyone equal access to information (**SDGs 10 and 16**).



Project name: Linguoo a Smart and Inclusive App to Listen Narrated News and Articles

Organization: Linguoo

Country: Uruguay

Initiated in **Uruguay**, *Linguoo* is a smart and inclusive app for listening to narrated news and articles from the web through a global community. The community consists of narrators and developers in 58 countries, united in a global project to fight for more inclusive apps to access web content in a more humanized way than with text-to-speech. Linguoo is a multilingual platform functioning in decentralized mode, whereby each narrator records articles from all over the world and uploads the audios to the platform. The articles are then available on smartphones through the Linguoo app.

The project fully meets a number of SDGs by providing the international community with quality information, providing the opportunity to study and develop inclusive societies, foster innovation, and so on. (**SDGs 4, 9 and 16**).



C10 - Ethical dimensions of the information society

WSIS Prizewinner

Project name:	EmpoderaLive
Organization:	Cibervoluntarios Foundation
Country:	Spain

Basic information

In **Spain**, the *Fundación Cibervoluntarios* (Cybervolunteers Foundation) is an atypical non-profit organization made up of social entrepreneurs whose vision is to use new technologies as a means for social innovation and citizen empowerment, thereby alleviating social gaps. This means in practice that Cybervolunteers Foundation works to increase the rights, opportunities and capabilities of each person within their environment, through the social use of technological tools and applications within their reach.

To achieve this goal, the Foundation has its cybervolunteers: inquisitive and proactive individuals who are willing to learn, have a passion for sharing and an enthusiasm for ICTs, who offer their time and knowledge to teach other people the possibilities of using technology tools and applications to improve their lives in a simple and useful way. They do this through both online and on-site courses, lectures, workshops, and other events.

They work with groups of people that may be excluded from the information society owing to their gender, age, professional and social environment, lack of time, inadequate knowledge, skills or motivation and/or material or economic resources. They adapt the use of technological applications to alleviate these social gaps in terms of work, participation or health. Fifteen years of work had, even by last year, received recognition from the Prince and Princess of Asturias for “the creation of new forms of participation and social innovation in support of groups at risk of exclusion”, as well as economic and social recognition of Google.org for being one of 50 entities that are changing the world-the first and currently the only organization that has obtained such recognition in Spain (<http://bit.ly/sM5CLM>).

Further information can be found at: www.cibervoluntarios.org.

For information on the Foundation’s ICT social living lab see: www.empodera.org

www.twitter.com/cibervoluntario

www.facebook.com/cibervoluntarios

www.youtube.com/cibervoluntarios.



Project description (description of activity)

The Cybervolunteers Foundation's team has been working for 15 years to train social and technological entrepreneurs and area leaders, who identify and analyse social needs within their environment and improve that environment through the social use of technology. The Cybervolunteers generate their own projects, framed by social innovation and the use of new tools to solve old problems in a different way. They are convinced that new technologies should not generate more gaps but remove existing ones.

That is why their way of contributing always seeks innovative and creative solutions for detecting and channeling needs and demands within their remit, since they are close to the prevailing conditions in their environment and therefore aware of the solutions that are needed.

The Cybervolunteers are agents for social change, social and digital entrepreneurs, online and offline local heroes, who use all manner of technological tools to alleviate a social need. They are characterized by being:

- Inquisitive and proactive people, eager to learn, with a passion for sharing and an enthusiasm for ICTs.
- Area Leaders: they identify and analyse social needs within their environment.
- Spokespersons for the needs of their environment: they channel opportunities and demands.
- Prescribers of creative and innovative solutions in their environment.
- Users of technology tools to solve old problems in a different way.
- Able and willing to disclose, as Cybervolunteers, the potential of new technologies in a useful, simple and effective way.

- Promoters of initiatives and projects marked by social innovation and creating replicable processes.

The Foundation tracks (training – management-consulting-coordination) for each Cybervolunteer lead ultimately to the creation of their own social innovation project or collaboration in a fellow leader's project. The organization certifies project completion and the type and number of skills acquired during the process. In short, we successfully develop Cybervolunteers, who are, through their efforts, a vital connection between the local and global information societies. They innovate and become social entrepreneurs in technology, while acquiring a series of basic generic skills for professional, personal and social development.

