International Telecommunication Union World Summit on the Information Society (WSIS)
WSIS Stocktaking Process



WSIS STOCKTAKING SUCCESS STORIES 2018







WSIS Stocktaking

Success Stories 2018

Acknowledgement

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Disclaimer

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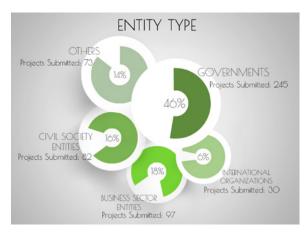
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Executive Summary

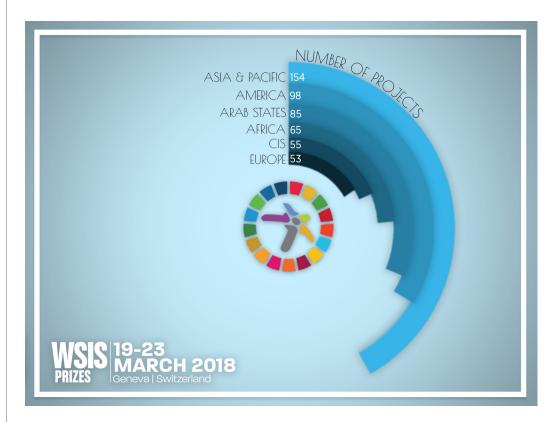
Each year, on the occasion of the WSIS Forum, 18 WSIS stakeholders are awarded **WSIS Prizes**, as a unique mark of global recognition for excellence in the implementation of WSIS outcomes. To this end, 18 projects are selected as the most successful stories worldwide, under **each category**, to serve 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. This year, we have continued to implement the **WSIS Prize Champions** category for the **WSIS Prizes** contest.

The International Telecommunication Union (ITU) has announced the top-90 winning Information and Communication Technology for Development (ICT4D) initiatives from around the world competing for prestigious WSIS Prizes 2018, from which will emerge one top Winner and four Champions in each of the 18 prize categories. These 18 category Winners will be announced and presented with their awards, and Champions honored, on 20th of March at the WSIS Prizes 2018 ceremony to be held at the Geneva International Conference Centre during WSIS Forum 2018. WSIS Prizes honor outstanding projects that leverage the power of ICT to accelerate socio-economic development around the globe.

The WSIS Prizes contest is open to all stakeholders: governments, businesses, civil society, international organizations, academia and others. The contest comprises 18 categories directly linked to the WSIS Action Lines outlined in the Geneva Plan of Action. This year's final list of **492 nominated projects** represented a wide range of stakeholders.



This includes, by region: 65 from Africa, 98 from the Americas, 85 from the Arab region, 154 from Asia and the Pacific, 55 from the CIS, 53 from Europe, and 11 international projects; and by sector: 245 from governments (46%), 97 from businesses (18%), 82 from civil society (16%), 30 from international organizations (6%), and 73 from other entities (14%).



The **WSIS Prize Champions** category recognizes those contenders having emerged from the online voting phase with almost one million 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 constitute the body of this report.

More than 40,000 new members of the WSIS stakeholder community voted this year, and with this, ITU is proud to announce that the WSIS Stocktaking Platform has increased to almost 300,000 registered stakeholders. This sets a new high for the level of global multi-stakeholder engagement, and implementation of WSIS Action Lines in support of the United Nations Sustainable Development Goals.

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 2018** kept 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 2018 are enabling the advancement of the **SDGs**.

Introduction

The contest comprises 18 categories which are linked to the 11 WSIS Action Lines outlined in the Geneva Plan of Action and **SDGs**. Almost one million votes were cast from September 11th, 2017 to January 10th, 2018 in the online voting process that resulted in these 90 exceptional ICT initiatives being selected for the seventh edition of the WSIS Prize contest. Voters selected from a list of 492 ICT success stories nominated through a comprehensive review by the WSIS Prizes Expert Group from 685 submitted projects. Out of 90 WSIS Prizes 2018 Champions, 18 winners were announced during the WSIS Forum 2018 (19-23 March 2018, Geneva, Switzerland).

The 18 WSIS Action Line 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

The 17 Sustainable Development Goals (SDGs):

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

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

The WSIS Prizes contest, first held in 2012 and rapidly gaining recognition and popularity within the ICT for Development (ICT4D) community, is seen 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.

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.

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

Project name:	OSE – Nationwide Education Network
Organization:	Ministry of Digital Affairs in Partnership with NASK – Research and Academic Computer Network
Country:	Poland

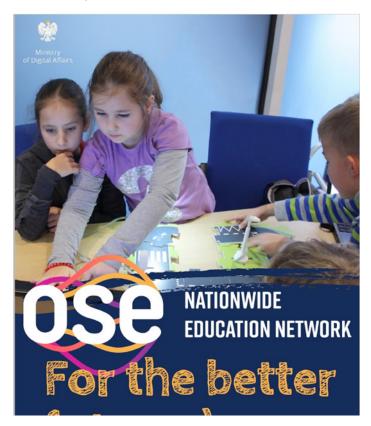
Basic information about the Winner

The Ministry of Digital Affairs is one of 19 ministries run within the Polish Government. Our aim is to make people's lives better through digitization.

We provide an enabling environment for a digital developmental boost in Poland, mainly by supporting:

- the building phase of broadband infrastructure;
- creation of web content;
- e-services;
- promoting digital meanings among citizens.

We consider digitization as a key to modern administration.



Our applications allow for more and more citizens' needs to be dealt with at home. Some of the examples are issuing a personal ID, reporting its loss, setting up businesses or reviewing the history of a purchased vehicle. We already have over 500 such e-services.

With such widely developed applications, safety is also very important. That's why the Ministry is also involved in cybersecurity issues and personal data protection. Strengthening citizens' security and keeping them safe online is our goal.

Project's description (activity's description)

Nationwide Education Network (OSE) provides fast, safe and free-of-charge Internet access to primary and secondary schools in Poland. We are looking at more than 30 000 schools and over 5 million potential users (both students and teachers). OSE is going to be fully based on existing broadband infrastructure that may be used for providing Internet access with bandwidth of at least 100 Mbps. OSE is not only about the Internet access, as it is a digital tool that enables the provision of services for teaching digital skills and constantly increasing competences of its users. OSE is a Polish governmental project that equalizes the chances and opportunities with access to the newest ICT solutions for all students, as OSE will overcome digital exclusion.

Currently, many countries (not only those in the European Union) are facing issues of local digital exclusion, especially in low population areas that are missing broadband infrastructure. We recognize the lack of universal access to fast Internet as an obstacle for full development of intellectual capital. This deficiency is especially unfavourable for children living in low population areas which are very likely to be digitally excluded because of low profitability of investments in broadband infrastructure. In most cases, lack of fast Internet access is due to limits of financial resources to purchase high-quality services as well as missing broadband infrastructure itself. This exclusion means the inability to use digital meanings in curricula such as new technologies or competence of its users.

By implementing the Nationwide Education Network (OSE) we are expecting:

- civilization leaps in teaching methods from analogue to digital, with the use of Internet educational content;
- levelling the playing field of educational opportunities for all students in Poland, particularly those living in low population areas;
- introduction of new forms of education and new curricula of competencies and digital skills;
- transfer of knowledge and good practices between educational units;
- ensuring security of using network by students by implementing mechanism of digital security.

Moreover, the Internet access increases the range of provided services, reduces their cost and improves their transparency. It makes them more available – both in the sense of the possibility to use a service remotely ("availability" dimension) and in the sense of adapting the method of providing a service to the recipient's perceptive abilities ("accessibility" dimension). In order to ensure the effectiveness of OSE implementation, we are organizing several financial sources to replace the existing equipment (computers, technical aids, IT lessons curricula, etc.) and to encourage developing digital competencies among teachers. Coordination between the Government and local governments is also required.

The activities that support smooth implementation of OSE are the following:

OSE Act:

• The OSE Act obliges schools to provide Internet access and ensures its stable funding by the State budget.

Ministry of Digital Affairs:

• Within the framework of Operational Programme Digital Poland 2014 – 2020 (OP DP), we subsidize the telecom operator to connect blank spots.

- Under agreements with telecom operators, we connect schools not covered by the OP DP intervention (100 per cent of schools will reach 100 Mbps).
- The Ministry of Digital Affairs is preparing education and information campaigns, which will include promotion and awareness-raising of the benefits of joining OSE programme.
- The Ministry is willing to create services for schools to facilitate the day-to-day running of schools and their management.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

In order to use OSE services, schools should be provided with broadband access at bandwidths of at least 100 Mbps at all times. As OSE will be a virtual network based on the existing broadband infrastructure, we do encourage all forms of investments in broadband infrastructure. Therefore, we meet SDG 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation. Any necessary infrastructure is to be built using both commercial funds and the subsidy from Operational Programme Digital Poland for 2014 – 2020 (OP DP), which is meant to grant up to 1 billion euros for the construction of new broadband infrastructure. We already declared that we have met the goal of having all schools in Poland in range of OSE by the end of 2020.

Most of all, OSE is a project providing fast, safe and free-of-charge Internet for schools. Therefore, we also meet SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, as OSE not only provides Internet access but is also a digital tool, which will supply digital didactic materials to all students. We expect every school in Poland to run classes using ICTs by the end of 2020.

By implementing OSE, in terms of transmission speed, we expect all pupils to have access to very fast Internet and modern solutions, including programming lessons. Such access will be considered a privilege by those living in low population areas or generally in poverty. In this context, we meet SDG 1: End poverty in all its forms everywhere. We are overcoming digital exclusion among those who cannot not afford Internet connection due to limited household budgets. On the other hand, households/villages/towns which are lacking broadband infrastructure, but are located within a close range from schools, become more profitable for telecom companies; therefore, there is a greater chance for them to have access to such infrastructure because the operators will make less of an investment to connect households in this specific area. Connecting schools will make the whole surrounding area more accessible and economically profitable for operators. It will also drop the Internet prices for citizens.

Highlights of the project's partnership activities

Ministry of National Education:

- The Ministry is currently running training programmes for teachers in the field of computer programming competencies, which will contribute to increasing demand for broadband Internet.
- The Ministry is running the "Active School Board" programme that is designed to equip schools with multimedia equipment. To participate in the programme, the school must already have access to fast broadband Internet.
- The Ministry is preparing an e-resources programme educational content available online.
- The Ministry is planning further investments in the educational portal aimed at teachers.

Challenges and project's future perspectives

We are aware of the benefits of Internet access among the youngest, therefore we must do our best to keep children safe from the threats coming from the Internet. For that reason, OSE will enable communication between schools (for exchange of good practices) so we learn from each other experiences in detecting and preventing such issues as hate speech, cyberbullying, etc.

On the other hand, OSE is an educational tool that provides students with didactic materials. We want to adjust OSE digital meanings to children's sensitivity, as first graders are obviously more susceptible than sixth graders. Due to those issues, we are obligated to create smart learning environments. We must increase awareness of those issues as well as prevent them in the best way possible.

The full potential of OSE is going to be used for the first schools by 1 September 2018, but the programme has an open perspective, meaning it does not have an end date. We expect to face obstacles that were unpredicted, as OSE is a brand new solution that will grow at a fast pace. Therefore, we will be studying how the programme develops so we may overcome all those obstacles as soon as possible and ensure they never happen again.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

ICT is still a nascent industry and it is expected to grow at a fast pace. We believe that participating in WSIS Prizes may have an impact on other frameworks around the world. We hope to share the idea of Nationwide Education Network so other governments make use of our solutions, as ICTs are of major importance for the development of the economy and lead to dynamic changes in all forms of social life. These changes in the digital society cannot happen without the involvement of youths and their connectivity to the Internet.

C2: Information and communication infrastructure: An essential foundation for the information society

Project name:	Federal Real Estate Programme for the Deployment of Telecommunications Infrastructure
Organization:	Ministry of Communication and Transport
Country:	Mexico

Basic information about the Winner

The Secretariat of Communications and Transportation in Mexico has the objective to promote secure, efficient and competitive transportation and communication systems by strengthening the legal framework, defining public policies and designing strategies that contribute to the sustained growth of the economy and balanced social development of the country; the Secretariat seeks to expand the coverage and accessibility of services, achieving the integration of Mexicans while also caring for the environment.

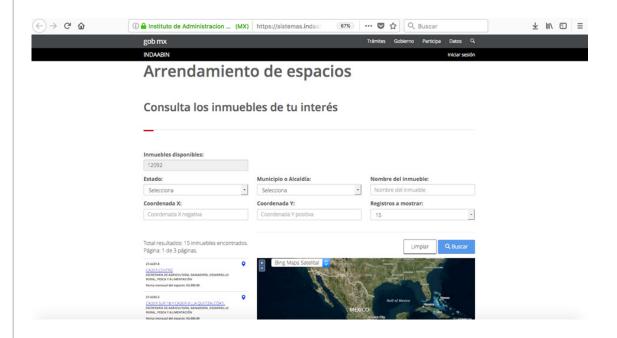
Project's description (activity's description)

The Federal Real Estate Policy for the Deployment of Telecommunications Infrastructure (FREP) promotes the use of government-owned real estate for the deployment of telecommunication infrastructure. The project enables telecom operators and infrastructure developers to lease public spaces all over Mexico, under non-discriminatory principles, to facilitate infrastructure deployment, decrease network deployment costs, and improve coverage and quality of service.

FREP was designed to promote the use of government real estate; to eliminate bureaucratic procedures; and to establish standardized requirements, prices, non-discriminatory principles, and infrastructure sharing obligations, in order to facilitate network deployment. It was put into effect on 4 May 2017, through an agreement signed by eight agencies of the Federal Government. The policy is designed so that federal, state and local governments may adhere to FREP.

The expected impacts of FREP are to reduce network deployment costs, to speed up the deployment of telecommunications and broadcasting infrastructure, to encourage the sharing of infrastructure that is already installed, and to increase the coverage of telecommunications services. As of November 2017, FREP includes a catalogue of more than 12 000 available properties for lease.

This project will reduce costs to three quarters lower than market prices and provide better services to end users as a result of increased competition and the reduction of operators' costs on structures derived from real estate and network infrastructure sharing.



Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Given the positive effects and consequences that connectivity through the country will have by granting the Mexican population with their now consolidated constitutional right of access to ICTs, some examples of such synergy are the following:

- to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work by Increasing labour productivity, and reducing the unemployment rate with the growth of the telecommunication sector (SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all);
- to ensure inclusive and quality educational content, as well as the promotion of lifelong learning opportunities for all (SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all);
- the deployment of resilient infrastructure, as well as the promotion of sustainable industrialization and fostering of innovation (SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation);
- to make cities inclusive, safe, resilient and sustainable (SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable).

Highlights of the project's partnership activities

- The Mexican Federal Government, through the Institute for the Administration and Appraisal
 of National Assets (INDAABIN, by its acronym in Spanish) established the technical, economical,
 safety and operational conditions that enabled government-owned real estate to be made
 available for the use of all telecommunication operators and infrastructure developers.
- The Ministry of Communications and Transports and INDAABIN formed a partnership to address the constitutional and legal mandates derived from the telecom reform. INDAABIN identified the potential use of 20 541 properties in different cities and rural populations all over the country that could be used for the deployment of telecommunication infrastructure.
- This partnership also identified that, up to that point in time, access to government infrastructure followed a case-by-case process, without a homogeneous framework that resulted in uncertainty

on legal or technical requirements. It was also noted that lease prices were highly heterogeneous and payment obligations were based on the number of towers and antennas that were installed on these facilities.

- Based on these considerations, FREP was designed to promote the use of government real estate
 to eliminate bureaucratic procedures and to establish standardized requirements, prices, nondiscriminatory principles, and infrastructure sharing obligations, in order to facilitate network
 deployment.
- The development of FREP has included, since its inception, the participation of all industry chambers and associations, thus ensuring it would adequately respond to the industry's requirements in alignment with any applicable legal, normative and regulatory frameworks.

Challenges and project's future perspectives

The policy is designed in a way so that other federal, state and local governments may adhere to FREP and include their buildings and other real estate in the ARES platform, in order to increase the number of government sites available for the installation and deployment of telecomm infrastructure.

As of September 2017, ARES contains a catalogue of 12 180 available properties, and 205 applications have already been filed and 47 lease agreements have been signed. Other government decentralized institutions and one state have joined this policy, namely the Mexican Postal Service, the Telecommunications agency (Telecomm), health Institutions and the State of Colima, among others.

INDAABIN identified the potential use of 20 541 properties in different cities and rural populations all over the country that could be used for the deployment of telecommunication infrastructure. The upcoming challenges would be to achieve such reach.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The WSIS Prizes contest serves as the ideal platform for identifying and showcasing success stories of projects and policies, providing the sector with models that can be replicated in the interests of empowering the community and, most importantly, recognizing the efforts made by stakeholders across the globe to contribute to the development of society and their commitment to achieve the SDGs established by the United Nations (UN).