With technology, social innovation is in our hands

Cybervolunteers are “cyberoptimists”. That is because they live in an historic moment like no other, in which the appropriation of technology is the key to eliminating social gaps- inherited gaps that are related to the educational, labour, social, participative, and health aspects of human development.

For the first time, closing these gaps is in the hands of citizens themselves, as technology gives each and every one of us a chance to become the main characters, the technological social entrepreneurs capable of changing the world. This transformation is the result of an informed and engaged citizenship. A citizenship that knows how to use the tools, applications, contents and technological services at its disposal to generate a better and more prosperous world. Because addressing real needs is generating innovation and social change.



Pioneers in technological volunteering

Cybervolunteers Foundation is a pioneer in technological volunteering, an international benchmark. Its volunteers are passionate about technology and the social good. They bring both these qualities to bear, using a methodology proven over the course of 15 years. Throughout its history Cybervolunteers Foundation has succeeded in identifying replicable processes based on the social use of technology

to manage intangibles and build projects that achieve social impact by improving the quality of life in the environment. It is also a recognized and internationally valued brand *Cibervoluntarios™*.

Cyberoptimism: Connected to an attitude

In short, it's time to share, time to act. Here, there. Wherever. The boundaries are blurred to a common attitude. People connected together by their causes, convinced that we all, together, can transform the world. Everyday heroes are not sitting around waiting for better times; this is our time. Collective heroes, able to empathize with their environment and use the transformative power of technology to change the course of things they are concerned or outraged about. Social Heroes, anonymous, privileged citizens, empowered, using their right to use the Internet, responsibly and with a clear objective: to bring about social, economic and human improvement. This is Cybervolunteers, that is cyberoptimism. Because with our attitude, we make a difference.



Examples of linkages between the WSIS Action Line and the SDGs

Cybervolunteers Foundation's best example is our ICT social living lab: Empodera.org. This platform highlights people and initiatives using technologies from a social and innovative point of view to create a more inclusive and empowered society. When the foundation participated at WSIS in 2003 it realized that it was no coincidence that this Summit was the first to allow citizens to participate actively: technology has been a very important tool in history for alleviating social gaps. We took this message and decided to create something to facilitate networking for everyone interested in the social use of ICT to generate socio-technological innovation for e-inclusion and promoting citizen empowerment. The seed from which Empodera was born was our belief that networking is key to a more inclusive and empowered citizenship. Empodera was born as a means of sharing what citizens are doing on this field with the world and inspire them to do something, to stand up and make a difference.

Empowerment is the formula which Cybervolunteers Foundation uses and applies to different products or spaces, online and offline spaces opened for thought, discussion and inspiration, with content and experiences of experts and citizens about the social use of technology, social innovation and other topics. All the contents are available in English at <http://www.empodera.org/en>. From this main access point you can find information on EmpoderaLIVE, an international symposium involving personalities including Jack Dorsay (co-founder of Twitter), Ndaba Mandela (Co-founder of Africa Rising) and David Kobia (co-founder of Ushahidi). It will celebrate the 10th edition this year on 20 and 21 September in Malaga, Spain. Empodera Live gives the opportunity to make offline previous online work, puts faces and bodies to the names of people in the world of social innovation and citizen empowerment who are participating, writing, commenting, posting, and contributing to Empodera through the year. It is an event where networking is promoted in different activities, where spaces for sharing initiatives in person with other people are key for the development of future projects and initiatives. This network of people from all over the world means that Cybervolunteers do not feel alone in facing challenges, are at the forefront of change and do not have to “re-invent the wheel” over and over again; it means collaboration and social innovation.

For further information see: www.empoderaLIVE.org and the Report: <http://goo.gl/EstTZt>;

Video: <http://goo.gl/2t85Ht>; Dossier: <http://goo.gl/Pb8Wte>

Empodera Book is a free e-book that promotes and gives visibility to the social innovation experiences of Empodera.org. Published annually, it is an international reference within the sector. The most recent editions were "Redvolution, the power of the connected citizen" in 2012 (<http://bit.ly/KO4m5A>), "Cyberoptimism, connected to an attitude" in 2013 (<http://bit.ly/14jLCmD>) and "Citizen Innovation: Collective Intelligence for global empowerment" in 2015 (<http://bit.ly/1Mr9iuc>) (all available at (<http://www.empodera.org/en/publications>) Texts are available in English and Spanish.

EMPODERA Awards recognizes young initiatives and gives them an impetus to achieve their goals. Any initiative worldwide set up in the last year that makes social use of technology to alleviate social gaps, generate social innovation and promote citizen empowerment, is invited to participate. See <http://www.empodera.org/en/awards>.

Highlights of the project's partnership activities

Cibervoluntarios Foundation is encapsulating its expertise and Know How, built up over 15 years in volunteer work and ICT, on a platform. This platform is intended to generate social innovation and citizen empowerment through ICT by promoting social entrepreneurship, citizenship participation and technological volunteering. This platform brings together, in a practical and attractive way, two areas that are currently changing the world, namely, technology and the social innovation field. Cibervoluntarios Foundation has identified a number of replicable processes which successfully:

promote social entrepreneurship and technological volunteerism;

enhance the social use of technology: technology as a way to alleviate social gaps, generating social innovation and citizen empowerment;

promote “gamification” and mobilization of the third sector: to open the third sector and its environment, making it flexible and dynamic through attractive tools within the scope of users, especially mobile tools and gamification methods.

provide accreditation and certification for acquiring skills through volunteering.

Challenges and future perspectives for the project

Open and share know-how of Cibervoluntarios Foundation and make it available to people and organizations (whatever their size, nature or cause) who want to MAKE A BETTER WORLD.

Make the dream of Cybervolunteers Foundation come true: they want to share the work of many years in a worldwide reference tool that can be used by everyone. Not trying to reinvent the wheel again and again. Cybervolunteers have the vision, methodology and procedures acquired by our experience during these 15 years of work and they want to share it with the world.

Views on the WSIS Stocktaking and Prizes contest

We are glad to receive the WSIS Prize 2016. Thank you so much for this award! It is a great honour for us. It means that during last 15 years we have been on the right path to bringing about change. New technologies today are among the best tools available to empower citizens and promote human rights. The Cibervoluntarios Foundation therefore works every day to promote the social use of technology to generate intangible social processes that achieve real social transformation and generate social innovation.

Unlike technological innovation, social innovation generates not a product itself but the social implementation of a product in response to a specific need. This is achieved with the support and collaboration of hundreds of cybervolunteers. The key is not to create needs but meet existing ones. Cibervoluntarios has been making this possible over the last 15 years.

Empodera LIVE brings together, in the same place, once a year, change makers and connected citizens capable of generating social innovation and citizen empowerment around the world. This international symposium concerning ICT social innovation was intended to continue their participation in the WSIS in Geneva and Tunis in 2005. That is why this prize is so important for Cybervolunteers Foundation, which realized then that it needed an event enabling it to meet, learn, share, keep in touch and increase visibility of people, leaders and projects that are contributing to sustainable development goals through the social use of ICT.

Finally, the Cybervolunteers Foundation invites everyone to participate in the tenth anniversary of EmpoderaLIVE (20 and 21 September in Malaga, Spain).

WSIS Prize Champions

Project name: Creation of the Global Industry Council
Organization: International Federation for Information Processing
Country: Austria

Created in **Austria**, the *Global Industry Council (GIC)* has been an official contributing partner of ITU for 2014, 2015, and 2016 and this continues in the implementation of **all 11 WSIS action lines** and **17 SDGs**. The GIC 2020 Skills Report published last year clearly demonstrates how GIC is implementing all WSIS/SDGs. Through its International Federation for Information Processing (IFIP) members, GIC brings considerable resources to the implementation of the WSIS action lines/SDGs. All domains are powered by their underlying dependence on ICT. GIC continues to work to ensure that the ICT profession is grounded in technical expertise guided by ethical and professional practice.