C3: Access to information and knowledge

Project name:	Parent Mobile App
Organization:	Ministry of Education
Country:	Oman
	المحالية الم

Basic information about the Winner

The Ministry of Education is the governmental body in the Sultanate of Oman responsible for the educational system. The Ministry is working to prepare a generation to achieve economic and social development of society through optimizing educational and learning processes in school administration. It also seeks to provide distinguished human resources, curricula, buildings and assessment tools for different students. This could happen by implementing technology to cope with Oman's digital society, and to activate a larger role of the local society and the private sector in the promotion of educational service.

Project's description (activity's description)

Parent Mobile App is designed to facilitate delivery of critical services for parents to make it easier for them to follow up their kids' achievement level, attendance in classrooms and their behavioural discipline, as well as to communicate with those in charge of educational processes in the schools. The app is fully integrated to the educational portal main system and the students' database. The services are covered for all parents in Oman.

All categories and segments of society are considered while designing Parent App in terms of interfaces by providing both Arabic and English languages. The App integrates with the Madrasty App, another internal app in the Ministry. It has been designed to operate on the latest versions of Apple and Android platforms. It has also been rigorously assessed and tested to ensure compatibility on a wide variety of devices and platforms.

The Parent App offers many services, such as creating, maintaining, and completing a student's personal profile and school data by providing an appropriate design which could display the student's personal profile, including student picture, student place, date of birth, school number, civil number, name of the school, educational governorate and the educational system that the student is enrolled in.

Also, parents are enabled to follow up their students' performance: the app provides them with a screen showing the following: number of daily timetable classes, attendance, and reasons for absences.

The regulation of student affairs is of critical importance and has been included in the Parent App. Parents can follow up cases and decisions of regularity in classrooms and behavioural discipline, as well as their kids' affairs regulation. This enables the parent to be fully familiar with their kids' academic performance, so they can be in touch with the school administration, and appeal against the decisions of behavioural disciplinary committees, in case they are not convinced of their reasons.

There is also an important service provided through the app, which is the possibility of applying for a transfer of students between schools, with notifications to the parents to complete the transfer and track the order submitted.

In Oman, the Government provides education free of cost and therefore the services provided through the Parent Mobile App are free services.

The services include all schools in the Sultanate, which means that it covers all the students and all parents in the Sultanate.



Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

The Sultanate of Oman believes that education is a fundamental human right and a basis for guaranteeing the realization of human rights.

Therefore, Oman considers education as the key that will allow many other Sustainable Development Goals (SDGs) to be achieved. For example:

SDG 1: End poverty in all its forms everywhere: People in Oman can get access to information and knowledge and have quality education, so they can find good jobs, and so that education helps people in Oman to break from the cycle of poverty.

SDG 3: Ensure healthy lives and promote well-being for all at all ages: Having Omani educated society empowers people to live more healthy and sustainable lives.

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all: The Ministry of Education provides education free of cost considering all categories and segments of Omani society. Therefore, the services provided through the Parent Mobile App are free services that do not cost the parent anything. Also, the services include all schools in the Sultanate, which means that it covers all the schools and all parents in the Sultanate.

SDG 5: Achieve gender equality and empower all women and girls: Oman has achieved equality in education between girls and boys, at all levels of education. Education therefore helps to reduce inequalities and to reach gender equality.

SDG 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: Providing access to information and knowledge to people is also important to fostering tolerance between people and contributes to more peaceful societies.

Highlights of the project's partnership activities

- The Ministry of Education cooperates with the Royal Oman Police represented by General Directorates of Civil Status to electronically link the civil number of parents and students with Parent App. Therefore, the Parent App was created to rely on the largest database available in the Ministry of Education.
- The Ministry of Education did an intensive awareness campaign for parents about the importance of the Parent App, explaining that this app facilitates delivery of critical services for parents to make it easier for them to follow up their kids' achievement level, attendance in classrooms and their behavioural discipline, as well as to communicate with those in charge of educational processes in the schools. The Ministry of Education continues introducing parents to the Parent App through its different channels and social media. Also, it conducts several meetings with parents in the parent council at the schools to introduce them to the application's services.
- The Parent App has been introduced at Exhibitions such as COMEX 2017, Muscat Festival and other IT events inside and outside the Sultanate.
- It has given senior teachers and school administrators the opportunity to attend training sessions and workshops aimed to assist them how to use the Parent App to interact with parents.
- Training and workshops are given to Mobile Application programmers in the Ministry aiming to
 design the Parent App by best utilizing the most commonly used phone systems and to assess
 and test the App on more than one device to make sure of its ability to handle with those
 systems.
- There is integration between the two apps, Parent App and Madrasty App, so teachers and parents can interact, submit queries and deliver integrated services such as student transfer from one school to another.
- The project contributes to the activities of implementing technology to cope with Oman digital society, and to activate a larger role of the local society and the private sector in the promotion of educational service.

Challenges and project's future perspectives

Some challenges faced Parent Mobile App, such as adding the complex automated processes available in the educational portal in the application, for example, transferring a student from school to another school (private or government), and creating channels between service provider (educators) and users (parents).

Within the strategic planning and future improvements of this application are facilitating the step of retrieving passwords, and providing the e-service to first grade student enrolment.

A new technical service is being added called Darb Al Salamah Project to monitor the safety of student well-being in the bus; the application is connected directly to Parent Mobile Application, where the parents can follow up their students' location from the moment they leave home until they reach the school, and again until they return back home by receiving notification of sound and pictures, and viewing all details related to their students' behaviour, regularity and academic achievement.

Future plans seek to rapidly develop the services provided to the parents in order to increase the presence of the parents in projects that enrich the educational aspect represented in e-learning and the possibility of the parents' participation in virtual classes with students and teachers, which will

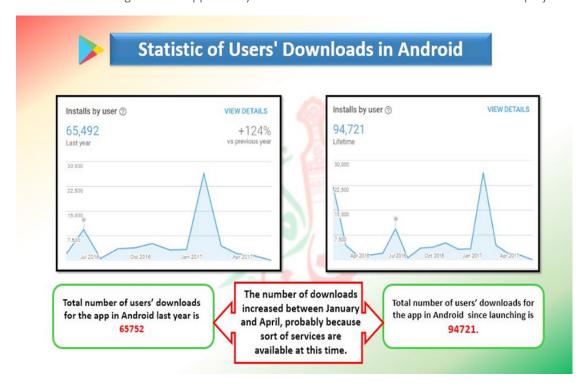
achieve an important presence in following up student participation and academic and scientific achievement, as if the parents are present in the classroom.

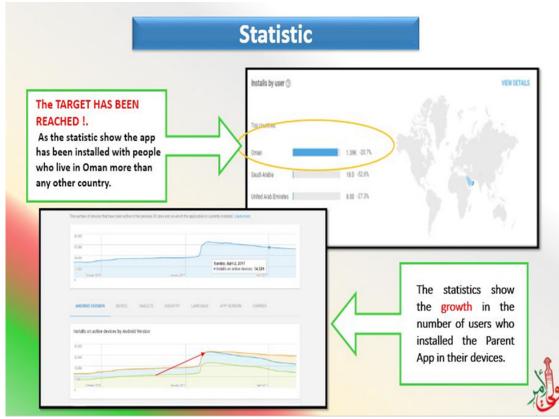
Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

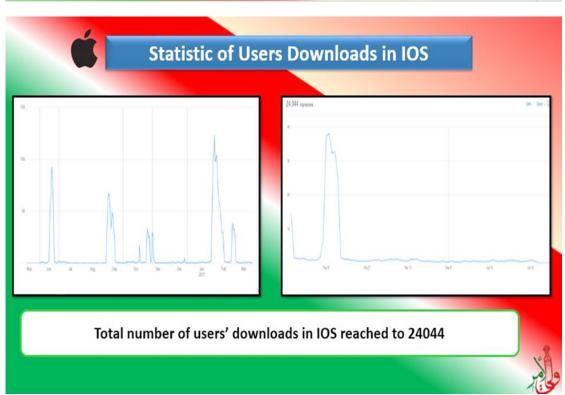
The Sultanate of Oman is always looking for the opportunity to participate in the WSIS Prize and forum, and it is delighted to share its experience and successful story of digital progress.

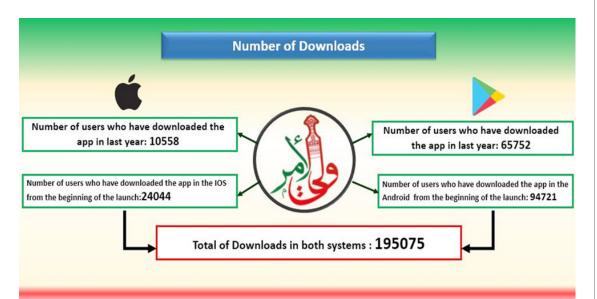
Oman believes that the WSIS Stocktaking has given a great platform for different countries of different stories to share information, learn and know what other stakeholders are doing to enhance and empower their communities in different sectors, (government and private projects).

The forum also will give us the opportunity to share our ideas and information on ICT-related projects.



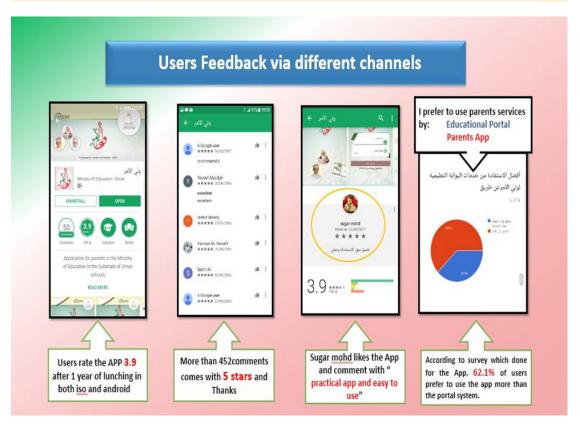




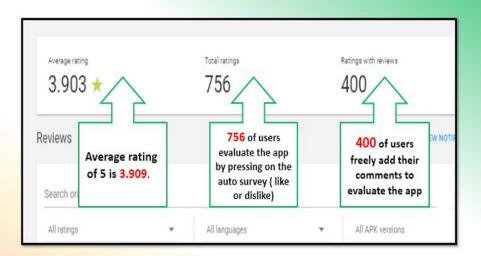


Number of registered parents in MOE Portal: **345557** parents have downloaded the app into their device





App Evaluation



C4: Capacity building

Project name:	Digital Citizenship
Organization:	Ministry of Information and Communication Technologies
Country:	Colombia

Basic information about the Winner

The Ministry of Information and Communications Technologies is the entity of the Government of Colombia in charge of deploying the ICT policy throughout the entire country. Even though this is one of the oldest ministries, previously called the Ministry of Communications, since 2012, in compliance with what was established in the principles of the information society, the Ministry adapted itself and adopted functions on information technologies.

In light of the above, besides promoting the usage of radio and television, it adopted functions of Internet distribution and appropriation. The policies which have made this possible have been called *Plan Vive Digital* (2010–2014) and *Plan Vive Digital para la Gente* (2014–2018).

Bearing this in mind, since 2012, one of the main missions of the Ministry of Information and Communications Technologies is to promote effective usage and massive appropriation of ICT through policies and programmes that ameliorate the quality of life of each Colombian, while contributing towards the sustainable development of the country as a whole.



Project's description (activity's description)

Digital Citizenship is a programme that enables the digital and productive transformation of the people in Colombia. We created a framework of 28 competencies within the nine elements of Digital Citizenship proposed by Mike Ribble to be developed and evaluated on the "know-what", "know-how" and "know-why" axes, and a set of questions to assess the performance within each of them.

We developed the most basic competencies of Digital Literacy through face-to-face courses, prioritizing 95 municipalities of the 32 departments of Colombia, based on poverty, connectivity and basic

literacy levels, and prioritizing the most vulnerable population on each of them. For the remaining competencies, we created quality content and made it available online for anyone to consult.

Finally, we created a baseline of partners that would give relevance and value to the certified competencies within the academy and the job market, and created an online community that brings access to opportunities for citizens and allows them to share experiences and to exercise their digital citizenship.



Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

The capacity building achieved through this project is linked to the SGDs in the following ways:

- SDG 1. End poverty in all its forms everywhere: We are developing and certifying digital competencies, increasing productivity and helping people connect with opportunities through our community, helping them develop skills needed to access job opportunities in the digital economy.
- SDG 3. Ensure healthy lives and promote well-being for all at all ages: A digital citizen is subject to several threats to his health and well-being, such as health problems related to ergonomic

failures and psychological conditions such as nomophobia. We created four content areas related to the element of Digital Health and Wellness: "Spaces and talents prepared for work using technology", "Balance between psychological health and well-being in digital life", "Digital citizens protecting the environment" and "I can't live without Internet". Through these, 56 941 people achieved certifications related to digital health and well-being.

- SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all: To ensure our goal of closing the digital divide, we had to make sure that people from all kinds of educational backgrounds acquired the necessary skills and knowledge. Because of these, we developed a framework of competence with related contents and conducted competence-based assessments to ensure this acquisition, while establishing ties to the educational system to guarantee that it becomes a national standard, adopted in the curricula by all kinds of academic institutions.
- SDG 5. Achieve gender equality and empower all women and girls: The face-to-face courses on digital literacy were primarily focused on vulnerable populations, including women heads of households. Both courses and certifications were available to anyone interested, regardless of gender. As a result, 331 190 (50.8 per cent) of our enrolees and 149 175 (54.5 per cent) of our certificates were awarded to women.
- SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive
 employment and decent work for all: We developed and certified digital competencies for
 all. This framework did not exist before for people outside the Ministry of Information and
 Communications Technologies. By adapting this programme so that it could be taught outside the
 Ministry, normal citizens can acquire skills that will help them incorporate into the information
 society.
- SDG 10. Reduce inequality within and among countries: Educating Colombians in digital economy issues will empower our citizens and diminish the existing gap that ICT creates among countries.
- SDG 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: We brought our face-to-face courses to several victims and members of the armed groups that are joining civil society as a consequence of the signature of the peace agreement. Also, some of the contents were focused on the topics of peace and inclusion.

Highlights of the project's partnership activities

To promote the courses and certifications, we developed partnerships with more than 120 allies, including local governments in each of the 32 departments and more than 25 cities of Colombia; more than 35 national universities; international partners such as the UN Global Compact and AIESEC; educational institutions such as *Aulas Amigas, Computadores para Educar*, REDIS and SENA; innovation hubs such as CreaTIC, *Fundación C7* and Sharecollab; non-governmental organizations (NGOs) such as *Fundación Conéctate con la Vida, Fundación Karisma* and *ImpactoTIC*;

enterprises such as Aldeamo and Hewlett-Packard; and the national army and the national police.





Embedded platforms:

- Registration and citizen follow up system
- e-Learning
- Certification tests



Apps

Available for training and certification

- Android
- · iOS
- Windows Phone



U. Corporativa

Contents and embedded tests with the corporate university of MinTIC



Challenges and project's future perspectives

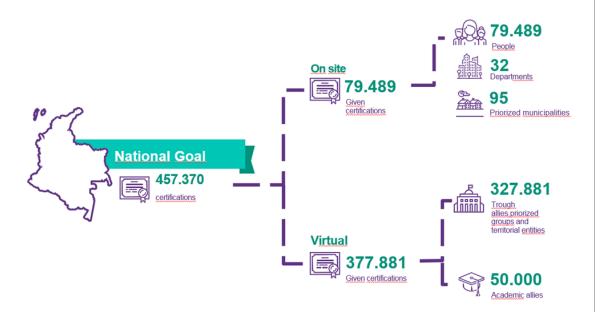
In the future, the competence framework built in 2017 should be expanded and linked to the National Qualifications Framework, once Colombia regulates this framework.

We also need to expand and improve the links we have with academic and private allies, guaranteeing the educational and employment values of the certification while creating more incentives for citizens so they become more eager to be trained and certified.

The courses developed in 2017 should also be expanded and diversified, and given extra accessibility for the disabled population.

It is our intention to release this project using an open license for our allies at the national and international levels, and for those interested in adopting this course into their curricula or into their career plans.

We should also keep in mind that most of our target population is digitally illiterate and has no access to a computer or discipline for self-teaching, so it is within our responsibility to continue our face-to-face training courses, which started in 2017 in 95 of the 1 122 municipalities that comprise the country, and adapt according to the needs of the population that starts to train.



Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The WSIS Stocktaking and Prizes contests are a quality seal for our appropriation policy. This prize and the stocktaking is a sign that we are on the right path, and is a signal for Governments to come, that this practice must continue in order to prepare the citizens of Colombia for the digital economy and beyond.

The WSIS Stocktaking and Prizes contests are proof that we are on the path of complying with the SDGs in terms of ending poverty and hunger, providing good health and well-being, assuring quality education, promoting gender equality, and contributing towards peace, justice and strong institutions, among others. Education is the path in regards to growth and development, and this price acknowledges the efforts carried out by this Government towards that path.



C5: Building confidence and security in the use of ICTs

Project name:	Digital KID
Organization:	General Women's Union
Country:	United Arab Emirates

Basic information about the Winner

The General Women's Union was established and chaired by Her Highness Sheikha Fatima Bint Mubarak on 27 August 1975 as an official representative of women in the United Arab Emirates, and acts as an umbrella, which supports and directs women's activities around the United Arab Emirates to serve women in general and United Arab Emirates women in particular.

Vision

Promote and empower Emirati women in all fields to be effective elements in the sustainable development of the United Arab Emirates and build children's capacities to ensure an advanced society in the future.

Mission

- Enhance and build Emirati women's potentials to reach higher positions and be an honouring example in all Arab and international forums.
- Raise and develop the skills of children to ensure competencies that serve the future of the State.

Values

Participation – respect – diligence – quality – transparency – excellence – development of globalization.

Objectives

- Set the general framework of women's activities in the United Arab Emirates and to prioritize the issues and matters that should be considered to enhance the position of women in various fields educational, social, economic, political and others.
- Study and analyse the positions of Emirati women in addition to utilizing the comparative studies in promoting the position of the women in the United Arab Emirates.
- Acquire materialistic and moral gains for the Emirati women through participating in the country's related decision-making process.
- Spread social and cultural awareness regarding the various matters that affect the security and stability of society in the United Arab Emirates.
- Develop and build children's capacities to ensure future development and prosperity of the country.
- Emphasize the local, regional and international role of Emirati women in all fields.
- Raise the people's awareness of the rights of the child.

Mechanisms of work

• Expand women's activities to cover all seven Emirates of the United Arab Emirates.

- Establish strong relationships with women's associations across the United Arab Emirates, Gulf Cooperation Council, and Arab countries and the world.
- Follow up the activities of local women's associations and coordinate with them in the fields that are aligned with the General Women's Union objectives.
- Continue cooperation with the federal and local authorities in the United Arab Emirates to serve women's public interest.
- Organize seminars, lectures and conferences on women's and children's issues.
- Organize educational workshops and awareness sessions for children.
- Organize specialized exhibitions in cooperation with related entities to promote and display the achievements of women in the United Arab Emirates.
- Implement court decisions regarding divorce situations, receiving and handing over of children to parents in a family-friendly atmosphere that creates a sense of safety, rather than places that have a negative impact on children's psyches.



Project's description (activity's description)

Children are the next generation and our hope for the future, so let's accompany them on the path to innovation and creativity.

In keeping with the aspirations of the wise leadership in the United Arab Emirates, and based on the kindness of Her Highness Sheikha Fatima Bint Mubarak, President of the General Women's Union, the Supreme President of the Family Development Foundation, the President of the Supreme Council for Motherhood and Childhood, to build human capacities, to enable people to gain knowledge and to encourage innovation, research and development, the idea of launching the National Campaign **#DIGITAL_CHILD** was born in order to translate the State's vision of achieving sustainable development and building a knowledge-based economy that supports innovation.

The campaign includes many activities, such as awareness campaigns, summer programmes, lectures and training workshops to train students and equip them with technical skills, as well as raise

awareness among parents about the dangers of the Internet and highlight the importance of technology in future industry.

Objectives

Sustainable development, a knowledge-based economy:

- supporting programmes for intellectual and scientific advancement to stop the brain drain due
 to consuming technology resources for entertainment purposes "fighting against consumerist
 thought";
- spreading digital awareness for optimal Internet usage and how to avoid cybercrime;
- enhancing skills scientific research and discovery and self-directed learning;
- capacity building in line with latest developments;
- securing guidance for using technology in a positive way.

The curriculum comprises four main themes: Awareness, Training, Education and Entertainment. The Awareness aspect will focus on the Internet and security breaches. The Training side will emphasize skills and capacity building. The Education side will present certain issues with security, as well as problems that victims of cybercrime may encounter. The Entertainment aspect will focus on expanding thought perceptions as well as building skills.

Lack of awareness among parents is very dangerous, as the Internet contains a huge amount of data and information. To reduce the risks associated with children's unsupervised Internet usage, downloading parental control programmes may prove to be a good solution. Unfortunately, these programmes cannot do anything about chat conversations or e-mail messages that contain content that is inappropriate or dangerous to children.

In general, parents should not rely solely on parental control programmes. Protection programmes may help parents from the technical side, but they are in no way a replacement for a child's actual parents. Parents should clarify the relationships between different topics and warn their children of the risks, while helping them address any problems that may arise. They should talk to their children about the dangers of the Internet, and let them know how risky it is to send private pictures and videos even to the people closest to them. They should explain how those pictures may be inappropriately exploited, and that children should know that if any problems occur, no matter how serious they seem, the need to tell their parents, without fear of punishment, so that their parents can help them solve the problem. Plus, there are also government institutions that can intervene and support victims in cases of cybercrime and online extortion and blackmail.

Your privacy is your responsibility

Children are vulnerable to violations of privacy and enticement by extremist and terrorist groups. In order to protect against these risks, parents must be sensitized to the need to educate their children to follow certain rules and behaviours that can prevent them from becoming victims. Therefore, to reach the largest target audience, we will use electronic media and launch the #your_privacy_your_responsibility campaign. The campaign aims to spread the culture of optimal use of the Internet, to teach about cybercrime, raise digital awareness, involve prominent and inspiring personalities on social networks, and involve society in spreading awareness messages.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Digital KID is relevant to nine SDGs, namely:

- SDG 1: Digital KID focuses on raising awareness on the measures to be undertaken for a secure and trustworthy use of ICTs, which is crucial for the economic development of a country/community.
- SDG 4: The Digital KID initiative, under the slogan "Every child has the right to an opportunity to learn computer science", which targeted children from four years and above, and parents and programmes throughout the year, includes awareness campaigns, workshops and lectures. The initiative works to contribute to spreading e-culture and spreading knowledge about the dangers of using the Internet.
- SDG 5: There is no gender gap, as Digital KID is for girls and boys, as well as parents.
- SDG7: Energy infrastructure relies on ICTs and protection against cyber-threats, which are the main topics of Digital KID.
- SDG 8: Digital KID aims to prepare a generation that is conscious of ICT concepts, which is essential for the sustainable growth of a country's economy.
- SDG 9: The plan of Digital KID aims to build a generation conscious of ICT concepts and can handle it smoothly to support economic development and industrialization, and foster innovation.
- SDG 11: The transition to the establishment of Smart Cities should be done in the right way, such as the Digital KID focus to build a generation conscious of security in ICT concepts.
- SDG 16: Many workshops on Digital KID were awareness sessions on cybercrime against children.
- SDG 17: Digital KID includes many session of awareness on the measures to be undertaken for a secure and fruitful use of ICTs by kids.

Highlights of the project's partnership activities

About the Supreme Council for Motherhood and Childhood – United Arab Emirates

An independent governmental institution, aiming to promote welfare and development
for mothers and children, and considered the primary reference for decision-makers for
motherhood and childhood matters in the United Arab Emirates. Encourages studies, research
and dissemination of comprehensive cultures. It also encourages artistic and literary production
of children and mothers, directing professional bodies and institutions towards the establishment
of projects aimed at maternal and child care education, health, and special programmes for
children and mothers.

Challenges and project's future perspectives

• Awareness-raising of the danger of technology is an important challenging part of Digital KID since the target group of the project is very young. We seek strong partnerships with high-level ICT companies and educational organizations within and outside the country. We also plan that the project will target children with special needs.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

• We are delighted the General Women's Union has been selected as the Winner in the C5 category of the WSIS 2018 Prizes.

• The WSIS Project Prize is an important international award which can be used as an indicator of outstanding achievement for the organizations and a good opportunity to exchange experiences between organizations and countries.

C6: Enabling environment

Project name:	The establishment of the Office for Information Technology and Electronic Government
Organization:	Office for Information Technology and Electronic Government
Country:	Serbia

Basic information about the Winner

The Serbian Government passed a decree in July 2017 on the establishment of the Office for Information Technology and Electronic Government. The task of our Office was to consolidate State IT resources, ensure the connectivity of various information systems and provide strong support and the basis for the development of Serbia's e-governance.

Project's description (activity's description)

Since July 2017, the Office for Information Technology and Electronic Government performs expert tasks related to the design, harmonization, development and functioning of the electronic administration system and information systems and infrastructure of State administration bodies and government services. It deals with the development and implementation of standards in the introduction of ICTs in State administration bodies and government services, and provides support in their application through the design, development, construction, maintenance and improvement of the computer network of Republic authorities. It performs tasks for the needs of the Centre for Security of the ICT System in the Republic's authorities. The Office also provides services of designing, developing and functioning of Internet access, Internet services and other centralized electronic services. It develops and procures computer and communication equipment for the needs of State administration bodies and the government service, and performs other tasks determined by special regulations.

In the future, the Office will for the first time electronically unite all State administration bodies, communication infrastructure, security centre of State bodies and government websites.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Our primary goal is to be a leader, a front-runner of future digital transformation of our society and IT technologies development. This is the point where our aims, mission and vision are allied with the SDGs, because digital technologies are the engine of every national economy and every improvement in society. They connect people and encourage them to communicate and exchange information. Today, technologies are the foundation of every well-informed and educated society. Development of digital technologies is crucial in fighting corruption. It pushes governments to act more transparently and citizens to monitor the work of the public sector, and engage in the creation of new politics and laws. Implementation of new technologies, especially in the work of public officers, cuts down bureaucracy procedures and rationales for the State apparatus. It brings comfort, saves time and money for citizens and the corporate sector. In that way, it directly contributes to the establishment of a better business environment and the growth of the corporate sector. It leads to the opening of new companies, additional jobs and completely new professions. Gross domestic product grows, unemployment and poverty rates decrease. Development of new technologies, as a tool for mass communications, helps us raise awareness of the importance of protecting the environment. It offers us new and creative solutions for eco-preservation. Finally, technologies help us make a bigger reach, an opportunity to seize the very edge of the social margin – to the wounded and deprived citizens. Technologies are the platform where they can gather valuable information, gain education or prequalification, and become equal members of the society.

Highlights of the project's partnership activities

In less than a year, since it was founded, the Office has created and implemented multiple projects with the help and support from our partners from governmental, corporate and non-governmental sectors:

eZup – with implementation of eZUP, we have connected the six largest databases in Serbia – registries, Ministry of Police databases, Tax Administration, Pension Fund, National Employment Service and the Central Registry of Compulsory Social Insurance.

eInspector – This unique information platform was created to connect and coordinate the work of inspections in Serbia. It allows the corporate sector to control the work of inspections and to see when the inspectors were in the company, how often they visit one company, and react if they know there are some irregularities. Over the next couple of months, more than 70 sectoral regulations will be harmonized with the Inspection Supervision Act, and in the next three years, new inspectors will be employed, and inspections strengthened by the acquisition of new IT equipment.

Government Data Centre – Last year we established the first Government Data Centre, in which the key information and communication infrastructure is located, which is important for the efficient functioning of electronic administration and development of new services for citizens and the economy. The Data Centre will enable millions of euros of savings for the budget of Serbia, taxpayers and citizens in the future, and will work centrally.

New National Open Data Infrastructure Portal — Last year, the portal — a central place where the data of State authorities are stored and made available to citizens, as well as the private and non-governmental sectors — was presented publicly, as part of the Open Data—Open Opportunities Campaign. The portal contains a total of 45 data sets set by nine State authorities. The portal provides information on how many citizens have travelled to the European Union in a given period, complete data on imports and exports, or what medicine is used — where it is possible to find and at what price. This is only some of the information that is adapted to this central database, which is available to everyone.

Baby, Welcome to the World Parental Allowance – This service was launched with the aim of facilitating the first days of the child's life for parents, enabling them to complete administrative tasks in a couple of minutes, free of charge and online.

Electronic payments on the eGovernment portal – The users of the national eGovernment portal can pay administrative fees for personal documents, extension of registration or any other of 800 different electronic services with their credit cards or eMoney from of December last year. This is the first time the eGovernment portal offers full service that does not include physical payment.

Challenges and project's future perspectives

The biggest challenge for us will be the creation of a legal framework for the continuation of digital transformation and the smooth functioning of e-government in Serbia. A major step towards the establishment of legal foundations was the adoption of the proposal for the Law on Electronic Administration in January of this year.

This law should enable simpler, more transparent and efficient functioning of electronic public services. One of the key objectives is to facilitate the electronic communication of citizens, legal entities and NGOs with the administration body. The law is also one of the pillars of functioning of electronic administration, necessary for harmonization with valid European regulations. However, with the adoption of the Law on Electronic Administration, legal intervention in the domain of administrative

procedure, the functioning of local self-government is necessary, as well as the adoption of a law that will regulate the issue of the register of personal data of citizens of Serbia and numerous other by-laws that directly or indirectly affect the functioning of the eGovernment system and further development of the information society. Also, reengineering and redesigning the eGovernment portal is a real challenge that we will meet in the coming period, because behind this portal we have built several complex information systems, such as eZUP, eBaby, eSchool, eParticipation, vehicle registration, school for passing a traffic exam, etc. We are moving step by step, module per module, and we want to involve as many young experts as possible in this work from our leading IT faculties and start-ups, and through some kind of public competition through the maintenance of Hakaton, we choose the best ones to work in the Office.

It is also significant that the Office participates in the planning and construction of IT infrastructure for the new Central Population Register, where for the first time all data on the citizens of the Republic of Serbia will be found. We expect the completion of the public procurement to obtain a software solution for the implementation of the elnspector information system.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The existence of WSIS Stocktaking helps in raising awareness of the importance of new technologies and the ICT industry and culture development globally. It points to the main parts in this significant process, helps them connect and network, helping them to become more visible. Also, by adopting a regular system of reporting since 2005, we can closely monitor the progress of ICT initiatives and projects worldwide. This important tool has helped us in terms of learning on our partners' experience – avoiding their mistakes and following the best examples.

WSIS Stocktaking not only promotes SDGs, but also points out the link between these goals and digital technology usage. Thanks to WSIS, we can now see that the new technologies are the fastest and the most reliable tools for accomplishing those goals.

The WSIS Prize is extremely important for us, because it supports the proactive and unique position of the Government of the Republic of Serbia, that the State needs and must be the bearer of the country's IT development. With the establishment of the Office for Information Technology and Electronic Government, Serbia became the first State in the region to set IT development and the digital transformation as a priority in further work, by adopting legal acts and by forming an entity that corresponds directly to the Prime Minister. In less than a year, our approach has been recognized and awarded with one of the most important international prizes. For us, that means additional motivation, and we hope that this will serve as an example of good practice and a signpost towards the further transition, for our neighbours in the region.

So, the key benefit of the prize is the promotion of best examples worldwide, as well as motivation to proceed even further for the winners and nominees.







C7.1: ICT Applications: e-government

Project name:	Targeted Poverty Alleviation System (TPAS)
Organization:	China Mobile Online Service Co., Ltd.
Country:	China

Basic information about the Winner

As the leading telecommunications services provider in Mainland China, China Mobile Communications Group Co., Ltd. provides full communications services in all 31 provinces, autonomous regions and directly-administered municipalities throughout Mainland China and in Hong Kong Special Administrative Region, and boasts the world's largest mobile network and the world's largest mobile customer base.

Based on the requirements of the information times, China Mobile Online Service Co., Ltd. was established by China Mobile Communications Group Co., Ltd. as its wholly owned subsidiary, committed to be provider and innovator of digital and higher efficiency services, to become creator of excellent service quality with customer satisfaction and social trust.

Project's description (activity's description)

There are still 30 million rural people in China living in poverty; the Chinese Government has formulated the goal that, by 2020, China will eliminate absolute poverty. Due to large number of poverty population and its wide coverage of distribution areas, China's poverty alleviation policy faces many challenges.

We thus designed and built the Targeted Poverty Alleviation System (TPAS), to improve the Government's efficiency and to provide tools for the Government in policy-making, project management, funds supervision and public scrutiny, so that the Government can use the system to help the population living in poverty to access aid resources, get stable jobs, increase income and finally get rid of poverty.

After two years' hard work, TPAS has already been used in six provinces nationwide, comprehensively covered 6.9 million poor people, and provided information tools for more than 400 000 Communist Party of China members and poverty alleviation staff in the Government.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Through TPAS, we implement the "Internet Plus Targeted Poverty Alleviation Policy" model. Government staff could use smartphones to collect poor families' information anytime and anywhere, so that the conditions of every poor family can be evaluated dynamically, including health status, diet and drinking water conditions, energy adequacy, gender equality and education opportunities. Based on these evaluations, the Government can help the families living in poverty to acculturate effectively.

At the same time, information and resources coming from NGOs, the Government and the public could be shared among rural poor people smoothly and quickly, so that they could learn about poverty alleviation policies, job applications, social security, health aids, educational opportunities and so on, getting things done more simply, and finding the service more satisfactory.

Beyond that, TPAS also offers intelligent and graphical analysis according to the big data collected and updated from poor areas by government staff through the TPAS Application on smartphones, to objectively identify poor families, their locations and the reasons for their poverty. Government will

then use this big data analysis in policy-making, project management, fund monitoring and receiving public monitoring, in order to help poor families more efficiently and transparently.

Highlights of the project's partnership activities

Provincial partners: The government departments in Hunan, Chongqing, Yunnan, Henan, Shaanxi, Anhui, Jiangxi, Liaoning, and China Mobile branches in the provinces above.