Project name: Internet Sehat (Internet Healthy) Towards Indonesian Information Society

Organization: ICT Watch- Indonesia

Country: Indonesia

ICT Watch is firmly committed to freedom of information and is keenly aware of the emerging challenges to online freedom of expression in **Indonesia**. It creates the conditions for responsible Internet use and high-quality online content, and involves multistakeholders as partners in disseminating the programme. Through the *Internet Healthy* (“*Internet Sehat*”) *Towards Indonesian Information Society* programme, ICT Watch has endeavoured to show multistakeholders that people can take responsibility for their online activities. To this end, ICT Watch released a how-to module under a creative commons licence for parents and teachers, and endorsed several publicly-available comic books for children containing basic knowledge about Internet safety. ICT Watch also participates in various offline activities such as workshops, as well as roadshows visiting schools/campuses and communities.

With 73 000 Facebook and 697 000 Twitter followers, and being active on Blog, YouTube, Flickr and Slideshare, the programme provides Indonesian society with equitable high-quality education, promotes gender equality and fosters an inclusive and peaceful society (**SDGs 4, 5 and 16**).



Project name: Hemayati Child Protection

Organization: Ministry of Interior

Country: United Arab Emirates

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).



Project name: 360 Degrees of Student Awareness

Organization: Khalifa Empowerment Program for Students | AQDAR

Country: United Arab Emirates

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 promotes 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).



C11 - International and regional cooperation

WSIS Prizewinner

Project name:	ICT Development in Arab Region
Organization:	Telecommunications Regulatory Authority (TRA)
Country:	United Arab Emirates

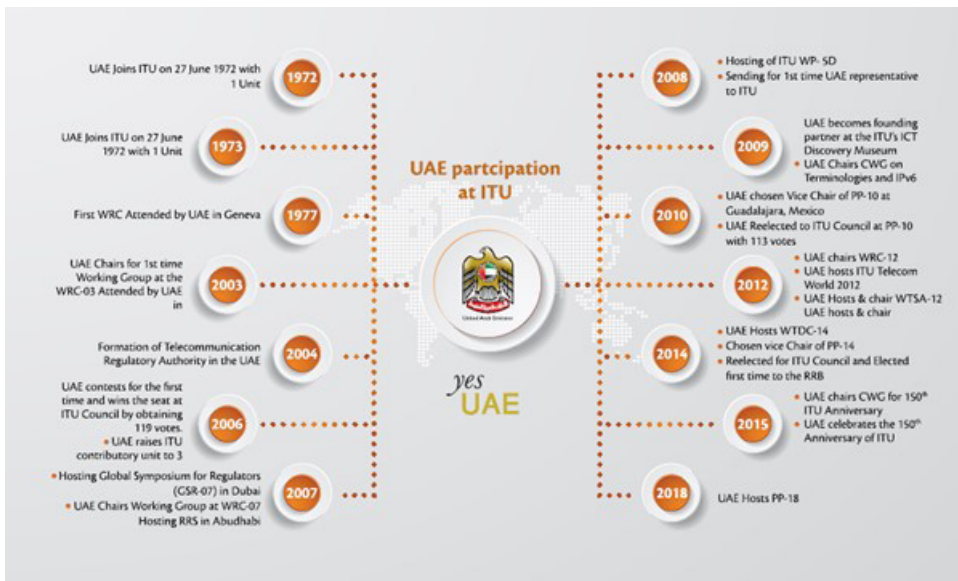
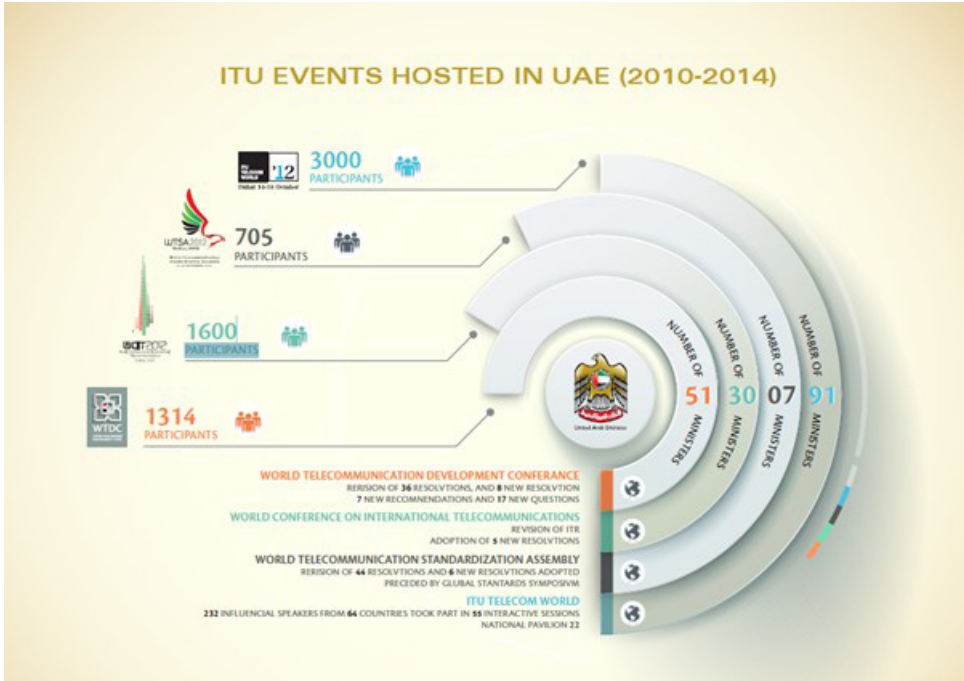
Basic information