Other partners: China Mobile Government and Enterprise Service Company; Beijing Qingsongchou Network Technology Co., Ltd.; Serve for China; and China Foundation for Poverty Alleviation.

Challenges and project's future perspectives

Through the popularization process, the project faced many challenges. For example, the network hardly covers all poor areas; poor people cannot afford smartphones to use mobile Internet; due to lack of education, the poor population gets little Internet experience.

By 2020, we aim to cover 10 million poor people in China, to provide intelligent tools and link thousands of welfare resources to over 500 000 government staff, and to help the Government to run targeted poverty alleviation polices smoothly. Moreover, based on achievements from this project, we aim to provide a replicable model for other countries with the same conditions to solve the poverty problem.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

We are grateful to the organizing committee. It is a great honour to be recognized as Winner of the e-Government Category. We hope that by because of our selection for the WSIS Prize, more people will pay attention to poverty and help the needy get rid of poverty.



C7.2: ICT Applications: e-business

Project name:	Self-Service Human Resource
Organization:	Ministry of Education
Country:	Saudi Arabia

Basic information about the Winner

The Ministry of Education is responsible for the creation, planning, execution and administration of education and the education system in the Kingdom. The Ministry is responsible for providing opportunities for education to every citizen and continually improving the standards of education; this can be achieved by implementing and maintaining the appropriate infrastructure and services.

The Ministry of Education is one of the biggest employers in the Kingdom of Saudi Arabia, with a total of around 740 000 employees, which includes teachers, officials and administrators. It has 46 subdivisions, referred to as Educational Departments, located across the Kingdom, in addition to the head office located in Riyadh. All Educational Departments are closely managing a huge number of schools scattered across the Kingdom, approximately 40 000 in total.

Project's description (activity's description)

- The Ministry of Education decided to launch almost all the services related to employees as online self-services which are available 24/7/365.
- All these services can be used by employees of the Ministry online from a portal and is available
 over the Internet. With this solution, there is eventually no need of employees to visit the
 education offices. For example, employees can view/download their salary letters, initiate
 direction orders and request a clearance, view their vacations and entitlements, and apply for
 vacations online.
- All these self-services have attached workflows for approvals, which are designed to meet Ministry of Education requirements. These workflows are dynamic in nature and ensure the transaction is approved by all the respective stakeholders related to that process.
- Dynamic alerts, notifications and short message service (SMS) texts are designed to keep employees updated about the latest status of the process.
- Online reports are sent to managers and human resources departments to review the transactions and to measure the important key performance indicators.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

By adopting self-service applications, and converting to an e-business model, the Ministry of Education achieves the objectives of WSIS Action Line C7 (e-business) to a considerable degree as below:

SDG 5: Achieve gender equality and empower all women and girls: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all: Achieved higher levels of economic productivity through technological upgrading and innovation.

SGD 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation: Developed a technological solution which is easy to use and helps in developing human well-being and which is accessible by all employees.

SD17: Strengthen the means of implementation and revitalize the global partnership for sustainable development: Enhance multistakeholder partnerships that mobilize and share knowledge, expertise, technology and resources. Encourage effective public—private partnerships.

By adopting the initiative of digitizing all Ministry of Education services, and making it accessible for all employees, this will reduce the administrative costs for the Human Resources Department, and let it focus on other strategic areas, and it will reduce maintenance costs and streamline the processes.

These services were developed with innovative solutions based on international best practices and from niche experiences. This value addition leveraged the Ministry position as a leader in the government sector nationally and worldwide. Finally, this project was designed to further develop Saudi Arabia's information society commitment to gender equality and citizens' empowerment.

Organizational:

- single point of entry of all human resources-related activities;
- more empowered employees with increased morale;
- online and role-based access;
- high availability of all the services;
- improved data accuracy;
- real-time and accurate reporting.

Financials:

- reduced operations costs;
- improved employee productivity;
- human resources departments can focus on other strategic initiatives.

Highlights of the project's partnership activities

- The sponsor and initiator of this project is the Ministry of Education.
- The technology partner is Oracle.

The Ministry of Education selected Oracle E-Business Suite Release 12 due to Oracle's open architecture, scalability and information security. The Ministry recognized that Oracle's applications, based on best business practices, provide Arabic user interfaces, and support the Hijra calendar. Further, Oracle has proven to be implementation partners with a good track record in Saudi Arabia and qualified local teams to support future projects.

The Ministry of Education is constantly updating its IT systems to maximize organizational efficiency, streamline departmental work, and meet long-term development objectives. Oracle E-Business Suite met our expectations after careful evaluation.

• Local insurance company.

The Ministry of Education has an agreement with a local Saudi insurance company to provide health care insurance to Ministry of Education employees, and this service was introduced through the

Ministry's SSHR. Any employee can request the service and pay the insurance fees through monthly instalments deducted from his salary.

• The IT service management is HP system.

The Ministry of Education needs to support the employees after SSHR launched against any incident facing the employee. HP system works as a CRM in order to provide full IT service management to all Ministry of Education employees across the Kingdom. The Ministry of Education applied the ITIL standard model and used HP open view product as a support product.

Enhancing customer experience by partnering with Skins4Oracle.

Oracle SSHR standard screen is not rich, and to follow the Ministry of Education look and feel it needs to do customization which not allowed and contradict our implementation objectives to minimize the customization. Therefore, the Ministry of Education started a partnership with Skins4Oracle (formerly "OracleSkins") whom part of Appsynx—Oracle Partner dedicated to UX! The Skins4Oracle allows customers to transform their Oracle applications without the need to customize, making it a remote, cost-effective solution. This partnership aims to change the look and feel and follow Ministry of Education visual identity without customization and be fully compatible with Oracle.

• The implementation partner is Tata Consultancy Services.

The Ministry of Education worked with Oracle Partner Tata Consultancy Services, as it has vast knowledge of Oracle E-Business Suite and in-depth government sector experience to help the Ministry complete the FARIS initiative.

By implementing Oracle E-Business Suite and taking advantage of the training and support services offered by Oracle Partner Tata Consultancy Services, the Ministry achieved a quantum leap in transforming the Kingdom of Saudi Arabia into a digital society. In addition, Tata Consultancy Services has a huge business call centre for women inside Saudi Arabia.

• Third party integration with the Ministry of Civil Services, Ministry of Finance, Ministry of the Interior, Ministry of Communication and Information Technology and others.

The Ministry of Education is partnering with other Saudi ministries to ensure data integrity.

The upcoming new partnerships for the next phase are:

• The intelligence business reports by introducing Business Intelligence (BI) Applications.

The Ministry of Education decided to start a mission of transforming the organization from opinion-based to data-driven by running business-critical analytics tools in order to enable the Ministry's data centre to offer modernized service in the most efficient and cost-effective infrastructure that is designed for business-critical databases. Launching the Oracle Business Intelligence application will enable/facilitate the Ministry of Education with visual analytics, business intelligence, dashboard and reporting capabilities. This will be achieved by partnering with the best technology in the market, such as Oracle Business Intelligence, Qlik, Tableau, etc.

• Performance Management, Oracle Time and Labour and iRecruitment.

Based on Saudi Vision 2030, there are strategic goals aimed at improving work culture in government sectors, including all ministries, and improve human capital efficiency. To achieve such goals, the Ministry is currently working to implement several components – such as Performance Management, Oracle Time and Labour, and iRecruitment – by partnering with Oracle and associated implementers.

Challenges and project's future perspectives

- For an organization as huge as the Ministry of Education and with such a vast spread across the Kingdom, one of the key challenges was to ensure that employees even in the remotest area were getting the best and most efficient services from the Human Resources Department.
- Employees had to visit the respective Education Department to get basic things (such as salary letters, basic data updates) related to the Human Resources Department.
- There is a lack of clarity on the full business process and minimum information of all the respective stakeholders/approvers involved.
- Everything was done using printed forms, there was no control on the efficiency of the process and it caused lot of delays.
- There was no reporting of the transactions or other key performance indicators to measure the productivity and efficiency of different Human Resources Departments.
- There was no data accuracy as it required the Human Resources Department to maintain the data changes.
- There were data migrations.
- Integrations with third-party systems caused challenges.
- It was difficult to find sufficient qualified personnel able to interact with the system.
- An actual and real organizational structure existed.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

We are delighted that the Ministry of Education was selected as a champion in the E-Business category of the WSIS 2018 Prizes. This recognition will leverage the Ministry of Education position among other governmental institutions in Saudi Arabia and across borders.

WSIS fosters effective communication between information technology stakeholders, and ensures up-to-date information on information services and technologies, leading eventually to all countries and businesses, achieving sustainable development through the use of IT.



C7.3: ICT Applications: e-learning

Project name:	MuktoPaath Facilitating Use of e-Learning in Skills and Professional Development
Organization:	Access to Information (a2i) Programme, Prime Minister's Office
Country:	Bangladesh

Basic information about you're the Winner

The world's first Public Service Innovation Lab, a2i works to ensure easy, affordable and reliable access to quality public services for all citizens of Bangladesh. The a2i programme drives the creation of a public service innovation ecosystem and delivery infrastructure from the Prime Minister's Office. To do so, a2i follows a multi-pronged approach that involves capacity development of government officers on developing empathy towards the needs of citizens; service process simplification of important public services to make service quicker, more affordable and less of a hassle for some citizens; and a Service Innovation Fund as a means of engaging and empowering the whole of Bangladeshi society to co-create novel solutions to development challenges and boost their chances of making impact at scale by:

- empowering civil servants with the tools, expertise, knowledge and resources they need for experimenting and innovating citizen-centric solutions to public service challenges;
- establishing both physical and online one-stop access points that scale innovative services and make them available to citizens easily, reliably and in an affordable manner;
- encouraging and supporting non-government actors, including small entrepreneurs, teachers and the youth, to partner with government actors.

Project's description (activity's description)

- With the eighth largest population in the world, Bangladesh is faced with unique challenges when it comes to skills and professional development. Every year, over 700 000 skilled, semi-skilled and unskilled workers are migrating outside of Bangladesh. But the problem is that the portion of unskilled workers is significant, and most of them come from poor families and often cannot adapt to a foreign environment. For the 10 million-plus unemployed, semi-employed and marginalized youths in Bangladesh, a significant percentage are left without opportunities for skills development, which only pushes them further into poverty.
- On the opposite spectrum, the professionals are also faced with challenges with professional development and career growth. Among over 1 million teachers in primary schools, secondary schools and madrasahs, the majority are unaware of how ICTs can be used in preparing classroom lectures. Among over 150 000 journalists in rural, peri-urban and urban areas, a significant portion do not have access to proper skills development opportunities.
- The 27 directorates under 23 ministries that are mandated by the Government of Bangladesh to address such skills gaps are faced with multilateral problems when trying to provide training opportunities to professionals, semi-professionals and unemployed persons from their facilities. With limited resources, they cannot fulfil the ever-increasing demand for wider area coverage and more diverse and modern traits. Again, there is no working mechanism for sharing resources among the directorates, which complicates things further. Citizens have a hard time accessing such facilities. For those who manage to reach these locations, some of them cannot bear the disruption that is caused in their daily lives from having to stay away from their homes or having to make long distance travel. As a result, there is an alarming rate of course dropouts.

With its prior experience of working with education technologies such as Multimedia Classroom,
Teacher's Portal (WSIS Champion 2016) and multimedia talking book (WSIS Winner 2017), a2i
saw the opportunity of developing a widely accessible platform for solving the demand and
supply side problems of the skills development industry. The availability of smartphones and
Internet connectivity, the growing popularity in the use of ICTs in education and the experience
of teachers in developing multimedia content (especially for Teacher's Portal) were added
incentives for a2i.

The project was designed to solve those problems and challenges faced by both the service providers and service seekers. The basic idea of this project is to meet the following objectives:

- Develop a skills and training portal that will be available in Bangla (the native language in Bangladesh).
- Make content available in both online and offline modes.
- Certificates generated online will be valued all across Bangladesh.
- Assessment system would ensure proper feedback on what the trainees have learned in the course.

To fulfil the objectives and solve the challenges identified, a2i from the Prime Minister's Office, with important stakeholders, such as the Cabinet Division and the Ministry of Public Administration, has created a national e-learning platform called MuktoPaath, where primarily e-learning content for all possible training programmes within the Government can be uploaded by the training service providers, and can be viewed and acted upon by anyone, anywhere, anytime. After a year-long design and development phase, MuktoPaath was launched in February 2016 by the Honourable Prime Minister of Bangladesh Her Excellency Sheikh Hasina.

To ensure a continuous supply of validated e-learning content, a2i has undertaken a two-pronged strategy of coordination and capacity development:

- All the relevant stakeholders are being brought under one umbrella and a unified spirit of
 e-learning content creation is being transferred among them. They include the Department
 of Youth Development, Press Institute of Bangladesh, Bangladesh—Republic of Korea Technical
 Training Centre, and teachers from the Department of Secondary and Higher Education and the
 Department of Primary Education.
- Capitalizing on the experience of teacher-led content development for the Teachers' Portal, a2i is facilitating the capacity development of the government offices on e-learning content development.

Thus, a resourceful database of multimedia content (both audio and visual) is being developed with the option to sit for quizzes and do assignments. MuktoPaath promotes peer learning and allows live sessions where multiple participants can sit in from remote locations. Now migrant workers, teachers, unemployed youths, start-ups, civil servants, private sector enterprises and any individual can get access to e-learning content for government-provided training programmes, either free or at a reasonable cost, and can receive honours upon successful completion of the courses.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

The project MuktoPaath Facilitating Use of e-Learning in Skills and Professional Development is relevant to WSIS Action Line C7.3 (ICT Applications: e-learning) whereby ICT applications can support sustainable development in the field of education and training within the framework of national e-strategies; and also to WSIS Action Line C4 (Capacity building), whereby ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning, encompassing people that are outside the formal

education process, and improving professional skills. In reference to the 12 points in WSIS Action Line C7.3 (ICT Applications: e-learning) and C4 (Capacity building), this project focuses on developing distance learning, training and other forms of education and training as part of capacity-building programmes. Moreover, it refers to the unique challenges faced by Bangladesh, a least developed country, and how these have been overcome during the project.

The Bureau of Manpower, Employment and Training has already trained 480 female migrant workers in this e-learning approach. As a result, the course in Dhaka is now just 12 days, saving students an average of 60–70 per cent in training-related expenses. Materials continue to be available online and on mobile after the training, so students can revisit them at a later date as needed. As a result, this e-learning initiative is helping women to develop their skills and confidence, and enabling them to earn more for their families.

This innovative learning method is already making meaningful contributions to attaining SDGs 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all), especially targets 8.2, 8.5 and 8.6. At a more micro level, it is helping to achieve SDG target 4C of substantially increasing the supply of qualified teachers by 2030. Female teachers in remote locations, related to SDG 5, can benefit from personalized learning with less disruption to household duties and not compromising personal security.

Highlights of the project's partnership activities

- MuktoPaath is extending partnership with all the ministries and directorates in the Government
 that are mandated to develop capacity among different segregated groups in Bangladesh. Already,
 partnerships have been developed with the Bureau of Manpower, Employment and Training;
 Department of Youth Development; Press Institute of Bangladesh; Department of Secondary and
 Higher Education; Department of Primary Education; Ministry of Primary and Mass Education;
 Ministry of Education; Ministry of Expatriates' Welfare and Overseas Employment; and Ministry
 of Youth and Sports.
- But MuktoPaath is not limited to training courses offered by the Government only. Rather, there is an equally important focus on NGOs. Already, partnerships have been formed with Save the Children, British Council, the International Organization for Migration and the Dhaka Ahsania Mission to offer training to their staffs using MuktoPaath.
- Partnerships have been formed with academic institutions such as Bangladesh Open University, the pioneer university in Bangladesh on distant learning programmes; and University of Dhaka, the leading university in Bangladesh, which can contribute with world-class content.

Challenges and project's future perspectives

The challenges facing MuktoPaath can be segregated into two categories: demand-side challenges and supply-side challenges.

Among the demand-side challenges are included insufficient promotion of the portal to the target audience, and risk of a system-generated certificate not getting accepted by employers. To address these potential challenges, massive promotion has been carried out through over 5 200 digital centres and all major government websites and portals. Moreover, formal agreements have been signed with relevant agencies and certification bodies, and a proper performance appraisal system is maintained.

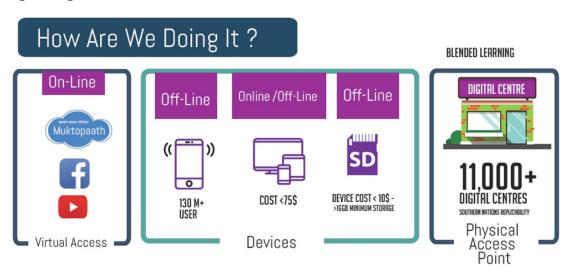
Supply-side challenges included that of switching from a traditional training framework to MuktoPaath, and how to develop regular courses and create content. This challenge was addressed using a top-down strategy of giving pressure down the hierarchy of government officers to come up with more ways of using MuktoPaath as a training tool. Also, features have been added to easily create and upload courses and content.