The Telecommunications Regulatory Authority (TRA) is the Administration of the **United Arab Emirates** at the ITU. During the past decade and since the establishment of the TRA, the UAE has been at the forefront of regional and international cooperation. Whether assisting in the implementation of concrete regional and international ICT4D projects, chairing regional groups for preparations towards major ITU conferences and hosting all major events of ITU in the past five years, or supporting the implementation mechanism of the WSIS outcomes, i.e. the annual WSIS Forum including the WSIS+10 High Level Event, the TRA has been at the forefront. The TRA has acquired a reputation as a major facilitator and credible partner among ITU Member States. With a vision to further enhance this in the future, the TRA looks forward to take this international cooperation to higher levels.

Project description (description of activity)

The United Arab Emirates has been an ardent supporter of regional collaboration among the Gulf Cooperation Council (GCC) and Arab countries. These regional collaboration initiatives have helped UAE to chair a number of regional groups and committees tasked with preparation towards major ITU conferences such as WRC, WTSA, WTDC and PP. Moreover, the regional collaboration goes beyond the steering of policy matters and chairing conference preparatory meetings, and the UAE has had the honour of assisting countries in the Region including Somalia, Palestine, Yemen and Sudan on matters related to spectrum monitoring, broadcasting regulations, international policy issues, and other issues.

In order to assist ITU's capacity building efforts, the UAE partnered with ITU's Telecommunication Development Bureau (BDT) to found the Multipurpose Community Telecentre (MCT) which provides dedicated ICT-based literacy training for Arab women and is currently working with BDT to set up a regional capacity building initiative.



Examples of linkages between the WSIS Action Line and the SDGs

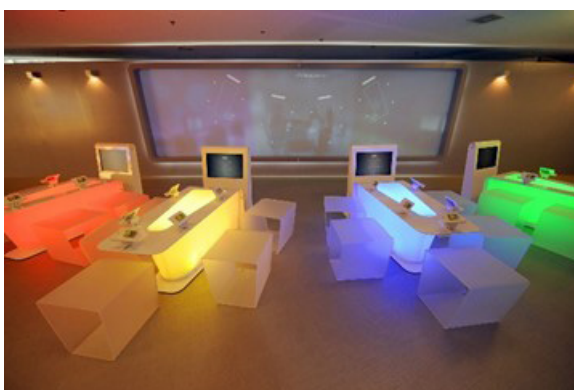
The C-11 Action line on International Cooperation is linked to the following:

- **SDG 17.9** “Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation”
- **SDG 17.16** “Enhance the global partnership for sustainable development, complemented by multi stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

- **SDG 17.17** “Encourage and promote effective public, public-private and civil society partnership, building on the experience and resourcing strategies and partnerships”.

Highlights of the project’s partnership activities

- **UAE and ITU** signed a memorandum of understanding in November 2015 during the World Radiocommunication Conference (WRC-15) to mark an important milestone in the relationship between the two organizations.
- **Smart Sustainable Cities Forum ITU, May 2015:** the TRA hosted the ITU Forum on Smart Sustainable Cities in Abu Dhabi and signed with ITU-T an ITU pilot project for Dubai’s first smart city. The UAE is chairing the ITU-T Study Group on the “Internet of things and its applications including smart cities and communities”.
- **Partnering with the WSIS Forums:**
 - 2010: strategic partner
 - 2011: strategic partner
 - 2012: strategic partner
 - 2013: strategic partner
 - 2014: visionary partner
 - 2015: platinum partner
 - 2016: platinum partner
- **World Conference on International Telecommunications (WCIT) in December 2015** - The UAE hosted the World Conference on International Telecommunications (WCIT) in Dubai for the first time in the Middle East, with the collaboration of the TRA.
- **World Telecommunication Development Conference 2014** - ITU’s World Telecommunication Development Conference (WTDC-14) was hosted by the TRA at the Dubai World Trade Centre.
- **Radiocommunication Assembly and World Radiocommunication Conference 2015 in Geneva** - Throughout the Radiocommunication Assembly 2015 in Geneva, the UAE was nominated to chair the preparatory meeting (CPM-19) for the World Radiocommunication Conference in 2019
- **ITU PP-18** - In view of its success in hosting major ITU events in the past five years, the TRA submitted a proposal to host ITU’s Plenipotentiary Conference in 2018.
- **ICT Discovery Museum** - An ICT Discovery Museum was built at ITU headquarters in Geneva with a USD 2 million grant from the United Arab Emirates. The United Arab Emirates Administration has not only been a sponsor but has also contributed to the design, theme and development of the Museum.



Simulation area ICT Discovery



ITU and the United Arab Emirates sign a new partnership framework (November, 2015)



ITU 150th anniversary celebrations

Challenges and future perspectives for the project

The UAE administration signed a memorandum of understanding (MOU) with ITU in November 2015 during the World Radiocommunication Conference (WRC-15), marking an important milestone in the relationship between the two organizations.

ICTs are an important mechanism for the development of societies. They act as a catalyst for growth in all sectors. The ITU had been mandated by its various conferences to work with its Member States on developing projects. International cooperation is a major element in implementing ITU Resolutions that aim to create opportunities in least developed countries (LDCs).

In recognition of ITU's important role in assisting countries through the implementation of ICT projects, the TRA wishes to cooperate with ITU, and believes that LDCs still face major challenges that need to be addressed and desire to cooperate with ITU for the purpose of implementing one or more projects in the areas of ICT development in the Arab Region.

Views on the WSIS Stocktaking and Prizes contest

The WSIS Stocktaking Process is a follow-up to WSIS that was initiated in 2004. Its purpose is to provide a register of activities carried out by governments, international organizations, the business sector, civil society and other entities, in order to highlight the progress made since that landmark event. Pursuant to § 120 of the Tunis Agenda for the Information Society (TAIS), ITU has been maintaining the WSIS Stocktaking database as a publicly accessible system providing information on ICT-related initiatives and projects with reference to the 11 WSIS Action Lines of the Geneva Plan of Action. ECOSOC Resolution 2012, “Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society”, encourages all stakeholders to continue contributing to the WSIS stocktaking database.

The UAE Administration greatly appreciates the ITU and related UN agencies for creating this database and keeping it live by seeking Member States’ inputs every year. Without the WSIS Stocktaking, the WSIS process could not have achieved what it has.