MuktoPaath has the prospect of training 600 000 migrant workers on different traits every year; 150 000 newcomer journalists on the basics of journalism; 350 000 primary school teachers and 400 000 secondary and high school teachers, trainers and education officers on different subjects; and more than 10 million unemployed youths on different skills-based traits.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

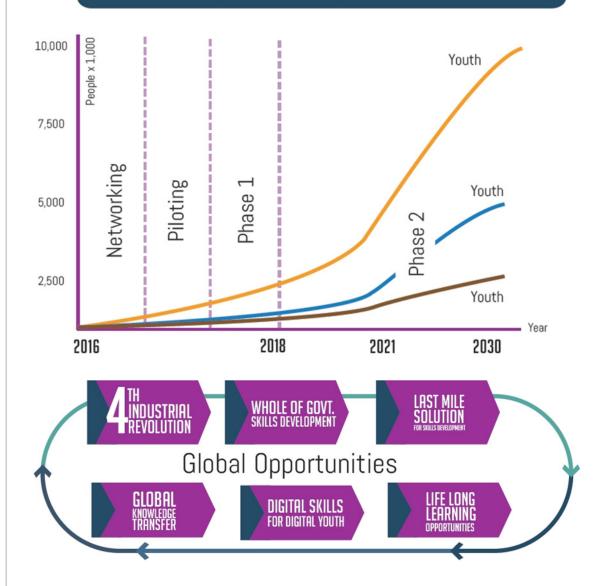
The WSIS Stocktaking and Prizes contest has proven to be the perfect platform for collecting development stories generated through the application of ICTs and modern technologies. The WSIS Action Lines serve as a guiding tool for projects around the globe to gauge their contribution to human and social development in a sustainable manner.

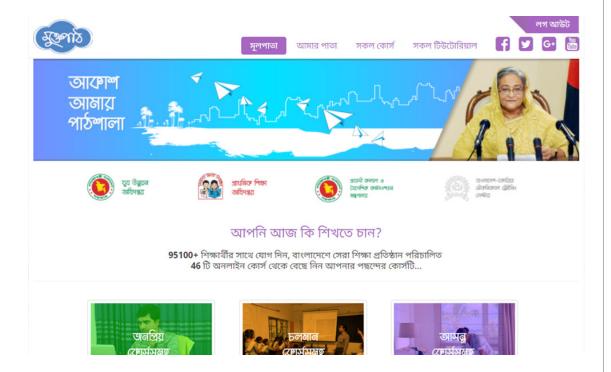
The a2i project is proud to be associated with the WSIS brand and the values it promotes in the global community. Our experience shows that the WSIS Prize serves as an incentive for government entities to innovate further, since there is an opportunity for international recognition and promotion of the Digital Bangladesh vision.



We think ITU should initiate local WSIS chapters in different countries, giving priority to those countries that have been most active in submitting proposals for the WSIS Prize. We at a2i would be glad to manage the Bangladesh chapter and execute events and activities that would further promote values upheld by WSIS.

How do we see the future?





C7.4: ICT Applications: e-health

Project name:	Panoramic Epidemiology
Organization:	Government of San Luis Province
Country:	Argentina

Basic information about the Winner

San Luis is a province located in the heart of Argentina. Its territory extends over an area of 76 748 km² and it has a population of approximately 450 000 inhabitants. For nearly 20 years, it has been investing in digitizing its society by providing free broadband connectivity to its entire population. The deployment of optical fibre extends over an area of more than 2 600 km², and the province aims to provide every home with fibre-to- the-home technology by 2019.

San Luis' Digital Agenda was outlined with the idea that the society of innovation and knowledge requires that the entire population of San Luis take part in its development.

Project's description (activity's description)

The San Luis Digital Agenda has also led to development and innovation in health, where the Government of San Luis deploys the *SALUD* 3.0 (HEALTH 3.0) policy, aimed at maximizing the digitization of the sector with these projects: telemedicine, digital prescription and clinical history, a web appointments system for public hospitals, and applications for epidemiological surveillance.

The advance of space technology has provided us with satellite images, which together with equipment and software for processing, the wide coverage of the Internet and the development of geographic information and global positioning systems, provide us with tools to organize information and produce digital maps.

For these reasons, the Government of San Luis contributes to strengthening health surveillance by incorporating the panoramic dimension by means of two platforms: barriosindengue.gob.ar for mosquito-borne disease surveillance, and pueblosinchagas.gob.ar for Chagas disease surveillance.

Despite their short implementation times, both platforms are effective for the management of epidemiological information and are user-friendly for both health agents and citizens alike.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

WSIS Action Line 3: Ensure healthy lives and promote well-being for all at all ages

In both platforms, the surveillance of transmitters of diseases that can cause epidemics is carried out.

In *Barrio sin Dengue*, the presence of the Aedes Aegpyti mosquito – transmitter of Dengue, Zika and Chikungunya – is monitored, registering the presence of the mosquito and/or its larvae in different places, such as grassland.

While in *Pueblo sin Chagas*, the surveillance of the "kissing bag", vector of Chagas disease is carried out, registering its presence in endemic areas. Although San Luis has not had vector transmissions since 2014 (certified by the Pan-American Health Organization), its surveillance is essential to continue in this way.

In addition, both platforms allow the registration of infected people for their care, avoiding possible epidemics.

In the application *Barrio sin Dengue*, the general public informs about possible outbreaks of the presence of the mosquito. This empowers the population in prevention.

The "health agents" carry out the professional registration through the applications on their tablets throughout the provincial territory, also counting on the information provided by the public.

The collected geo-located information allows decision-making in real time.

Challenges and project's future perspectives

As a result of these two experiences, an application for health workers called Ramón Carrillo was developed in homage to the former Minister of Health of Argentina, who in 1946 promoted a health reform based on prevention and primary health care. This platform has the same technological features as the two previous ones and makes it possible for health agents to digitize the surveys carried out at the community level, which provide socio-health information such as: housing situation, income level, pregnancies without controls, infant mortality, vaccination coverage, chronic illnesses, etc., allowing a detailed diagnosis of the community's health conditions. The three platforms described above complement each other and are integrated to provide a strategic dashboard for healthcare managers.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The presentation of the CMSI awards forces us to think about the different strategies followed to achieve the maximization of digitalization according to the SDGs. This process adds value to what is being done because it forces us to rethink and improve the defined action plans.

That is, the existence of these awards is in itself an aid for governments and institutions.

The process of selecting nominees, champions and winners is guaranteed by the WSIS organizations that ensure transparency.

The publication of the nominated projects allows that the continents to learn about the successful plans, and helps find local solutions to shorten efforts and time.

The publication of the champions' and winners' plans is a unique recognition of the excellence in the implementation that fills with pride all those who obtain them.

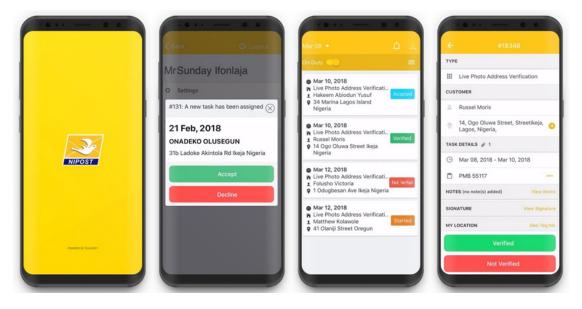


C7.5: ICT Applications: e-employment

Project name:	NIPOST Address Verification System
Organization:	Nigerian Postal Service
Country:	Nigeria

Basic information about the Winner

The Nigerian Postal Service (NIPOST) is a public government corporation that regulates and provides postal services in the Federal Republic of Nigeria. Services provided by NIPOST range between common postal services — such as mail, parcels, express mail and modern services such as e-commerce, money transfers, and e-government transactions — to retail, government and business enterprises. NIPOST, through the "Posting the Post into Prosperity Initiative", is making a large investment in the electronic and technological infrastructure of postal operations and National Addressing System to raise the quality and speed of services and contribute to increasing the capacities of distribution and mail delivery to customer locations, and offering outstanding services to individuals, enterprises and government institutions in Nigeria.



Project's description (activity's description)

The NIPOST Address Verification System (AVS) is a technology platform developed on artificial intelligence to empower individuals, businesses and government institutions to verify physical addresses and the identity of the individuals or businesses that reside at the address in a sustainable and commercially viable manner. Businesses need a reliable and effective verification system to verify customer data. Using AVS, the system improves the integrity of customer data collected and does away with mistakes in addresses.

AVS turns the address verification challenge on its head, to create a centralized system for verified physical addresses. Through smartphones with Internet access and the NIPOST AVS App, on-field agents located in any part of the country can accept verification requests and carry out the address verification in less than 24 hours.

Customers – including financial institutions, government agencies, private security guards and others – can request address verification via plugin the Application Programme Interface API/SDK, which

works with the existing web form to provide the address to be verified and receive a response back after verification is carried out.

AVS is a single trusted platform helping financial institutions to address know-your-customer and anti-money laundering and counterterrorism financing challenges and for the financial institutions to be regulatory-compliant. This will make the 67 per cent of Nigeria's population that is unbanked to have a verified identity with address that can be used for accessing financial services. The platform will create 150 000 direct jobs through on-field agents crowdsourcing, and improve governance through social intervention and address the national data security challenges.

The details about the project and its activity may be found at https://verify.nipost.gov.ng/.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Regarding the SDGs dealing with the pursuit of decent work and job creation (SDG 10), economic growth (SDG 8) and good governance (SDGs 5, 11 and 16), NIPOST AVS creates value for society by:

- Goal 1: End poverty in all its forms everywhere. We do this through income growth, generating up to up to \$25 per day for every field agent.
- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture. This is done through financial inclusion NIPOST AVS will bring over 40 million Nigerians to have access to financial services and improve their quality of life.
- Goal 5: Achieve gender equality and empower all women and girls.
- Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all. We have a target of 150 000–500 000 new jobs to be generated through AVS on-field agents.
- Goal 10: Reduce inequality within and among countries. Regardless of gender with smartphone and Internet, anyone can become a NIPOST AVS agent.
- Goal 11: Make cities inclusive, safe, resilient and sustainable. This is done through the National Data Security infrastructure.
- 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. This is accomplished by allowing citizens to have access to improved governance.

Highlights of the project's partnership activities

- Youverify-Co: NIPOST partnered with Youverify-Co (www.youverify.co), as the technology partner to develop the NIPOST AVS.
- Central Bank of Nigeria: NIPOST partnered with the Central Bank of Nigeria, the financial regulator body in Nigeria, to adopt AVS as the official portal to verify proof of address in the financial sector in Nigeria.
- National Identity Management Commission: NIPOST partnered with the Commission, the government regulator managing all government-issued identity, to adopt NIPOST AVS as the official system to confirm citizens' addresses in exchange for driving overall national adoption.
- Corporate Affairs Corporation: NIPOST partnered with the Corporation, the regulatory body
 managing business names registration in Nigeria, to adopt AVS the as official system to verity
 business addresses before registration and when filling annual returns to increase income tax
 generation for the country.

• National Communication Commission: NIPOST partnered with the Commission that regulates the telecom sector in Nigeria to adopt the system for confirming subscribers' addresses during Subscribers/Identity Module (SIM) registration.

Challenges and project's future perspectives

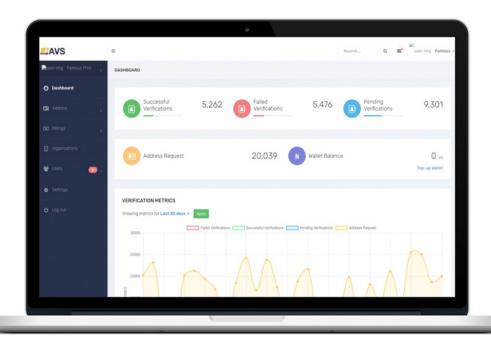
NIPOST will focus on driving citizens' participation in the project for social economic development based on Youth Engagement. Under our road map, we started this project in September 2017 and will continue until it is expanded nationwide and can offer up to 500 000 direct jobs, bring more than 40 million citizens to financial services and improve governance. Moreover, the application will be expanded as it becomes social intervention and national data security infrastructure.

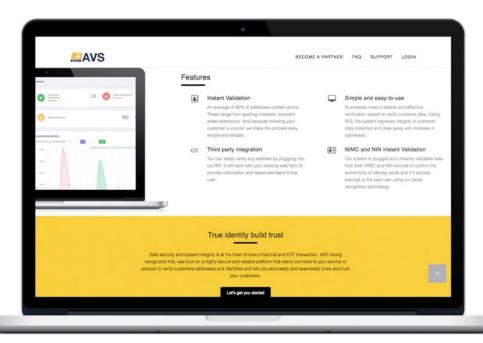
Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

This initiative contributes to the SDGs by creating a job role for the world we live in today, for every youth in Nigeria regardless of gender, disabilities or tribe. NIPOST AVS creates an insatiable demand for the supply of able and educated youths across to country to earn a living wage simultaneously doing collaborative work for the overall good of the country.

NIPOST appreciates the WSIS contest initiative, where country-level programmes and projects on innovative technology for economic and social development are given the opportunity to be in the limelight. This encourages the prime movers of the Postmaster General of the Federation to make efforts to attain the next level in the initiative. The global community puts high emphasis on the power of technological success, and in his transformation and progress the Postmaster General has achieved making NIPOST a technology company that leverages the power of ICT to provide all its services.







C7.6: ICT Applications: e-environment

Project name:	Disaster Emergency System
Organization:	Abdelmalek Essaâdi University, Faculty of Sciences and Techniques of Tangier
Country:	Morocco

Basic information about the Winner

Abdelmalek University is a Moroccan university created in 1989, considered as the main university of the Northern Kingdom of Morocco. This university is made up of 13 institutions, including schools and institutions in the Tangier—Tetouan region, and especially in these two major cities. It covers the fields of sciences, law, economics, letters and human sciences, sciences and techniques, etc.

Among the missions of the university, it remains faithful to:

- education and initial and in-service training;
- scientific research and the valorization of the results;
- dissemination and scientific and cultural information;
- cooperation.

Project's description (activity's description)

Human security means protecting fundamental freedoms that are the essence of life. It also means protecting the individual against serious threats or danger. Therefore, we need to develop new ways of thinking to design better solutions and new intelligent systems that solve our current problems and help people with their survival, their lives and their dignity. In this context, we present in this project a new concept to create an adaptive system to save lives and help the individual in all kinds of danger. The main objective of this system is the implementation of a new intelligent system that serves to provide services in a fast and efficient manner to those in physical or moral danger, and help them to cope with less damage or guide their choices, using a suitable solution based on the environmental data integration from the Internet of Things, according to their profiles and situations.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Among the goals of WSIS is to promote innovative solutions for supporting humanity. This goal is summarized in our system characterized by trust, efficiently and quality, which will guarantee a proficient operation depending on the services offered by our system before, during and after the disaster. The essential objectives of the Disaster Emergency System are to (a) reduce the probability of accidents; (b) warn the public about the behaviour of the disaster or an emergency; (c) reduce the severity, if the disaster occurred despite the taken precautions; and (d) provide an automatic and adaptive navigation guide.

Highlights of the project's partnership activities

These include:

- the commune;
- the region;

- local authorities;
- the private sector;
- civil society;
- emergency rescues;
- government institutions (ministries, agencies);
- national and international crisis management organizations;
- national and international for management natural disasters.

Challenges and project's future perspectives

Our challenge is how to make the solution that we propose (Disaster Emergency System) an international solution, and how to make it available to all institutes for free. Our idea is to set up a configurable and open system accessible over our planet for all organizations and all users through an effective and sustainable way. We believe that any solution that can save a life or provide support in a critical situation to anyone and everywhere is a duty of humanity.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

WSIS is one of the most famous international IT meetings, and is provided around the world to governments, international organizations, the private sector, civil society and other stakeholders to contribute with innovative projects or prototypes in different fields.

WSIS PRIZE 2018 FOR THE CATEGORY C7: ICT APPLICATIONS : E-ENVIRONMENTS

Disaster Emergency System

Abdelmalek Essaâdi University Faculty of Sciences and Techniques of Tangier

Pr. Mostafa EZZIYYANI - Morocco





DES Project Description

Human security means protecting fundamental freedoms that are the essences of life. It also means protecting the individual against serious threats or danger. So, we need to develop new

ways of thinking in order to design better solutions and new intelligent system, that solve our current problems and help people to their survival, their lives and their dignity. In this context, we present in this project a new concept to create an adaptive system to save lives and help the individual in all kinds of danger. The main objective of this system is the implementation of a new intelligent system that serves to provide services in a fast and efficient physical or moral danger and help them to cope with less damage or guide their choices using a suitable solution based on the environmental data integration based on IoT according to their profiles and situation. Our interests are the trust, efficiently and quality of our system which will guarantee an proficient operation depending on the services offered by the our system Before, During and after the Disaster.