WSIS Prize Champions

Project name:	Inspired Generations
Organization:	Youth for Sustainable Development Foundation
Country:	Canada

Launched by the Youth for Sustainable Development Foundation in **Canada**, the *Inspired Generations (IG)* programme aims to draw up a list of approved and certified projects being carried out by local stakeholders, including young people, in the interests of sustainable development. The IG programme initially mobilizes all the key local stakeholders to make a diagnosis at the subnational level, then to establish a multistakeholder local committee for sustainable development (LCSD). This LCSD proposes a common long-term sustainable development strategy allowing for the certification of a list of projects that respond to the identified priorities, are accepted by civil society and will be supported during their implementation. This process also lays emphasis on project durability while facilitating the development of public-private partnerships for sustainable infrastructure projects.

Already established in Madagascar (three LCSDs), Comoros (two LCSDs), Seychelles (one LCSD) and Zanzibar (one LCSD), the project meets **all SDGs** related to the WSIS action lines, achieving them at the local level.



Project name: Securing The Cyber Space through International Collaboration of the Computer Emergency Response Teams

Organization: CyberSecurity Malaysia

Country: Malaysia

In **Malaysia**, *Computer Emergency Response Teams (CERTs)* are entities that work to ensure the safety of cyberspace by resolving computer security incidents, or cyberincidents, in their respective constituencies. In addition to mitigating cyberincidents, they also provide training and awareness-raising in cybersecurity. Since the Internet does not respect a country's physical boundaries, cybercrimes can easily be committed across borders and beyond the jurisdiction of any given law enforcement agency. As the point of contact for cyberincidents, CERTs therefore find it beneficial to form international collaborative partnerships beyond their respective constituencies in the interests of resolving incidents, in line with **SDG 17** on the global partnership for sustainable development.

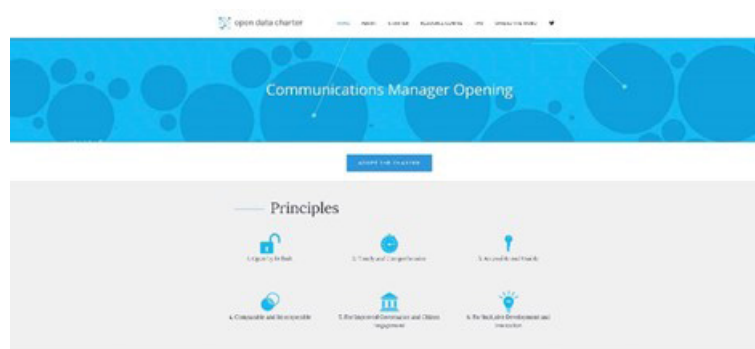


Project name: International Open Data Charter

Organization: National Digital Strategy

Country: Mexico

In **Mexico**, the National Digital Strategy led a global consultation with experts from governments, civil society, multilateral organizations and the private sector to develop the *International Open Data Charter*, a set of fundamental principles for greater coherence and collaboration between open data initiatives around the globe. To date, 18 governments have adopted this Charter and it has been endorsed by 15 organizations. Members of the Charter are working on an Anticorruption Open Data Package and a Climate Change Open Data Package that were released for public comment in the G20 and COP21, with a view to identifying key datasets and potential cases of use to promote impact in these sectors, thereby establishing a linkage with **all SDGs** of the WSIS action lines.



Project name: Disability & Technology

Organization: Association Tunisienne de Développement Numérique

Country: Tunisia

After being a member of the 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**).



Conclusion

The fifth, 2016, edition of Success Stories contains the greatest success stories in the form of 18 winning projects from different countries of the world. For the first time, this publication also contains the inputs from 70 Champion projects, i.e. those receiving the highest number of votes in each category.

These success stories showcase examples of projects related to the implementation of WSIS outcomes, emphasizing the achievements of stakeholders working towards achieving both WSIS goals and **SDGs**, transferring experience and knowledge at the global level, and spreading and fostering WSIS values.

We are also pleased to announce the imminent launch and official 2016-2017 call for updates and new entries relating to new ICT-related projects, via our WSIS Stocktaking platform. 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 and to 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. We urge all 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 and prizes contest.

We trust that readers will find this Success Stories 2016 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.