Devices adaptation to user profile



Software Layers of DES

D.E.S an Open Platform for Devices Interoperability and Data Integration



The DES architecture underlying network complexity of heterogeneous connected devices and sensors and provide an adaptive services as autonomous applications that lead users toward a automatic way of interacting with the physical environment for monitoring natural disasters with: (1) low cost, (2) quick response, and (3) salability and flexibility.

DES platform is a well-known data intensive application for the high bandwidth requirements and stringent delay constraints. It manifests a typical paradigm of data-intensive application upon low-cost scalable system. (1) supporting reliable data transmission, (2) handling huge data of heterogeneous sources and types, and (3) minimizing data transfer. The DES system incorporates data fusion and reconstruction approaches to bring together all data into a single view under monitoring.

BEFORE

DES will be able to predict and inform all users and any person subject to risk about all necessary measures to avoid in such situations or disaster. DES advise people about the seriousness the risk and, how to change (or control) the behavior according to the proposals offered by the



During Disaster, DES propose an automatic evacuation guiding scheme using intelligent evacuees sensors nodes, which can automatically grasp damage situations and guide evacuees. Evacuees can obtain the surrounding map and locations of safety places by preinstalling applications for evacuation guiding in their device nodes. System offers to users the solutions that can be adopted in a safe and a reliable change as the path to follow, report emergencies by taking

2 DURING

3 AFTER

DES system provides means of real-time decision for emergencies of the disasters in a strictly minimum time interval. This system is based on the data collected automatically from the connected devices and sensors, for coordination with emergency units to allocate the suitable available resources to save the victims according to the severity of their situations.



into account user profiles CHALLENGES AND PROJECT'S FUTURE PERSPECTIVES

Our challenge is, how to make this solution (D.E.S) as an international solution and how to make it available to all institutes for free ? Our idea is to setting up a configurable and Open System accessible over our planet for all organizations and all users that need such this system through an effective and sustainable way. Because, we believe that any solution that can save a life or provide support in a critical situation to anyone and everywhere is a duty of humanity.

Automatic Evacuation Guiding Using Mobile Sensors Nodes Based on MAS

When large-scale disasters occur, evacuees have to evacuate to safe places quickly. DES, provide an automatic evacuation guiding scheme using intelligent sensors nodes of evacuees based on mute-agents System. Each node tries to navigate its evacuee by presenting an evacuation route. It can also trace the actual evacuation route of the evacuee as the trajectory by measuring his/her positions periodically.



The proposed scheme automatically estimates blocked road segments from the difference between the presented evacuation route and the actual evacuation route, and then recalculates the alternative evacuation route. In addition, evacuees also share such information among them through direct wireless communication with other mobile nodes and that with a server via remaining communication infrastructures. Through simulation experiments, we show that 1) the effectiveness of the proposed scheme becomes high with the increase of degree of damage and 2) the effect of information sharing through communication infrastructures is higher than that through direct wireless communication.

















































C7.7: ICT Applications: e-agriculture

Project name:	E-voucher Systems: Connecting Smallholders to Knowledge, Networks and Institutions
Organization:	International Fund for Agricultural Development
Country:	Kenya

Basic information about the Winner

The International Fund for Agricultural Development (IFAD) is an international financial institution and specialized United Nations agency based in Rome, the UN's food and agriculture hub. Since 1978, we have provided \$18.5 billion in grants and low-interest loans to projects that have reached about 464 million people. At IFAD, we invest in rural people, empowering them to increase their food security, improve the nutrition of their families and increase their incomes. We help them build resilience, expand their businesses and take charge of their own development.

Project's description (activity's description)

An e-voucher is a simple and cost-effective means of electronically distributing, tracking and delivering subsidized agricultural inputs to targeted farmers, common in certain value chains. Through funding contributions from IFAD, the Government of Kenya and the European Union, Equity Bank of Kenya, Ltd. (EBL) set up and operationalized the e-voucher platform through which farmers were able to access e-voucher package inputs. The e-voucher beneficiaries accessed inputs through agro dealers who had been issued POS (point of sale) devices by the bank for transactions. Eligible farmers are required to open a bank account with EBL and deposit their 10 per cent contributions of the value of the e-voucher package for the first cropping season, after which they are issued customized ring-fenced debit cards.

The cards are segmented into different e-wallets (seeds, fertilizers, hermetic bags and tarpaulins). Based on the validation and valuation of the e-voucher package, the eligible farmers and agro-dealers are informed of the date of the cropping season and sequence of the distribution of the inputs that each farmer needs to collect from their assigned/allocated agro-dealer in their county.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Goal 1: End poverty in all its forms everywhere

The project facilitates access to improved agricultural inputs to boost yields and income generation. There was a successful enrolment of a total of 11 678 farmers (6 per cent young people, 56 per cent male and 38 per cent female) benefiting from the full e-voucher package (comprising 176.8 tons of assorted certified seeds, 1 399.2 tons of inorganic fertilizer, 7 047 litres of foliar feed, 11 678 tarpaulins and 116 780 hermetic bags) that enabled farmers to plant maize/beans in the Western Region while farmers in Eastern Region started planting (sorghum/green gram). In the long run, creating livelihoods and sustainable production for such farmers alleviates poverty.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 12: Ensure sustainable consumption and production patterns

Failures in agricultural input markets are common in Kenya, and a major constraint to productivity growth. Farmers are faced particularly with acute constraints, low output price incentives, high fertilizer prices, lack of liquidity/credit and low-quality seeds. The project supported the capacity

building of value chain stakeholders to engage profitably in the provision of agricultural services and enhance productivity in view of commercialization and linking farmers to output markets and financial institutions.

Eligible agro-dealers were trained by EBL on financial and business management before being supplied with POS and record books as legitimate agents of EBL for operation of the e-voucher system, building their capacity as value chain stakeholders on sustainable agricultural services.

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

Highlights of the project's partnership activities

IFAD provided support to farmers who have reached household subsistence levels to graduate to market-oriented farming for value chains with market potential while retaining their diversified livelihood coping strategy. The European Union provided additional funding to its original contribution to the KCEP through IFAD to contribute through the programme to strengthening institutional capacity to manage droughts and improve food security and livelihoods in the arid and semi-arid lands.

The lead agency for the consolidated programme implementation is the State Department of Agriculture in the Ministry of Agriculture, Livestock, and Fisheries of Kenya. The agency will take the responsibility for the coordination of programme implementation, supported by a Programme Coordination Unit for IFAD-funded activities, liaising with focal points for activities under their realm.

Challenges and project's future perspectives

Some of the challenges faced during implementation of the e-voucher scheme include the inability of some selected farmers to raise the 10 per cent contribution required to trigger the e-voucher system to access inputs; mismatch of identification numbers with names on the Government's Integrated Population Registration System; lost and/or old-generation IDs, leading to inability to open bank accounts; and farmers forgetting or blocking their debit card PINs.

Some of the things that further exacerbated the challenges in the e-voucher system include the failure of the enrolment kit (experienced during the first day of farmers' enrolment to the e-voucher platform in some regions); POS machines not working; debit cards being declined by POS devices; delay by agro dealers to sign "offer letters" from EBL; inconsistent signatures; agro dealers pulling out of the e-voucher scheme; inadequate logistical arrangements by the bank; lack of alternative arrangements to source power in the field during enrolment; and lack of devolved decision-making to the branches.

Inclusion of agricultural insurance in the e-voucher scheme is expected to expand farmers' livelihood diversification options in difficult seasons, and this will be complemented with the implementation of the County Adaptation Fund under the Climate-Resilient Agricultural Livelihoods Window.

Potential for scaling up: E-voucher has the potential for scaling up to various counties through a comprehensive basis for costing the e-voucher package per farmer of all the required transactions and inputs in order to derive the e-vouching costing. Also, the programme needs to establish a clear basis for defining the e-voucher scheme cost at an acceptable margin that accommodates fluctuations in prevailing input prices, given the time-bound subsidy arrangement by the scheme to ensure that farmers are empowered to purchase these inputs well beyond programme support or even with reduced public subsidy interventions.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

WSIS is an excellent platform for dissemination of knowledge and global projects relevant to the SDGs. It serves a congruence of international organizations, development partners, UN agencies, the

private sector and civil society to showcase their ICT-related efforts towards achieving global impact. It encourages innovation and technological adoption, and IFAD is honoured to be among the 2018 Prize Winners.



C7.8: ICT Applications: e-science

Project name:	Development of PC-based Colour Code System
Organization:	Multimedia University
Country:	Malaysia

Basic information about the Winner

The Centre for e-Health is established with the intention of providing a friendly environment to encourage the development of expertise in both theoretical and applied aspects of biomedical researchers. The Centre of e-Health has won recognition through international contests and research articles publications, and filed 10 patents and more than 55 copyrights for the developed innovations.

To develop biomedical engineering research requires the combination of traditional disciplines that include biology, image processing, digital signal processing, optics, mechanics, mathematics, electronics and chemistry. The biomedical engineering research is unique in bringing together these areas of research with its broad array of researchers, students and post-doctoral research scientists from biomedical engineering, mechanical engineering, electrical engineering, physics, chemistry, materials science and biology.

Project's description (activity's description)

In this era of technology, the existence of data storage is essential. Thus, the importance of data storage catalyses the evolution of the data storage media. In the 1920s, data storage media began with magnetic tape, eventually evolving to floppy disk, optical disk, flash drive and barcode. Among all these media, barcode is the most exceptional invention ever, due to its nature of storing information within a printed image. Unlike other data storage media, such as optical disk and flash drive, barcode does not involve any electronics hardware for storing information.

The barcode is a single dimensional optical data representation. It was invented by Bernard Silver and Norman Joseph Woodland in 1948. The barcode represents information systematically by varying the widths and spacing of parallel lines. Before the emergence of smartphones, the barcode was decoded using a barcode reader, also known as optical scanner. Now, the mobile software applications are available for the smartphones to decode the information of the barcode by using the camera on the smartphones.

However, as technology advances, the required size for the data storage increases as well. Thus, the maximum size of the barcode, which is able to store 48 alphanumeric characters, is no longer sufficient. The single dimensional (1D) barcode eventually evolved into two-dimensional (2D) barcode. The Quick Response (QR) code is the most common standard among the 2D barcodes.

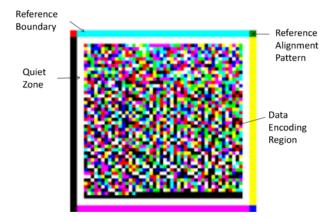
The QR code is a standard for a type of 2D barcode that was invented by a development team led by Masahiro Hara of Denso Wave Incorporated, Japan, in 1994. The layout of QR code is monochrome, which is constructed by black squares on a white background. The layout of QR code is composed by two main components. They are known as function patterns and encoding region. The function patterns – such as finder pattern, timing pattern and alignment pattern – are used to assist the decoder to locate the exact position of QR code. The encoding region consists of format information, version information and the data and error correction codewords. These are the information encoded in the QR code, which can only be retrieved by using the decoder.

A few features make the QR code unique from the barcode and previous matrix barcode. The first is the high capacity of encoding data, which can reach 100 times the capacity of the 1D barcode. Secondly, QR code can encode various types of data type such as numerical, alphanumerical, binary data and

kanji. Another feature is known as 360 degrees of readability, which means the QR code doesn't have to be read exactly on a straight upward direction. Lastly, the most exclusive feature of QR code is the error correction capability. The error correction algorithm utilized is known as the Reed–Solomon error correction. The current QR code can achieve the error correction capability up to 30 per cent.

The usage of QR code is extremely wide. In the beginning, the invention of QR code was only to replace barcode in inventory tracking. However, as technology advances, the QR code is widely used for other purposes as well, for example, ticketing, entertainment, commercial tracking and product marketing. Due to its capability to encrypt data such as website URLs, just a single scanning on the QR code can perform many actions, such as browsing the web, bookmarking a webpage, initiating a call, sending an SMS, sending e-mails, connecting to Wi-Fi networks, accessing information and purchasing items. Thus, QR code can increase the efficiency of various tasks of our daily life.

The maximum data storage capability can be achieved by the latest version 40 of QR code. It is approximately 3 kb. As the technology advances, the expectation on the QR code rises as well. People may expect the QR code to be able to store an image, a short video or even a document. However, this current capability is not sufficient to allow the QR code to store these data.



In this project, the main objective is to develop a code that can store twice as much data than QR code. To achieve this aim, this paper proposes the multicolour data encryption code which encrypts the information into a square block with various colours and stores it onto a rectangular code layout. Since the QR code consists of the feature of data error correction, the proposed QR code is also designed by considering the Reed–Solomon Error Correction as the error correction algorithm. For the first prototype, the colour code is designed according to the number of modules in QR Code Version 8. Then, the data capacity of the developed colour code is assessed by comparing it with the data capacity of QR Code Version 8. Besides, another objective of this project is to develop a decoder application to decode the proposed colour code.

1. Quiet Zone:

- This is the margin around the code.
- It is free from any markings and indicates the boundary of the code.

2. Reference Boundary:

- The boundary is made up of cyan, yellow, magenta and black.
- It is used to locate the position of the code.
- The reference value for image processing during decoding is provided.

3. Reference Alignment Pattern:

- Three blocks are on the corner of the code: upper left, upper right and lower right.
- The element is utilized to determine whether the code is misaligned.

A reference value is provided for image processing during decoding.

4. Data Encoding Region:

- This is the region area where both data and error correction codewords are encoded into colour blocks.
- The information is stored into row and column array of the code.

The code is also equipped with the Reed–Solomon Error Correction technique, which allows the system to autocorrect the data when an error is detected. Besides, the colour multiplexing technique employed in this system allows the Colour Code to store three times more data than a QR code with a similar module size.

Since the code involved multicolours, a few techniques have been developed to pre-process the captured image to increase the detection accuracy on the colours. The developed techniques are known as:

- Image Magnification using Gradient Based Smooth Hue Transition Interpolation;
- Colour Contrast Adjustment using Adaptive Piecewise Transformed Normalization;
- Object Layout Extraction and Auto Rotation;
- Pixels Recolour and Reconstruction of Multicoloured Object.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

With the large data capacity of the colour code, it can be utilized to encode the materials regarding education and training within a single colour code. With the feature of supporting offline identification, the knowledge can be decoded without requiring any Internet connection.

By using this technology, the information can be shared worldwide, including areas that do not have Internet connections. It is also known as one of the peer-to-peer technologies to share scientific knowledge. Thus, it can promote electronic publishing and open access initiatives to make scientific information affordable and accessible in all countries on an equitable basis.

This technology can be used to perform long-term systematic and efficient collection, dissemination and preservation of essential scientific digital data to contribute in the field of education, science, industry and agriculture.

Highlights of the project's partnership activities

Industrial: Collaboration to implement the colour code for asset management, item tracking and inventory system.

Medical science: Collaboration to implement the colour code for hospital and medical institutions for asset management. It is also aimed at printing the colour code on the medicine to indicate the information and contents of the medicine.

Challenges and project's future perspectives

- To establish an ISO standard for colour code.
- To develop more advanced image processing techniques to achieve lighting and environment invariant, thus improve the accuracy of decoder application.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

This is a great event to promote the importance of SDGs. It also encourages a great number of projects that enable the achievement of SDGs and contribute to everyone around the world. Most importantly, it offers a platform to expose the relevant projects to find for collaborators, in order to lift the potential of the project to contribute to and achieve the SDGs.

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

Project name:	Mujeres TIC-Ayni Bolivia: When Women Get Wings
Organization:	Ayni Bolivia
Country:	Bolivia

Basic information about the Winner

The NGO Ayni is an organization in the Plurinational State of Bolivia. Its purpose is to support the educational environment (at the primary, secondary and higher levels) with the insertion of ICTs within the classroom as a strategic and innovative approach to improve the quality of education and expand opportunities for access to jobs or even ambitious start-ups.

We have over 10 years of experience in reducing the digital gap between the haves and have-nots, providing basic ICT training, implementing labs and co-creating educational software with local content nationwide. We believe in building on existing knowledge and experiences to create long-lasting effects for the Bolivian youth.

Our experience in the information society is diverse but has three things in common: it is inspired by new concepts, it is practical and it is led by the day-to-day practitioners who bring us new insights to serve the Bolivian community.

We are a multidisciplinary team, young and committed to facilitating the same opportunities for all students in the country. The team is composed of young professionals, mostly women, with experience in the application of ICT to the educational environment.

Two main programmes of Ayni are the Chaski programme and the TICMujeres programme.

The Chaski programme was born with the aim of empowering the educational community, introducing ICT in urban and rural schools in underserved areas. Chaski is a structural intervention programme that has developed strategies to achieve financial, technical and pedagogical sustainability in educational telecentres. Its flagship project, Learn while Creating, is a methodology that enables classroom teachers — in co-creation with our technical staff — to develop educational software contextualized in Spanish and other native languages according to the national curricula. The parents were eager to collaborate in the modernization of their children's education. These characteristics ensure a structural, sustainable and successful intervention such as that evaluated by Wageningen University in 2016.

The Chaski programme respects the cultural and multilingual identity of the students. The result of these years of work is the production of the educational video games available at www. aprendercreando.bolivia.bo. We produce educational content suited to the local context. By creating this platform, we ensured the transmission of educational content combined with new technology. This information is freely available after registration. Many teachers highly appreciate and contribute regularly to update the material, as they know from experience how difficult it is to work without material.

The programme involves 74 schools nationwide, distributed throughout seven departments in the Plurinational State of Bolivia. It benefits more than 8 000 teachers and 52 000 students with training and production of digital material. The programme has been recognized for the success achieved nationally and internationally, receiving invitations from various entities inside and outside the country to share the experience.

The ICT Women initiative focuses on integrating gender-sensitive curricula in formal education, enhancing communication and media literacy for young women and empowering them to understand and develop ICT content. Ayni improves the learning ability of indigenous students in Bolivian rural

areas and works with the (female) teachers to develop content in their own languages. We exchange knowledge, experiences and best practices on policies and tools designed to promote safe Internet on specific issues, such as violence against women.

Project's description (activity's description)

ICT Women has been developed since 2014 as a successful initiative to reduce the digital divide for young women. Our project – When Women Get Wings – promotes their participation in the technological area and creates agents of social change.

In countries such as the Plurinational State of Bolivia, young women face a harsh reality. Technology has now arrived in isolated regions primarily in the form of computers and cell phones, but students still have to learn to use those novelties properly. Girls often do not know their rights, cannot reach higher education and are frequently victims of family violence. The risk for these "Millennials" of experiencing some form of violence is greater than for previous generations because traffickers can approach them online without people in their environment noticing it. These Bolivian Millennials are not too different from the rest of the world. They also consider education a commodity to be acquired and consumed; they hope that their approach to knowledge will be quick, entertaining and as simple as possible, while they look to reduce the time at school and get the best results. They prefer practice above theory, working in a team, and also want to receive digital information. Furthermore, teachers are daunted by these requirements, especially when they are not tech-savvy or do not know where to turn for help.

Keeping that in mind, we approach students and teachers and work together ensuring that young women (between 14 and 20 years old) are effectively guided to facing the probable risks in the digital society. The ICT Women initiative helps to empower individuals, schools and networks to increase their positive impact.

We are creating a lasting learning effect in the information society. In 2017, we trained 1 317 students and 200 teachers. Pursuing this educational objective, the following activities have been implemented:

- selecting the participating schools;
- selecting the most promising students (technical minded girls, with parents' authorization);
- creating training courses that enable teachers to teach young people technical skills (Learning Scratch and Robotics in a train-the-trainer form);
- bringing robots to classrooms: Ayni developed kits to encourage students to learn more about such subjects as mechanics and electronics in the classroom;
- repairing hardware and installing (antivirus) software the pupils who complete the course get a certificate and are able to perform activities as a repairer;
- students learning programming of educational games, robotics for education and 3D design;
- training sessions for pupils and students in repairing and assembling computers in groups;
- training courses for students on safe Internet, working in groups;
- training courses for students on the prevention of human trafficking (in collaboration with the Police Department);
- working in groups, co-elaborating digital information/material for other students during this
 training the students learn how to raise awareness among fellow students and how to effectively
 combat bullying and trafficking of women;
- training on hands-on entrepreneurship, where students learn how to run a business;
- accounting and first legal steps;

- visit to small enterprises and networking;
- trainings in 3D printing for 200 students;
- trainings to teach teachers to teach in a challenging way and thereby stimulate students to think further and eagerly seek new technical solutions;
- setting up learning goals for teachers to facilitate a standard teaching programme so that the quality of the lessons is guaranteed.

Parenting support: The schools are encouraged to purchase their own technical material so they can continue to give the courses independently, but Ayni will also provide them with material in case of emergency, so that the training can continue. In order to successfully carry out this work, Ayni works in close collaboration with the director, the whole school and the parents.

A yearly contest is held where all the schools of the district can participate showing the acquired skills, the material which is developed by the students and teachers. A quote of a participant: "I've always been fascinated by computers. Thanks to Ayni's workshop, I found there was something about robotics in particular that tapped into my ability to think logically."

Replicability is a must, since all the teachers (and some students) who followed the training can pass on the knowledge, with support of Ayni.



The ICT Women initiative focuses on one of the aspects according to the needs of the target group. Up to now, this method worked for all of us.

In 2014, we ran the course Students as Experts in PC Maintenance and Safe Internet in Oruro.

In 2015, we ran the course Women in Technology and Entrepreneurship in Tarija.

In 2016, we ran the course Using the TICs against Violence and Women Trafficking in Oruro.

In 2017, we developed the mobile computing classroom to give access to more students and teachers in Tarija.

In 2018–2019, we would like to establish the AyniTech Academy as a linking and learning IT social company, based on the reputation of Ayni, targeting the facilitating of economic development conditions of social entrepreneurs by supporting both access to IT knowledge and entrepreneurship skills. At AyniTech Academy – a technology-innovation centre – students and entrepreneurs will share ideas, take classes, and participate in hackathons, competing to solve challenging software problems. Young, tech-savvy Bolivians will come seeking the advice and expertise to create groundbreaking technology solutions.

This experience is compiled in the book of good practices "ICT Innovations in Bolivian Classrooms", which will soon be available.

Empowering people, creating impact!

Impact

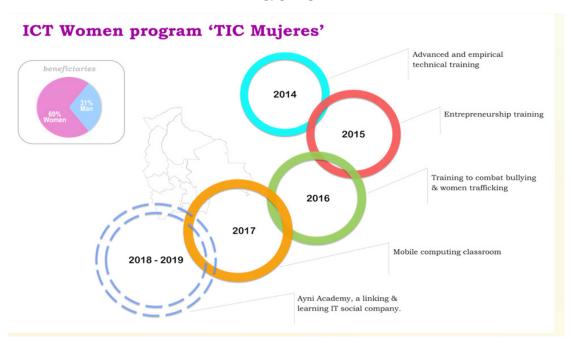
Thanks to this project, our students get more interpersonal skills. We create role models. The project encourages women's participation in technical and technological training. We create awareness and more participation of parents in education. The girls become leaders among the students.



We stimulate vocational training or a professional career and give them professional guidance. We stimulate the application of technology to other branches. We effectively contribute to creating more

awareness about human trafficking and precarious employment for girls. Our best students get additional income for their families. They are proud and confident about their future.

Ayni works to promote the economic inclusion of the Bolivian students regardless of sex, race, ethnicity or location. They learn to speak in public and learn about their rights. They break with traditional schemes and show that women and technology go together.



Proyecto: Capacitación TIC para combatir la trata y trafico de personas

Resultados

CAPACITACION TIC	MUJERES	VARONES	
Prog. Scratch	94	58	152
Robótica Educativa	93	51	144
Impresora 3D	89	50	139
T&T	39	18	57
interner seguro	216	77	293
replica	318	214	532
			1317

Se promueve la réplica para que más estudiantes se beneficien. Impulsamos la sostenibilidad pedagógica y actualiza

Estudiantes mejoran sus habilidades tecnológicas, con nuevas herramientas TIC.





Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

The NGO Ayni in the Plurinational State of Bolivia is working day-to-day aiming to contribute to the achievement of the following goals:

- SDG 1, by achieving productive employment for women and young people.
- SDG 4, by providing equal access to affordable technical and vocational education and through the entrepreneur skills project, effectively increasing the number of people with relevant skills for financial success.
- SDG 5, by working effectively to achieve gender equality and empower more Bolivian women and girls, protecting them from violence at home.
- SDG 8, by reducing the proportion of youths not involved in education, employment or training. With the project When Women Get Wings, we contribute to more awareness of human trafficking and precarious employment for would-be migrants. Our best students get additional income for their families. They are proud and confident about their future.
- SDG 10, by working on promoting the economic inclusion of Bolivian students, regardless of sex, race, ethnicity or location. They learn to speak in public and learn about their rights, break with traditional schemes and show that women and technology go together.
- SDG 11, by contributing to making life inclusive, safe, resilient and sustainable in cities. Our students get more interpersonal skills thanks to the project. We create role models. The project encourages women's participation in technical and technological training. We create awareness and more participation of parents in education. The girls become leaders among the students. We stimulate the application of technology to other branches.

Highlights of the project's partnership activities

Awards include the Chaski programme, where Ayni won the First Global Telecentre Award as the "Best Telecentre Initiative" on an international level awarded by the Telecentre Foundation; the SPARK2013 event in Granada, Spain; and in 2014, when Ayni was nominated in the category "capacity building" for the WSIS 2014 award granted by ITU.

Ayni's work is supported by different partners, such as:

- The Departmental Directorate of Education of Oruro, through the Subdirector on Formal Education. The Department gives particular support by participating with the signature of official certificates.
- The Police Department, with experts of the Units GACIP (*Grupo de Apoyo Civil de la Policia*) and FELCC (*Fuerza de lucha contra el crimen*), who gave support with the workshops over women trafficking, contributing with their experience to raise more awareness among the students.
- The Governor of Oruro, who supports facilitating spaces to hold the Technology Fairs.
- The Municipal Government of Tarija, which supports facilitating spaces to hold the Technology Fairs.
- The Municipal Government of Huanuni, which finances the robotic kits for the participating schools from Huanuni.
- The TIC Bolivia Network, which disseminates and promotes the exchange of experiences among the network members, among which are ministries, universities and NGOs working in ICT4D.
- The School of Teachers AJM, which contributes with its experience when it comes to the systematization of co-creation with the teachers.

- Ayni supported the WSIS Initiative to Celebrate Girls in ICT Day and to enhance the awareness among the general public. Because of this support, there is nationwide attention to this day.
- International impact: Ayni shares knowledge with partners in Argentina, Costa Rica, Ecuador, Peru and Mexico.
- Ayni's activities in 2016 and 2017 were powered by Dutch funding from the Rabobank Foundation, Wilde Ganzen and the Ayni Bolivia Nederland Foundation.

Challenges and project's future perspectives

Our challenge in 2018 and 2019 is the setting up of the AyniTech Academy, as a linking and learning IT social company based on the reputation of Ayni targeting facilitating economic development conditions of social entrepreneurs by supporting both access to IT knowledge and entrepreneurship skills. In this technology—innovation centre, students and entrepreneurs will share ideas, take classes and participate in hackathons, competing to solve challenging software problems. Young, tech-savvy Bolivians will come seeking the advice and expertise to create groundbreaking technology solutions.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The WSIS contest that annually rewards outstanding initiatives in the IT world is for Ayni an incentive to look beyond our possibilities. We try to accelerate the socio-economic development of our students, training them on personal skills, and are glad to know that, thanks to initiatives such as WSIS, we can continue improving. The WSIS inventory and prize contest is an inspiring and excellent initiative; it feels like a "quality check" on the real application of the SDGs, and constitutes a platform for the exchange of knowledge and experience among nations, governments, corporate entities and individuals.

C9: Media

Project name:	Government Portal for Viral-able Public Policy Communication
Organization:	Ministry of Communication and Information Technology
Country:	Indonesia

Basic information about the Winner

Indonesiabaik.id (the Good of Indonesia) is a unique information portal. The portal is managed directly by the Ministry of Communication and Information Technology, Directorate of Information Processing and Provision, Directorate General of Information and Public Communication. The portal is intended to provide alternative information that is viral-able and easy to understand, so that people can have better alternative information based on their needs and usefulness.

Vision: To give reliable public service information and foster a spirit of national optimism.

Mission:

- to bring valuable information and data;
- to educate people, especially the younger generation;
- to promote positive values, such as the spirit of being transparent, accountable and professional regarding information openness;
- to build community engagement; and
- to seek active contributions from the public and communities.

Therefore, Indonesiabaik.id provides information to the society about issues related to government programmes, and also about people's interests. Indonesiabaik.id is committed to giving the information in "stylish" and reliable design. The information is also made to combat hoaxes and disinformation.



Project's description (activity's description)

- 1. Digital products of Indonesiabaik.id in the form of visual information with the purpose of delivering government information are divided into four pillars of content, namely:
 - Daily Information/Issue: Delivering the latest information with emphasis on what, why, and how elements.
 - Government Programme: Providing comprehensive information and data about the programme, an explanation of the timing and where it is implemented, as well as the procedures of the programme. This category emphasizes what, when, where and how elements.
 - Education and Public Information: Delivering information, guidance and schedule by emphasizing what, when and how elements.
 - About Indonesia: Providing entertaining and interesting information with emphasis on what, who and why.

CONTENT PRODUCTION OF 2017

No.			Theme									
	Month	Government Program		About Indonesia		Education and Public Information		Daily Issue / Information		Total		
		Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Info graphic	Konten
Į,	January	20	20	0	0	0	0	0	0	20	20	40
2.	February	19	19	14	12	15	15	12	11	60	57	117
3.	March	21	21	21	20	20	20	20	19	82	80	162
	April	17	17	17	17	17	17	17	17	68	68	136
5.	May	17	17	19	17	17	17	17	17	70	68	138
6.	June	13	13	12	12	13	13	13	13	51	51	102
7.	July	21	21	19	19	21	21	21	21	82	82	164
8.	August	22	22	41	18	21	21	33	27	117	88	205
9.	September	14	14	14	14	14	14	13	13	55	55	110
10.	October	21	13	15	16	20	0	8	17	64	46	110
11.	November	20	14	15	14	18	0	18	15	71	43	114
12.	December	14	14	14	14	14	14	13	13	55	55	110
Total (Content	164	164	157	129	138	138	146	138	795	713	1508

(Number of content production by IndonesiaBaik.id for 2017 only.)

Statistic of indonesiabaik.id media socials:

- Website: Around 5 000 unique visitors per week;
- Instagram: Around 37 000 followers, 550 000 viewers per week;
- Facebook: 55 000 followers, around 75 000 engagements per week;
- Twitter: 4 900 followers.
- 2. Public education and engagement

Indonesiabaik.id is not an ordinary portal. Its ecosystem was designed by the Ministry of Communication and Information Technology as a medium for developing capacity of young people 20–34 years of age on creating positive content with stylish attractive packaging. It does not just provide information one-way to the public, but also does some interaction and conversation through its social media, and provides training and workshop collaboration for netizens, bloggers and citizen journalists, and collaboration with multistakeholders, under the activity name #FIRAL.

This capacity-building programme is one of the Ministry's strategies to engage and develop capacity of the netizen, blogger and citizen journalist in generating positive, informative and interesting content that can be viral on social media.

Indonesiabaik.id provides workshops and seminars for netizens, bloggers and citizen journalists, as follows:

- Content: Infographic, motion graphic, blog, article, photography;
- Participants: In 2016, approximately 2 200 participants in nine cities; and, in 2017, approximately 2 310 participants in nine cities.

That's why the Indonesiabaik.id programme from the Ministry of Communication and Information Technology has the presence to answer the challenges. As Minister Rudiantara himself stated during the launch of Indonesiabaik.id, "Usually the Government delivered information in a way that is rigid and less current. With this (IndonesiaBaik.id), the Ministry wants to deliver the good news about Indonesia. Do not bother with grammar, as long as the message is delivered immediately." Indonesiabaik.id also encourages the public to come together to create positive, informative and viral-able content.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

Indonesiabaik.id is placed in the category of WSIS Action Line C9: "The media — in their various forms and with a diversity of ownership—as an actor, have an essential role in the development of the Information Society and are recognized as an important contributor to freedom of expression and plurality of information", which strongly emphasizes:

- Encourage the media print and broadcast as well as new media to continue to play an important role in the Information Society.
- Take appropriate measures consistent with freedom of expression to combat illegal and harmful content in media content.
- Reduce international imbalances affecting the media, particularly regarding infrastructure, technical resources and the development of human skills, taking full advantage of ICT tools in this regard.

The reference used for linking the IndonesiaBaik.id to the SDGs is as indicated in the document "WSIS-SDG Matrix: Linking WSIS Action Lines with Sustainable Development Goals", as follows:

- SDG 5.B: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women;
- SDG 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature;
- SDG 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.

Highlights of the project's partnership activities

From the beginning, Indonesiabaik.id has always involved multistakeholders (government, media, civil society organizations, academia and the technical community). A number of strong partnerships in the context of community empowerment through seminars, workshops or training and in the context of knowledge development through the preparation of e-book material, module or video documenter for advocacy and education, are priorities that must always be carried on by mutual and inclusive multistakeholder partnerships.

Challenges and project's future perspectives

Providing positive contents in various ways will be very dynamic, diverse and therefore more problematic. It's about how to create more interesting content/product that can make this certain information become publicly needed interests.

Other challenges faced by Indonesiabaik.Id will be directly related to efforts for having a more massive, well-planned and measurable strategy in order to get more people affected by positive content. Comprehensive education programmes such as workshops — with the inclusive, equal, transparent and accountable engagement of multistakeholders and society — should be increased in the future because they will deliver and give a positive and multi-impact effect.

Providing open data for the public will be very urgent and challenging when related to public information openness.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The WSIS Stocktaking and Prizes contest has a strong, significant and mutual relationship with the SDGs, for several reasons:

- It delivers a strong message across the world about ICT initiatives undertaken by relevant parties in each country in order to develop their society and communities.
- It ensures that people everywhere have strong awareness and access for information and data, to strengthen sustainable development and lifestyles in harmony with nature.
- It provides motivation for relevant stakeholders to continue innovation as well as support, and encourages the utilization of ICT for the benefit of sustainable development.
- It shows clearly that public access in information is important and should become a priority in every nation.



IndonesiaBaik.id is a spirit of optimism for making Indonesia better

Providing information of government programs presented through infographics and motiongraphics in creative, interesting, accurate and trusting manners

We urge millenial generation to create positive contents especially to fight hoax, a big problem in Indonesia



HOPEFULLY OUR EFFORTS WILL NOT ONLY BRING BENEFITS FOR INDONESIA BUT ALSO FOR THE WORLD

LET'S CREATE POSITIVE CONTENTS!

Bravo! *IndonesiaBaik*



C10: Ethical dimensions of the information society

Project name:	Social Programme for Digital Equality				
Organization:	PJSC Rostelecom				
Country:	Russian Federation				

Basic information about the Winner

Rostelecom (www.rostelecom.ru) is one of the largest national telecommunication operators in the Russian Federation and Europe. The company operates in all segments of the telecommunication market and covers millions of households in the Russian Federation.

Rostelecom is an undisputable leader of the broadband and pay-television markets in the Russian Federation, with over 12.7 million fixed-line broadband subscribers and over 9.7 million pay-television subscribers, over 4.7 million of whom are subscribed to Rostelecom's IPTV services. In the first nine months of 2017, the Group generated Rub 221.2 billion of revenue, Rub 71.2 billion of OIBDA (32.2 per cent of revenue) and Rub 9.9 billion of net income. The Group is a market leader in providing telecommunication services to government bodies and corporations of all levels. Rostelecom is an important innovator that provides solutions in the field of e-government, cloud computing, health care, education, security and housing and utility services. The Group's stable financial position is confirmed by its credit ratings. Rostelecom was assigned BBB- and BB+ international credit ratings by Fitch Ratings and Standard and Poor's respectively, and AA(RU) by ACRA.

Project's description (activity's description)

The Digital Equity Programme is one of the most important Rostelecom federal scale social programmes and the company's contribution to implementation of social changes to the benefit of the entire society. The goal of the programme is to improve the quality of life of millions of people in the Russian Federation by eliminating digital barriers and providing accessibility to communications to such socially unprotected groups as elderly people, children from orphanages and families that find themselves in difficult life situations, children with disabilities, and others.

The Digital Equality Programme combines the company's seven most significant and successful social projects: Internet-ABC, IT-ROST, Learn and Manage the Internet!, Social Impact Award, Internet for Libraries, Computerization of Orphanages and Distant Education for Children with Disabilities.

Projects under the Digital Equality Programme shall contribute to the improvement of the quality of life of the population through provision of more opportunities in the following areas:

- access to modern telecommunication technologies;
- increasing education level and acquisition of users' skills in telecommunications;
- social adjustment and practical application of acquired skills.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all:

• Rostelecom products and services give many people a chance to increase their level of education and literacy.

- Rostelecom is carrying out the programme Internet-ABC to give computer knowledge to elderly people.
- Rostelecom is implementing programmes to increase the level of computer literacy of young people.
- Rostelecom is implementing a distant learning programme for children with special needs.
- Rostelecom is a partner in implementation of the ROST distant learning programme for children who stay in or left orphanages or foster homes, and children left without parental care.

Highlights of the project's partnership activities

Various organizations operate as partners in Rostelecom social projects:

- Internet-ABC. The project is being implemented along with the Pension Fund of the Russian Federation.
- ROST project: Development. Education. Socialization. Employment a distant learning project for children who stay in or left orphanages or foster homes, and children left without parental care. In cooperation with ANO ROST.
- Social Impact Award a joint project for start-up social entrepreneurs. In partnership with Impact Hub Moscow.
- The IT-ROST project is being implemented jointly with AIESEC.

Challenges and project's future perspectives

In 2018, as part of the Digital Equality Programme, the company continues contributing to the development of society, going beyond the economic component. The plan involves paying attention to social integration of orphaned children, offering on-site training programmes to young professionals, going on with support of bright-minded young people, inclusion in the project of new orphanages and foster homes, and provision of more assistance to elderly people in mastering modern technologies. Guided by the interests of people living in regions where the company operates, Rostelecom will continue implementing socially significant programmes and projects every year, striving to improve their level and quality.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

• The WSIS Prizes contest established by ITU is an essential tool for implementation of Action Lines adopted by WSIS, owing to which countries worldwide are offered an opportunity to share experience, specific practical solutions in the development of information and communications technologies aimed at bridging the digital divide and achieving the Sustainable Development Goals.



C11: International and regional cooperation

Project name:	Digital Schools Chapterthon
Organization:	Internet Society

Basic information about the Winner

The Internet Society is a global cause-driven organization governed by a diverse Board of Trustees that is dedicated to ensuring that the Internet stay open. The Internet Society supports and promotes the development of the Internet as a global technical infrastructure, a resource to enrich people's lives, and a force for good in society.

Project's description (activity's description)

Our chapters provide us with unique local and regional perspectives on emerging Internet issues, and there are currently over 110 active chapters across six continents. They all share a common interest in helping to achieve the Internet Society's mission in their own geographical area.

With this in mind, we created a competition called the Chapterthon. A global Internet Society chapters marathon, where all Internet Society chapters can participate by developing a project within a timeline and budget to achieve a common goal for the development of education and the Internet. Once the project is finalized, the best project receives a prize. This competition aims to increase our chapters' commitment in finding innovative solutions to global challenges and raises awareness on sustainable development.

Chapterthon 2017 was launched under the theme "Digital Schools" in partnership with the Wikimedia Foundation. The effective date for the Chapterthon 2017 announcement was 18 May. The initiative was open to all Internet Society chapter members, and 30 projects were selected to participate in the competition. All of them fit into the following categories:

- Digital literacy;
- Online lectures;
- Training people in the community;
- Developing connectivity for a school or an educational institution.

The chapters implemented their project starting from 15 October and completed them by 30 November. They were each requested to create a video that lasted about three minutes and submit the project reports no later than 30 days after completing the project.

List of 30 participating projects:

Argentina Chapter, Armenia Chapter, Bangladesh Dhaka Chapter, Plurinational State of Bolivia Chapter, Brazil Chapter, Bulgaria Chapter, Dominican Republic Chapter, Ecuador Chapter, El Salvador Chapter, Estonia Chapter, Honduras Chapter, Kazakhstan Chapter, Kenya Chapter, Mali Chapter, Mexico Chapter, Nepal Chapter, Nicaragua Chapter, Paraguay Chapter, Peru Chapter, Philippines Chapter, Rwanda Chapter, Saint Vincent and the Grenadines Chapter, Senegal Chapter, SIG Blockchain Brazil, South Africa Gauteng Chapter, Sri Lanka Chapter, Turkey Chapter, United States New York Chapter, Venezuela Chapter, Yemen Chapter.

Examples of linkages between the WSIS Action Line the project was awarded for with each of the Sustainable Development Goals (SDGs) it helps advance

We have always seen the Internet as a critical enabler for sustainable development and believed that access to it will help accelerate the achievement of all of the SDGs. The adoption of the 17 SDGs by the United Nations in September 2015 gave us a clear framework to increase our development efforts as well as reinforce our commitment to bringing the benefits of a globally connected Internet to everyone.

SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all: To make this real and show the impact of the Internet in the achievement of the SDGs, we wanted to help our chapters move the needle on SDG 4 in particular. This is why Chapterthon 2017 was launched under the theme "Digital Schools". Connecting schools to the Internet, teaching coding to girls, training teachers and parents, raising awareness about the safe use of the Internet, developing an online platform for a school, and helping to create educational and local content are just some examples of the amazing work our chapters have done to achieve SDG 4.

SDG5 – Achieve gender equality and empower all women and girls: All the chapters' projects have left an important mark on local schools but also have contributed to fighting the digital divide by creating new opportunities for girls to be involved in the science, technology, engineering and mathematics fields. One of the best examples is the Chapterthon 2017 winner Turkey Chapter for the project Coding Sisters. The project, focused on closing the digital gap in the country, was developed in Bilkent University in Ankara. In that project, 42 girls from middle and high schools and 30 university students received coding lessons, and almost all of them stated they wanted to keep learning how to code. "Coding Sisters" is proof of how the Internet is a powerful enabler not only for quality education (SDG 4) but also for gender equality (SDG 5). On 19 December, Coding Sisters was announced as the Chapterthon winner by the Internet Society CEO Kathryn Brown during the Internet Governance Forum Internet Society Open Forum in Geneva. Also, the Yemen Chapter worked to eradicate digital illiteracy by connecting the Nama School and implementing training programmes for women about the benefits of the Internet.

SDG17 – Strengthen the means of implementation and revitalize the global partnership for sustainable development: A total of 30 chapters from all the regions have worked hard to extend the education benefits of the Internet to their communities. This competition increased our chapters' commitment in finding innovative solutions to global challenges working all together to reach the following goals:

- finding collaboration with all who share our goals for the Internet to be open, globally-connected, secure and trustworthy;
- promoting the Internet Society's collaborative and inclusive model;
- strengthening the sense of community among chapters from different countries and opening the doors to future collaborations;
- gaining experience by working together to solve a local problem on a global scale;
- building capacity to create successful models to replicate.

Highlights of the project's partnership activities

- **Argentina Chapter** implemented a sustainable Internet connectivity project in a rural school in a town in the west of Argentina.
- **Armenia Chapter** trained 30 teachers from 20 schools to gain essential knowledge and skills to develop e-learning products for science, technology, engineering and mathematics education.
- **Bangladesh Dhaka Chapter's** project created a chain-based community of trainers, mentors, legal supports and cases studies, to help girls to be aware about cyber issues.

- The Plurinational State of Bolivia Chapter developed a course to give the students the initial knowledge on suitable tools in the creation of contents and their publication.
- **Brazil Chapter** focused on teaching basic programming to hundreds of children, enabling them to develop basic software and awareness in the use of the Internet.
- **Bulgaria Chapter** raised awareness about major online risks among 7–15–year–old children, empowering them to use preventative measures for mitigating Internet use risks.
- **Dominican Republic Chapter** promoted safe use of the Internet by teachers, children, teenagers and parents in educational entities in their region.
- **Ecuador Chapter** implemented a System of Virtual Tutorials through the Internet in a school. The project helped last-grade children to support intermediate-grades children through a simple e-learning system.
- **El Salvador Chapter** created an online platform to help students develop the right skills required to become an entrepreneur in a playful way.
- **Estonia Chapte**r engaged 50 high school students for a Wikipedia e-course documenting the experience to replicate in other schools and train Wikimedia administrators.
- **Honduras Chapte**r empowered local youths through social activism using online resources to strengthen democratic values within their communities.
- **Kazakhstan Chapter** trained high school teachers on technical and soft skills needed to ideate, design, prototype and present business value of an end-to-end Internet of Things solution.
- **Kenya Chapter** created an educational community network, enabling schools and youth centres to access learning resources and collaborate in content creation.
- **Mali Chapter** developed the application *Suivi Scolaire* that helps parents to follow in real time the schooling of their children from their smartphones.
- **Mexico Chapte**r worked on cybersecurity for rural and indigenous schools delivering courses to young people and parents, educating them about safety on the Internet.
- **Nepal Chapter** trained students of all ages about the use of the Internet and the importance of digital literacy and cybersecurity, creating training materials to make learning easier.
- **Nicaragua Chapter** promoted digital literacy in three remote schools, empowering more than 65 young students and teachers in the use of coding principles.
- **Paraguay Chapter** created an IPV6-based network with Internet access, five computers and one printer in a technical school offering training to students and teachers.
- **Peru Chapter** created a web platform to gather young people who wish to prepare themselves for university. They built a database of questions that allows each user to simulate a real entrance exam and provides statistics of each student's progress.
- **Philippines Chapter** provided a facility to the institution to minimize the digital divide between students who are capable of having the proper technology and students who lack the necessary means.
- **Rwanda Chapte**r set up a mini computer lab for a primary school in order to resolve an issue of space. The mini lab is now hosting the IT equipment and providing one year of Internet connection.
- **Saint Vincent and the Grenadines Chapter** trained 50 young parents between 18 and 35 years of age on the use of the Internet in two underserved communities. The project complemented the Government's ICT initiatives of "one laptop per child".
- **Senegal Chapter** created a programme to identify students in disadvantaged schools who can support their colleagues on the use of the Internet and a platform called Actuschola.

- **SIG Blockchain Brazil** showed how to deal with emerging technologies such as Blockchain and basic community connectivity needs by creating interactive dialogues and experimenting with demonstrations of concrete applications.
- **South Africa Gauteng Chapter** increased the number of Wikipedia contributors and editors among young people. They built capacity to create and translate online content and improved the reputation of Wikipedia as an education platform.

Challenges and project's future perspectives

The biggest challenge the 30 chapters participating in Chapterthon are facing is to find a way to self-sustain their projects in the future. Many of them have already opened a conversation with public institutions and local organizations. The chapters also have the opportunity to submit to the Internet Society "Beyond the Net Funding Programme". Our programme funds projects that support our mission and use the Internet to help change lives. We offer several programmes of funding from small to medium and large projects.

The Internet Society has a global team that is passionate about fulfilling the vision and mission of the organization. Together, we work to promote policies that sustain an Internet that's open and has a universally accessible platform for innovation, creativity and economic opportunity. Concerning the Chapterthon, the challenge of Internet Society will be to launch an even more successful edition in 2018.

Winner's views on WSIS Stocktaking and Prizes contest, including its relevance to SDGs

The WSIS Forum is the world's largest annual gathering of the ICT4D community, gathering global multistakeholders to discuss the role of ICTs as a means of implementation for the United Nations Sustainable Development Goals. WSIS fosters an environment for international cooperation, a culture that enables self-governance to work and promotes the Internet as a positive tool to benefit all people throughout the world.

Taking our projects to the WSIS Forum 2018 as winners is a great chance to recognize the efforts made by our community to contribute to the development of society. It also strengthens the sense of community among chapters from different countries and opens doors for future collaborations.

Thanks to WSIS for giving us this great opportunity. We would also like to thank Wikimedia Foundation for partnering with us and making this happen.



Chapterthon 2017
Digital Schools!



Conclusion

The seventh, 2018, edition of WSIS Stocktaking: Success Stories contains the most appreciated success stories in the form of 18 winning projects from different countries of the world. 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.

At the World Summit on the Information Society Forum in Geneva, 18 prize winning projects received global accolades for their work using information and communication technologies to improve lives, impact the environment, reduce inequalities and many more.

The WSIS Prizes winners represent some of the most innovative and high impact projects from around the world that prove ICTs are key to achieving the United Nations' Sustainable Development Goals.

WSIS Prizes honor outstanding projects that leverage the power of ICT to accelerate socio-economic development around the globe. It is a unique international contest developed in response to requests from the WSIS community to create an effective mechanism to evaluate and recognize multistakeholder efforts for good practices that leverage the power of ICTs as an enabler of the development. As an integral part of the WSIS stocktaking process that was set up in 2004 to assist WSIS implementation and follow-up, the WSIS Prizes contest was held for the first time in 2012, and rapidly gained attention and popularity within the ICT for Development community.

Since 2016, WSIS Prizes reflect close linkages with achieving SDGs, and it grew into one of the most globally appreciated efforts for collecting and promoting ICT-related projects and initiatives that also enable progress towards achieving SDGs on local, regional and global level. We believe WSIS Prizes and WSIS Stocktaking with examples from the ground, true stories of engaging ICT power for development, will support the evidence based policy making in the future and help in shaping strategies towards achieving the SDGs. WSIS Forum as a unique ICT4SDG platform will continue to harvest from this international repository of success stories in the years to come.

Close to 60,000 new members of the WSIS stakeholder community voted this year with close to one million votes cast, and around 300 members of both winners and champions delegations participated at this year's WSIS Prizes Winners and Champions ceremonies during the WSIS Forum that was held from 19 to 23 March in Geneva.

ITU is proud to announce that the WSIS Stocktaking Platform has increased to 300,000 registered stakeholders, with close to 10,000 entries since 2004. Not a lot of international databases can match this numbers and we consider this as the recognition by the WSIS and ICT4D communities of our good work.

We are also pleased to announce the imminent launch and official 2018-2019 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 2018 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.

Abbreviations

AVS	NIPOST Address Verification System				
EBL	Equity Bank of Kenya, Ltd.				
FREP	Federal Real Estate Policy for the Deployment of Telecommunications Infrastructure				
ICT	information and communication technologies				
ICT4D	information and communication technology for Development				
IFAD	International Fund for Agricultural Development				
INDAABIN	Institute for the Administration and Appraisal of National Assets (Mexico)				
IT	information technology				
NGO	non-governmental organization				
NIPOST	Nigerian Postal Service				
OSE	Nationwide Education Network (Poland)				
POS	point of sale				
QR	Quick Response				
SDG	Sustainable Development Goal				
SMS	short message service				
TPAS	Targeted Poverty Alleviation System (China)				
UN	United Nations				
WSIS	World Summit on the Information Society				

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